

***Lincoln County
Rural Living
Handbook***

Second Edition

***Considerations for
Country Living***

Lincoln County Resource Directory

Lincoln Soil and Water Conservation District
www.lincolnsxcd.org(541) 265-2631

United States Agencies

USDA Farm Service Agency
www.fsa.usda.gov(541) 967-5925

Natural Resources Conservation Service
www.or.nrcs.usda.gov(541) 265-2631

US Forest Service—Siuslaw National Forest
www.fs.fed.us/siuslaw(541) 563-3211

Bureau of Land Management—Salem District
www.blm.gov/or/districts/salem
....(503) 375-5646

US Fish and Wildlife Service
www.fws.gov(503) 231-6179

Tribal Government

Confederated Tribes of Siletz Indians
www.ctsi.nsn.us(503) 444-2532

Lincoln County Departments

www.co.lincoln.or.us

Animal Shelter(541) 265-6610

Assessor(541) 265-4102

Board of Commissioners(541) 265-4100

Health and Human(541) 265-4112

Parks(541) 265-5747

Planning and Development(541) 265-4157

Public Works(541) 265-5747

Schools District(541) 265-9211

Sheriff's Office(541) 265-4277

Solid Waste District(541) 265-4127

Surveyor's Office(541) 265-4147

OSU Extension (Lincoln)(541) 574-6534

Oregon State Agencies

Agriculture(503) 986-4550

Building Codes Division(503) 378-4133

Education(503) 947-5600

Environmental Quality(503) 229-5696

Employment Department(800) 237-3710

Fish and Wildlife(503) 947-6000

Forestry(503) 945-7200

Geology and Mineral Ind(971) 673-1555

Human Services(503) 945-5600

Marine Board(503) 378-8587

Parks and Recreation(503) 986-0707

State Lands(503) 986-5200
State Police(503) 378-3720
Transportation(503) 986-3432
or(888)-ASK-ODOT
Water Resources(503) 986-0707

Watershed Councils

Alsea(541) 528-3390

Midcoasts (Siletz, Yaquina)(541) 265-9195

Salmon/Drift Creek(541) 996-3161

Mary's River(541) 758-7597

Ports

Alsea(541) 563-3872

Newport(541) 265-7758

Toledo(541) 336-5207

Lincoln County Fire Departments

Emergency911

Central Oregon Coast(541) 563-3121

North Lincoln(541) 996-2233

Cities/Zip Codes

Depoe Bay(541) 765-2361

Newport(541) 574-0611

Lincoln City(541) 996-2151

Siletz(541) 444-2521

Toledo(541) 336-2247

Waldport(541) 264-7417

Yachats(541) 547-3565

Other

Call Before You Dig
www.digsafely.org(800) 424-5555
or811

Lincoln County Historical Society
oregoncoasthistory.org(541) 265-7509

Devils Lake Water Improvement District
www.dlwid.org(541) 994-5330

Hatfield Marine Science Center
hm.sc.oregonstate.edu(541) 867-0100

Oregon Coast Community College
www.oregoncoastcc.org(541) 265-2283

Invasive Species Hotline(866) INVADER
www.oregoninvasiveshotline.org

Table of Contents

Introduction	2
Conservation District History	3
Lincoln County, the “Heart of the Oregon Coast”	4
A Brief History of Lincoln County	5
Is Rural Living for You?	6
Buying Rural Property	7
Water Rights Primer	8
Living on Rural Roads	9
Onsite Waste Management Systems (Septic Systems)	10-11
Being Neighborly	12
Hunting and Fishing	13
Invasive Plant and Weeds	14-15
Soil Quality and Conservation	16-17
Riparian Areas, Floodplains and Wetlands	18
Salmon	19
Resource Management Plans	20
Agricultural Water Quality Rules and Plans	21
Local Sponsors	22-23
Grazing as a Management Tool	24
Open Range and Livestock Districts	25
Wildlife-Friendly Fences	26
Livestock, Horses and Clean Water	27
Going Organic	28
Organic Certifications	29
Backyard Wildlife	30
Livestock and Poultry	31
Native Plants and Pollinators	32
Feral and Invasive Species	33
Growing a Healthy Forest	34
Small Woodland Management	35
Fire Prevention	36
Lincoln County Planning, Development and Zoning	37
Siuslaw National Forest Stewardship—Profile Hebo Stewardship Area	38-39
Public Land Neighbors	40
Local, State and Federal Agencies	41-43

Disclaimer:

The material in this handbook is presented by the Lincoln Soil and Water Conservation District (SWCD) and other contributors as a convenient reference. The book is not intended to provide legal advice and should not substitute for specific technical advice from county, state, or federal agencies. Neither the Lincoln SWCD nor its members make any express or implied warranty in regard to the accuracy or use of the material presented herein. This information was compiled over time.

Introducing the Rural Living Handbook, 2nd Edition

Rural living in Lincoln County offers beautiful landscapes, unique communities, and close connections to nature. Since the meadows, forests, wildlife, fields and rivers of our County are attracting more and more people to the rural life, we have compiled this handbook to address some of the issues rural landowners may encounter.

The issues covered in the Lincoln County Rural Living Handbook range from construction and engineering to business practices, animal care and management, and government regulation. Many of the questions that arise are complex, requiring guideline interpretation and site-specific solutions.

Sources of information listed at the end of some sections will provide referrals to appropriate agencies or businesses.

Stewardship of the land and its resources is an important aspect of rural life. This handbook has been prepared so landowners have an easy way of identifying subjects they need to address in using their land, as well as providing easy access to sources of additional information. However, laws and regulation can change at any time, so it is your responsibility to ensure you are familiar with current laws and regulations.

Use this handbook as a resource in determining if rural life is for you and, if so, how to get the most from your land. The Lincoln Soil and Water Conservation District (SWCD) helps landowners identify the questions they need to ask, and where they should start asking, so that rural life in Lincoln County is as enjoyable and rewarding as possible.

Every county has a Soil and Water Conservation District; if you are outside of Lincoln County contact your local SWCD office with any questions. To find other SWCD offices in Oregon visit: www.oacd.org.

This 2nd Edition handbook was updated by Lincoln SWCD with support from the Plum Creek Foundation, Oregon Department of Environmental Quality, Oregon Department of Agriculture, Oregon State University Extension, and multiple local business sponsorships.

Acronyms used throughout the Rural Living Handbook

BLM: Bureau of Land Management

CREP: Conservation Reserve Enhancement Program

EQIP: Environmental Quality Incentives Program

FCA: Farmers Conservation Alliance

FSA: Farm Service Agency

NACD: National Association of Conservation Districts

NRCS: Natural Resources Conservation Service

OACD: Oregon Association of Conservation Districts

ODEQ: Oregon Department of Environmental Quality

ODF: Oregon Department of Forestry

ODFW: Oregon Department of Fish & Wildlife

ODOT: Oregon Department of Transportation

OPRD: Oregon Parks & Recreation Department

OWEB: Oregon Watershed Enhancement Board

OWRD: Oregon Water Resources Department

SWCD: Soil & Water Conservation District

USDA: US Department of Agriculture

USFS: US Forest Service

USFWS: US Fish & Wildlife Service

WHIP: Wildlife Habitat Incentives Program



Conservation District History

In the early 1930s, along with the greatest depression this nation ever experienced, came an equally unparalleled ecological disaster known as the Dust Bowl. Following a severe and sustained drought in the Great Plains, the region's soil began to erode and blow away; creating huge black dust storms that blotted out the sun and swallowed the countryside. Thousands of "dust refugees" left the black fog to seek better lives.

But the storms stretched across the nation. They reached south to Texas and east to New York. Dust even sifted into the White House and onto the desk of President Franklin D. Roosevelt.

On Capitol Hill, while testifying about the erosion problem, soil scientist Hugh Hammond Bennett threw back the curtains to reveal a sky blackened by dust. Congress unanimously passed legislation declaring soil and water conservation a national policy and priority. Because nearly three-fourths of the continental United States is privately owned, Congress realized that only active, voluntary support from landowners would guarantee the success of conservation work on private land.

In 1937, President Roosevelt wrote the governors of all the states recommending legislation that would allow local landowners to form soil conservation districts. Brown County Soil & Water Conservation District in North Carolina was the first district established. The movement caught on across the country with district-enabling legislation passed in every state. Today, the country is blanketed with nearly 3,000 conservation districts. (source: www.nacdnet.net)



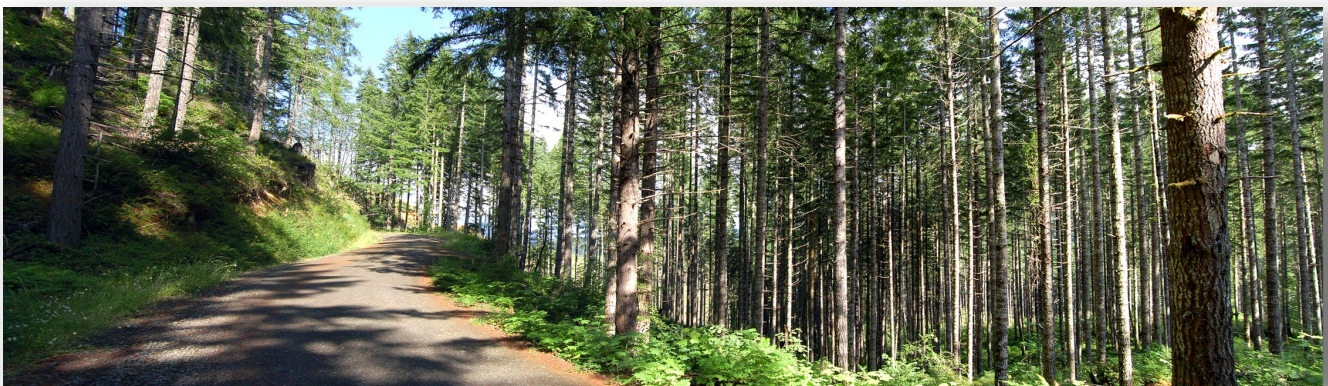
Lincoln SWCD was organized in 1955 under the Oregon Soil and Water District Law Oregon Revised Statute (ORS) 568.210-780. All Oregon soil and water conservation districts are classified as special districts under ORS 198.010 through ORS 198.955. This means that the Lincoln SWCD is not a County or State entity, as many may assume. The Lincoln SWCD is administered by seven locally elected volunteer directors representing 5 zones and 2 at-large positions. District operations and programs are funded by grants and fundraising. Our monthly meetings are open to the public

and run every second Thursday at our office (23 N. Coast Hwy in Newport). We are located at 23 North Coast Highway, Newport, Oregon 97365. Our phone number is (541) 265-2631.

Currently, Lincoln SWCD programs include: Invasive Species Control, Water Quality Monitoring, Salmon and Stream Survey, and Watershed Restoration. Our programs offer assistance to private landowners of the County who wish to voluntarily conserve and/or restore natural resources on their land by providing:

- ◆ Technical expertise - land management and conservation practices, soil and water information, invasive vegetation control, improvements to wildlife habitat and water quality, and fish population information
- ◆ Funding opportunities - grants, programs, and coordinated efforts with other agencies are available to assist with habitat restoration and other natural resource related projects.

Please visit our website for more information: www.lincolnswcd.org



Lincoln County, the “Heart of the Oregon Coast”

Lincoln County comprises approximately 493,340 acres located along the central Oregon coast. The westernmost part of the county has about 55 miles of coastline consisting of beaches, dunes, marine terraces, jutting headlands, and coastal bays and estuaries. The rest of the county consists of steep, forested mountainous areas which are drained to the west by the Alsea, Salmon, Siletz, Yachats, and Yaquina Rivers and their tributaries.

Timber production takes place on about 90 percent of the forested area; the remainder is used mainly for agriculture, urban and rural development, and recreation.

Commercial fishing, lumber and forest products, recreation and tourism, and agricultural products provide the economic base of the County.

Soil scientists have determined that there are about 65 different kinds of soils in the county. The soils formed in the steep mountainous areas are loamy, moderately deep to deep, contain many rock fragments and perch on bedrock. The soils formed along the alluvial valleys are deep, somewhat poorly drained to well drained, and loamy to fine textured. The soils formed along the marine terrace area adjacent to the Pacific Ocean are deep, excessively drained to poorly drained, and sandy to fine textured.

The climate of Lincoln County is greatly tempered by the nearby Pacific Ocean and the coastal areas have many characteristics of a maritime climate. Differences in climate are apparent even a few miles inland; the climate of the east side of the county, 24 miles from the coast, could be classified as a modified continental.

For additional information, visit the Oregon Blue Book website at: <http://bluebook.state.or.us>, or the Oregon Coast History Center at www.oregoncoast.history.museum/.

Also, we’ve included a more complete list of agencies that focus on Lincoln County’s natural resources, starting on page 41.



Facts about Lincoln County

- ◆ Established: February 20, 1893
- ◆ Named for: Abraham Lincoln (President, 1861-1865)
- ◆ Area: 992 square miles
- ◆ Population: 46,560 (circa 2013)
- ◆ County Seat: Newport
- ◆ Average Temperature:
 - January 44.4°
 - July 57.6°
- ◆ Annual Precipitation: 71.93”
- ◆ Principle Industries:
 - Tourism
 - Government
 - Service/Retail
 - Forest Product
 - Fishing

A Brief History of Lincoln County

The earliest noted European contact with this area of the Pacific Coast occurred when Captain James Cook landed at Yaquina Bay in March of 1778. At that time, the area's local population included three tribes: the Siletz Band of the Tillamook in the north, the Yacona in the central area, and the Alsea in the south. In 1855, remaining members of these local tribes plus about 4,000 people from 20 other tribes were placed on the newly-formed Coast Reservation, which went from Cape Lookout on the north to the Umpqua River on the south.

In 1861, volunteer soldiers replaced the regulars on the Reservation. In that same year, a rare oyster was discovered in Yaquina Bay. These two occurrences led to pressure to open parts of the Reservation to settlement. In 1866 the land between Cape Foulweather and the Alsea River was removed from the Reservation. By 1892, most of the land had been removed from the Reservation.

Settlement occurred first in the Yaquina Bay area, along the river leading east to what is now Toledo. In July 1866 Sam Case opened a new resort hotel, the Ocean House, on the hill where today's Coast Guard Station is located; he named the area Newport. Joseph Graham and his father, John, claimed land where Toledo is today. John Nye claimed the area now named Nye Beach. David Ruble is recognized for settling the southern part of the county. North County was not settled until 1892, when the remaining members of the Siletz Reservation were given allotments of land. Most of that land soon passed from their hands, and a string of towns developed.

Transportation was an on-going problem. When the railroad arrived in 1884, it stopped a few miles short of Newport, in a town named Yaquina City which had been created by the railroad developers. In 1893, coastal residents, unhappy with the condition of roads and lack of response from Benton county officials in Corvallis, pushed for formation of a county of their own. The state legislature included portions of Benton as well as Polk counties when it created what is now Lincoln County.

In 1917, Toledo and other parts of the county experienced a dramatic change when the Spruce Division of the U.S. Army began construction of a mill to use the region's spruce to build airplanes for the war effort. After the war ended, the infrastructure for a successful lumber industry remained in Toledo.

During the Recession years, the area was helped by the Works Progress Administration, which built the Yaquina Bay and Alsea Bay bridges. Public works programs also built parks, schools and other facilities. The bridges were finished in 1936, making it possible for the first time to travel the Oregon coast without being ferried across bays or rivers.



*Top: Oyster Barges,
Circa 1890*

*Right: Blodgett
Tract 1*

*Photos courtesy of
the Lincoln County
Historical Society*



-Information provided by Diane Disse, Oregon Coast History Center

For more information about the rich history of Lincoln County, visit the Lincoln County Historical Society Center, at 545 SW Ninth Street in Newport, or visit their website: www.oregoncoasthistory.org

Is Rural Living for You?

Choosing to live “off the beaten path” can be a rewarding experience, but with this decision comes a unique set of responsibilities and potential drawbacks. For example:

- ◆ You discover that you don’t have access to the irrigation water that runs through your land.
- ◆ You lose a pet or livestock to a predator.
- ◆ You are responsible for a fire that starts on your land and spreads to other properties.
- ◆ Elk and deer have eaten everything you planted.
- ◆ There is no garbage service where you live.
- ◆ You are responsible for the quality of water that leaves your land.
- ◆ The cost of building structures needed to protect livestock from predators surprises you.
- ◆ You don’t have enough time or energy to mow fields, maintain fences, spray weeds, feed livestock, deal with muddy facilities, doctor sick animals, vaccinate healthy animals, etc.
- ◆ Your domestic or agricultural water source has dried up.
- ◆ Minerals or pollutants have entered your well.
- ◆ It takes more time and money to drive to town than expected.
- ◆ It takes more time to learn about and maintain domestic wells and pumps, sewer systems, irrigation pumps, ditches, hand lines, etc.
- ◆ You discover that the access road to your property is not publicly maintained and instead it is your responsibility to maintain.
- ◆ You learn that the forested land next to yours will be logged.
- ◆ Your neighbor applies pesticides or herbicides that drift onto your land.
- ◆ You discover that there are laws regulating what you can do with your land.

Programs & Incentives

There is a vast array of federal, state and local programs that support soil and water conservation, habitat conservation, organic agriculture, energy efficiency and renewable energy systems for rural landowners in Oregon. Together with partners, Lincoln SWCD regularly assists landowners to explore these programs and find one (or more) that best suits their resource management needs.

Please visit “The Navigator, a guide to incentive programs that help save money by saving resources” put together by the Farmers Conservation Alliance (FCA). It is a comprehensive guide that outlines more than sixty energy and water programs to assist landowners to save money and resources: <http://issuu.com/fcasolutions/docs/thenavigator>.

Grant Programs: Grant opportunities vary throughout the year and from year-to-year. Please check-in with Lincoln SWCD for current opportunities. There are many programs available through USDA’s Natural Resources Conservation Service (NRCS), Rural Development, and Farm Service Agency (FSA) to support landowners in improving land and water quality and quantity. Visit USDA’s website: www.usda.gov.



Buying Rural Property

Country living can be very satisfying. Whether you raise crops and livestock or just enjoy clean air, open space and solitude, this section offers some tips to help first-time rural property buyers, or those new to Lincoln County.

What are your expectations of rural living? What do you want and need from your land? If you've never lived in the country before, it may be best to consider renting before investing in a piece of land.

When working with a realtor, be sure that he/she is familiar with land use restrictions, aware of water issues, and knows where to get answers to your questions. Many rural buyers find it helpful to hire an attorney who is an expert on rural property sales to represent them in the closing process.

Unlike city property with water and sewage connections, you will need to know that there is a reliable water source for home use and farm irrigation. If a well is already in, it should be professionally tested for purity and adequate flow. If there is no well, it may make sense to make the sale of the property contingent on successfully drilling a well. It may be less expensive to pay for a dry well than to buy the property and find out that there is inadequate water. It is also important to fully understand the irrigation rights (if any) that apply to the property and the method of irrigation.

If there is a septic system, it should be professionally tested to ensure that it works. If there is no septic system, percolation tests should be done to ensure that the installation of a new septic system will be approved by the county and will work properly.

Power hook-ups can be expensive in the country. Check your options prior to making an offer on the property. Don't forget to include telephone lines at the same time. You may decide to go "off the grid" and generate your own power. For information, see www.homepower.com.

It is important to understand land use rules that apply to the parcel you're considering, as well as the neighboring properties. Some properties can be subdivided, agricultural lands can be sprayed with pesticides, forests can be logged and farm animals or equipment can produce noise at any hour.

If a property doesn't have a satisfactory home you will

A few considerations when buying rural property

- ◆ Easements
- ◆ Equipment for future maintenance
 - ◆ Land use rules
 - ◆ Power source
 - ◆ Septic system
 - ◆ Survey markers
- ◆ Telecommunications
- ◆ Water source

want to be sure that you are allowed to remodel or build a new one.

Check and understand easements that pertain to the property. Utility and access easements allow others some legal use of your property. Not all rural property has been recently surveyed, so fences and driveways that appear to be on a parcel may not be. If this is important to you, make the sale closure subject to the completion of a survey that satisfies your understanding of the boundaries. If you find the driveway is not on the property, you may want sale closure dependent on securing an easement from the legal owner. Have the current owner walk the property line with you and show the corner survey markers.

Country living often requires cooperation between neighbors, so try to meet them to get a feel for the neighborhood. Learn about all the equipment which will be needed to maintain the property if the current use is similar to what yours will be. The seller may be willing to include equipment in the sale.



Water Rights Primer - Oregon Water Resources Department (OWRD)

A water right is legal authorization to use a quantifiable amount of water, at a specific location, for a particular use. The State of Oregon requires users of public water to obtain approval prior to use of the water. In general, very few new water rights are available. A water right search can be conducted by local Watermasters at the OWRD to determine if a parcel has an existing water right. These organizations are listed on the inside front cover. Or you can do your own search on the OWRD website at www.wrd.state.or.us.

...very few new water rights are available.....

The approval is granted in the following forms: Permit, Certificate, Limited License, or a Registration. The Water Right will indicate the season of use and the maximum diversion rate, the place of use and point of diversion or appropriation (for a well), the use and if for irrigation, the number of acres. Find out about the water rights of a given property before purchasing it. Once it is established that there is a water right, prospective buyers should inquire about the historical use of the water right. If a water right has not been exercised for five successive years within the last twenty years, then the right may be subject to forfeiture.

Surface Water Right

A surface water right is required before diversion of any amount of water from surface water such as lakes, streams, rivers and springs. A few exemptions exist and it is your responsibility to make sure they apply to your specific use. Exemptions include:

- ◆ The use of a natural spring that under natural conditions arises on a parcel and the waters of that spring do not flow into a well-defined channel that flows off that parcel.
- ◆ Livestock watering which occurs directly out of the stream, with no diversion or modification of the source. Also, use of water for stock watering from a permitted reservoir to a tank or trough.
- ◆ Water used for fish screens, fishways bypass structures and egg incubation projects under the Salmon and Trout Enhancement Program (STEP).
- ◆ The withdrawal of water for use in or training for

emergency fire fighting.

- ◆ Certain forest management activities, such as slash burning and mixing pesticides. To be eligible for this exemption, a user must notify OWRD, the Oregon Department of Fish and Wildlife Department, and Oregon Department of Forestry, and must comply with any restrictions of OWRD relating to the source of the water.
- ◆ Land management practices where water use is not the primary intended activity.
- ◆ The collection and use of rainwater from an impervious surface.

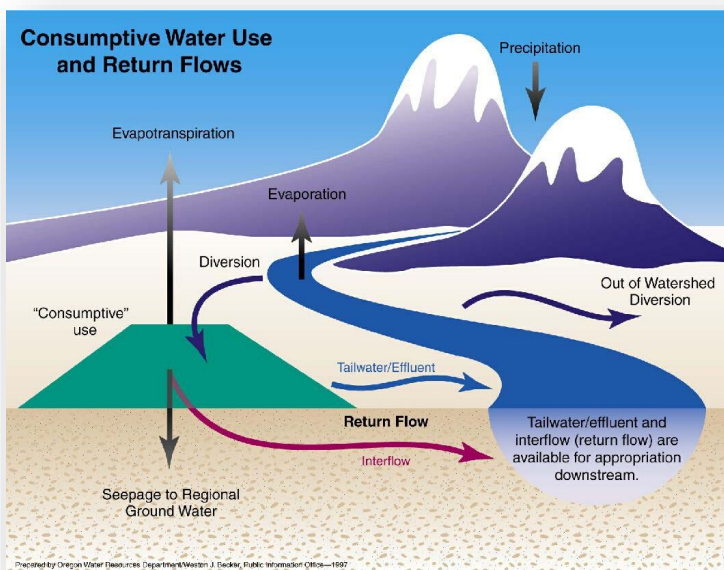
Ground Water Right

A ground water right is necessary for withdrawal of water from a well or sump. Submittal and approval of a transfer application to OWRD may provide changes to a water right. Exempt uses include:

- ◆ Stock watering
- ◆ Irrigation of less than ½ acre of non commercial lawn or garden
- ◆ Single or group domestic use of less than 15,000 gallons per day
- ◆ Single commercial or industrial use of less than 5,000 gallons per day.

Ponds

Most ponds require a water right to store water. A water right is also required to use the water stored in the pond.



Living on Rural Roads

Landowners accept the presence of roads which border their property as part of a community transportation system. The design of private roads must consider emergency vehicle access, water management practices (erosion control), and connections to existing roads. Counties issue a permit for new private road and driveway access that connects to county roads. Applications outline the requirements for access and culvert designs.

Maintenance on rural roads is often the responsibility of landowners. Road crews will be out during inclement times and quickly act on calls of hazardous situations. Please respect flaggers, temporary cautionary signage, and flashing warning beacons.

Rain

Road crews regularly clean roadside ditches and clear the ends of culverts. During heavy rain, culverts can be plugged by debris or overwhelmed by water, causing water to flow across the road or accumulate in the road.

When driving during heavy rain, decrease your speed and be cautious of water in the road. If you have a driveway with a culvert, clean the ends prior to the rainy season to prevent the possible loss of your driveway. On paved roads, an accumulation of dust, oil and film can cause a slippery road when the first rains occur after any dry period of time.



throughout the winter until spring prior to the dry season. They may add more material to get a smooth, even surface. On some roads, the landowner is responsible for maintenance.

Gravel roads can be hazardous. They usually do not have posted speed limits and are designed for slower speeds. Driving gravel roads requires a high degree of attention and respect for others traveling and living along the road. They don't have marked centerlines, though most will have enough width for two vehicles to travel safely. Drivers tend to crowd the center of the road resulting in loose rock along the sides of the road which can be hazardous. *Please* slow down when you approach pedestrians, equestrians, homes, cars, and road crews.

Snow and Ice

Road crews will respond 24/7 if storm conditions are persistent. The main roads are treated for traction during icy weather. Along the coast, we generally don't get enough snow to warrant plowing; however, the eastern side of the county sees more snow. During snowstorms, it is recommended to use or at least carry traction devices if travel is a must. In some areas traction devices are mandatory.

Wind

County road crews or contractors remove dead and dying trees and trim trees and clear brush along roadways to maintain sight lines, horizontal and vertical clearance and reduce fire danger. Heavy wind can loosen and knock down limbs or entire trees onto the roadway. Be cautious while driving in heavy wind, especially at night when visibility is limited.

Gravel Roads

County road crews grade, rock, and perform maintenance activities on gravel roads. Minimally, they grade in the fall after adequate rains and

The Lincoln County Road Department maintains approximately 332 miles of paved and graveled roads throughout the county

Paved Miles: 186.13

Rocked Miles: 145.59

Total Maintained Miles: 331.72

Lincoln County Public Works Department
410 NE Harney Street, Newport, Oregon
97365

TO REPORT A ROAD EMERGENCY:
During Regular Business Hours
(541) 265-5747

Onsite Waste Management Systems (Septic Systems)

Over thirty percent of Oregonians use onsite septic systems to treat their residential waste. A conventional septic system is a fairly simple and effective method that consists of two primary components. The first is the septic tank and the second is the drainfield.

Septic Tanks

Septic tanks range in size and material. Most septic tanks installed in Lincoln County after 1974 range in volume from 750-1500 gallons. Current regulations require new tanks to be at least 1000 gallons. The most common materials are steel, concrete and plastic. (Did you know: A steel tank may begin to break down in as little as ten years! Although, a concrete tank is a bit more expensive it will last 4 or 5 times longer).

The primary role of a septic tank is to pretreat wastewater before it enters the drainfield. This happens in a few ways. First, solids and other heavier particles sink to the bottom of the tank and create what is called a sludge layer. At the same time fats and grease float to the top of the tank to create a grease layer. The result is that the effluent that enters the drainfield should be liquid and solids will be trapped in the tank until pumped out by a certified contractor. This liquid effluent however, can still carry disease and other pathogens. This leads to the second major component which is the drainfield.

Drainfields

The septic tank will eventually fill up as house users flush, drain and pipe wastewater into it. Once full, the effluent which has been pretreated in the tank is pushed out and enters the drainfield. It is here where the final treatment takes place.

Drainfields typically consist of a series of gravel trenches about 12" deep. Perforated pipes lie in the trenches and allow effluent to be evenly distributed throughout the drainfield. The effluent then enters the soil where the soil captures and breaks down heavy metals, disease, pathogens and other pollutants.

Septic System Care and Maintenance

Although septic systems are very effective they do require regular maintenance. If a system is maintained properly it will increase the lifespan and save owners money! Unlike most of a homeowner's property which is visible, septic systems lie below ground and are often

forgotten about until a failure.

Did You Know: EPA estimates that 10-20% of septic systems fail. It is very important to assure that your system is properly functioning. Failing systems degrade the environment and pose a health risk to your family, neighbors and pets. A failing system can create a problematic situation that could cost thousands of dollars to repair and clean up.

Septic DO'S and DON'TS

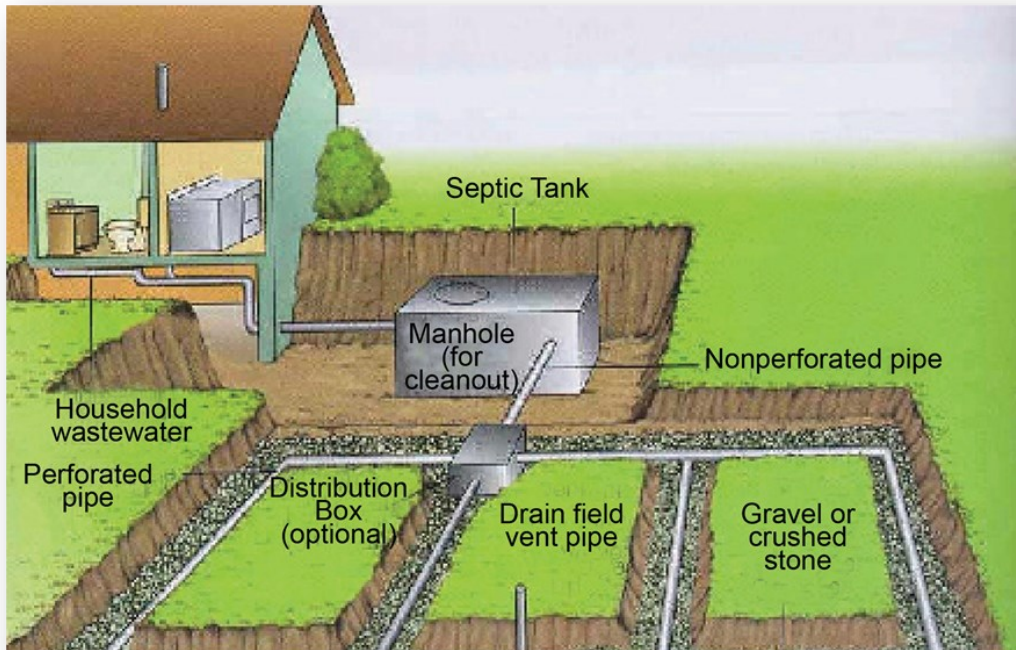
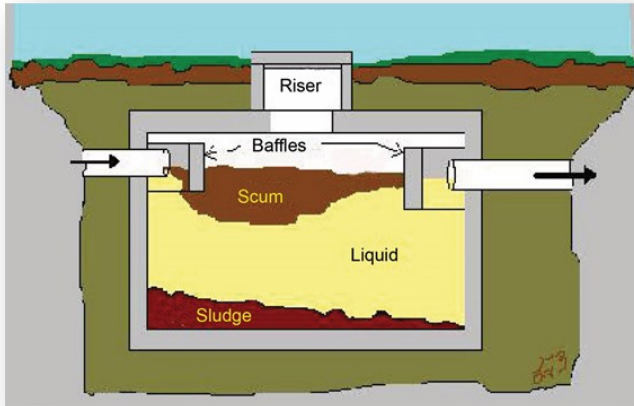
- ◆ DO have your system inspected on a regular basis. Experts agree the system should be inspected every 3-5 years.
 - ◆ DO have your drainfield and septic tank mapped out, so you know where it is.
 - ◆ DO pump your septic tank regularly.
 - ◆ DO protect your drainfield.
 - ◆ DO direct storm-water and other surface water away from the drainfield.
 - ◆ DO use liquid detergents, since powder detergents will clump in the septic tank.
 - ◆ DO space out your water use. Excessive water use decreases pre-treatment time in the septic tank.
-
- ◆ DON'T build structures or plant long rooted plants above the drainfield.
 - ◆ DON'T use a garbage disposal. Small food scraps will fill up the septic tank and block drains in the drainfield.
 - ◆ DON'T put anything but water and wastewater down your pipes. Throw food waste, paper towels, feminine products, and other heavy materials in the trash.

Failing Systems

As a homeowner using a septic system you are required by law to assure that it is functioning. This is not always easy to know since, the entire system is underground. However, there are some signs that indicate a failing system. If you notice any of the following have your system inspected immediately.

- ◆ Sewage smell in the house
- ◆ Toilets draining slowly or backing up
- ◆ Water ponding over the drainfield
- ◆ Foul smells over or near the drainfield.

Also, know your septic system's capacity and limit heavy use by finding an alternative (e.g., porta-potty) for large events such as weddings and reunions.



For additional information, or local inspection, contact the Lincoln County Onsite Waste Management Program, at (541) 265-4192 or visit the website at www.co.lincoln.or.us/planning/onsite.

Planting on Your Septic Drainfield

A drainfield is a series of relatively shallow (a minimum of 12 inches below the surface) underground perforated pipes set in gravel trenches that allow septic tank effluent to drain over a large area. As the effluent seeps into the ground, it is purified by the soil.

Plant roots can help remove excess moisture and nutrients, thereby making the purification of the remaining effluent more efficient. However, roots that clog or disrupt the pipes will seriously damage the drainage field.

The challenge of drainfield gardening is to find plants that will meet your landscape needs but not clog the drain pipes. Shallow-rooted herbaceous plants, such as flowering perennials and annuals, grass, and many ground covers, that are not excessively water loving are best.

Trees and shrubs are much riskier choices for the drainage field than herbaceous plants and should not be used. The woody roots of these plants are more likely to clog and damage drain lines. Especially notorious for line clogging are water-loving trees such as willows and poplars.

Information provided by Devils Lake Water Improvement District

Being Neighborly

The importance of neighbors is heightened in rural areas, but it can present unique circumstances. Get to know your neighborhood before you move to an area. Conflicts, both real and perceived, between new and existing rural landowners, have always existed. By gaining a better understanding of the causes of these conflicts, some may be avoided.

Advice on Being a Good Neighbor

- ◆ Recognize that being neighbors is a two way street and that it is important to respect your neighbors' endeavors.
- ◆ Cooperatively build and maintain boundary fences to keep livestock from trespassing. Some parts of Lincoln County are open range and livestock may be on roads or in open areas. It is the responsibility of the property owner, not the livestock owner, to keep livestock off of private property.
- ◆ Realize that moving livestock and farm machinery on country roads is necessary. Be cautious and prepare for delay.
- ◆ Control your dogs so that they do not harass or harm your neighbors' livestock.
- ◆ Understand that some practices, such as burning along irrigation ditches and running machinery after dark are common farming practices and are necessary at certain times of the year.
- ◆ Prevent noxious weeds from moving from your property to your neighbors' land via wind, water, animals, or other means.
- ◆ Always know where you are and whose land you are on. Ask permission to be on someone's property; do not trespass.
- ◆ Keep in mind that people who live in rural areas prize their privacy and their space.

Dogs

Dogs must be under control and on your property at all times. Free roaming dogs are a threat to livestock and wildlife. Farmers and ranchers have the right to protect their livestock and, in some cases, will destroy animals that pose a threat. If your dog is responsible for the injury or death to livestock, you will be held financially responsible and your pet may be euthanized. It is also your responsibility to license and vaccinate your dog against rabies.

Dogs are susceptible to Salmon Poisoning Disease, an often fatal condition that can occur when dogs eat certain kinds of raw fish. The disease is caused by Salmon (salmonid fish) and other

anadromous fish (fish that swim upstream to breed), which can be infected with a parasite called *Nanophyetus salmincola*. Overall, the parasite is relatively harmless.

The danger occurs when the parasite itself is infected with an organism called *Neorickettsia helminthoeca*. It's this microorganism that causes salmon poisoning. Generally clinical signs appear within six days of a dog eating an infected fish.

Common Symptoms of Salmon Poisoning

- ◆ Vomiting
- ◆ lack of appetite
- ◆ Fever
- ◆ Diarrhea
- ◆ Weakness
- ◆ swollen lymph nodes
- ◆ dehydration.

If untreated, death usually occurs within fourteen days of eating the infected fish. Ninety percent of dogs showing symptoms die if they are not treated. Luckily, salmon poisoning is treatable if it's caught in time. It is important to let your veterinarian know if you suspect that your dog may have eaten raw fish.



Don't let your four-legged friends eat raw fish

Cats

If you see a stray cat in your yard, do not pick it up. Most likely it belongs to a neighbor. Cats have been known to roam as much as 3 miles away from their home turf. Do not feed the cat; by not feeding it, the cat will be encouraged to return home for its food. If you insist on doing something, check with the neighbors first. Distribute posters with pictures of the cat to neighbors, stores, and vets to give the owners a chance at coming and retrieving their pet. Bring stray cats to the shelter as a last resort. They will only take stray cats after you call and make an appointment. It is extremely important to spay and neuter your pets.



Feral cats are common throughout county

The Lincoln County Animal Shelter is located at 510 NE Harney Street, in Newport, (541) 265-6610.

Fences

Fences and property lines are potential sites of conflict. Working with your neighbors to maintain these areas is a great opportunity to improve relationships. It is the duty of each landowner sharing a fence to maintain half the existing fence and equally share in constructing a new fence. Properly maintained fences are important for the protection of livestock, domestic animals, and wildlife to prevent entanglement, injury and/or death (See Wildlife-Friendly Fences page 24). Fences do not always indicate property lines; know where your boundaries are.

Opt to Adopt!

Visit the Lincoln County *Animal Shelter* to meet the wonderful dogs and cats who are waiting for their forever home.

To report roaming animals, abuse or neglect, please call LinCom at (541) 265-4231.

Hunting and Fishing

Throughout Lincoln County there are many opportunities for hunting and fishing. Be aware that permission is required for any hunting or fishing on private lands.



Rules and Regulations

The Oregon Department of Fish and Wildlife (ODFW) publishes an annual synopsis for hunting (big game and birds) and fishing. Wildlife laws and regulations are enforced by the Oregon State Police, Game Division.

If landowners are experiencing trouble with hunters or fishermen, they should first contact Oregon State Police, their local ODFW Office or the County Sheriff.

Gaining Access to lands

Hunters and fishermen can only enter private land with the owner's permission. Remember to be courteous when on, or asking to use, private property. Many landowners may grant access to their land for hunting or fishing if asked nicely and if you keep their property the way you found it or better.

Some landowners may prefer not to grant access. It is their right to choose, so be respectful of their wishes.



Get permission to hunt on private lands

Invasive Plants and Weeds

Weeds have likely plagued agricultural practices since the beginning of cultivation. Essentially defined as unwanted guests, weeds can be native to an area but not suitable in a particular setting - crop field, pasture, garden or lawn, for example. More often, weeds are human-introduced and not of local origin (nonnative). Within this spectrum are the less common but more problematic invasive weeds.

Invasive weeds cause serious ecological and economic harm when introduced to areas they are not native. They typically exhibit aggressive competitive behavior that can, over time, replace local flora and alter native plant communities. These weeds exhibit aggressive growth and productivity, and may produce chemicals that prevent growth of other plants (allelopathy). Natural areas that are dominated by a single species of non-local origin are unbalanced and at odds with a properly functioning ecosystem. Preventing invasive weed introduction or spread protects food webs (insect, fish, wildlife) and reduces economic impacts to natural resources humans depend upon.

A considerable percentage of invasive weeds were originally introduced as ornamentals or livestock feed while others “hitchhiked” from their origins within the effective global human transportation infrastructure. More recently, government organizations and other land managers have been emphasizing the mantra **Early Detection and Rapid Response** (EDRR). This mantra aims to utilize limited resources in order to prevent establishment of new invasive weeds locally. It focuses on education and outreach about new invaders and encourages public participation in reporting sightings of new invaders so that authorities can nip the problem in the bud, so to speak.

Guard your property from the threat of new invaders. And remember to report them - don't underestimate your impact in this critical effort. The following resources provide additional information on what to look for, how to effectively control them, and what resources are currently available in Lincoln County to assist in controlling invasive weeds on your property:

Lincoln SWCD

Invasive Species Control Program—541-265-2631
<http://www.lincolnswcd.org/invasive-species-program.html>

Oregon State Weed Board - Department of Agriculture. Profiles of all State Listed Noxious Weeds: www.egov.oregon.gov/ODA/PLANT/WEEDS/.

Lincoln County Public Works, Vegetation Management, at 880 NE 7th Street, Newport, Oregon Phone: (541) 265-5747, or: www.co.lincoln.or.us/publicworks/vegetation_mgmt.html.

TO REPORT WEEDS

go to:

www.oregoninvasiveshotline.com

Or call: **1-866-INVADER**



English ivy strangles native trees; Himalayan knotweed takes over meadows; Policeman's helmet blankets valleys

Asian knotweeds (*Fallopia* species) are among the most virulent and difficult to control invasive weeds. These perennial species were brought to the U.S. as ornamentals but their escape into natural areas threatens the stability and biodiversity of hundreds of miles of riparian forest and other sensitive habitat across the U.S. and the world. Almost impossible to control without herbicides, these species readily spread via vegetative fragments and pose a serious threat to wildlife and fish habitat. Contact the Lincoln Soil and Water Conservation District for more information about these species. Photos (left to right): Giant, Himalayan and (bottom) Japanese knotweed.



Yellow flag iris (*Iris pseudacorus*) is a perennial iris species that was introduced as an ornamental from Europe. This species is particularly destructive in wetlands as it can completely replace native wetland plants that water fowl and other wetland species depend upon. This iris is well recognized by its bright yellow flowers and tall stature (3-5 feet tall).



Policeman's Helmet (*Impatiens glandulifera*) is an annual weed from central Asia that inhabits moist forests. Its prolific growth (up to 8 feet tall) outcompetes other herbaceous species and competes for local pollinators. Explosive seed pods eject seeds effectively. Control is actually easy as its roots are shallow -- pull before seed pods mature and allow drying of material before disposing.



Clematis vitalba (old man's beard) is a deciduous (leaves die during the winter) perennial vine that produces copious biomass in the form of woody vines that grow into tree canopies, toppling trees and carpeting understory vegetation. This species readily spreads from vegetative fragments and produces airborne seeds, and is a serious threat to coastal forests; report any known occurrence. Look for the opposite-positioned leaves and thick long tan vines with ribs along their length.



Soil Quality and Conservation

It is very important to know the soil type(s) on your property. Heavy clay and sandy loam, for example, require different management decisions for most efficient use of your land. Knowing your soil type will help you with the planning of crop yields, waste disposal systems, recreation sites, erosion control, and conservation.

Lincoln SWCD encourages you to learn more about your soil by using NRCS's Web Soil Survey tool: websoilsurvey.nrcs.usda.gov. You can find your property, make soil maps and learn the specific qualities and applications of different soil types. Lincoln SWCD or local NRCS staff can assist with this, too.

Soils 101

What is soil?

Soil is a naturally occurring mixture of mineral and organic ingredients with a definite form, structure, and composition. The exact composition of soil changes from one location to another. The following is the average composition by volume of the major soil ingredients:

- ◆ 45% minerals (clay, silt, sand, gravel, stones)
- ◆ 25% water (the amount varies depending upon precipitation and the water-holding capacity of the soil)
- ◆ 25% air (an essential ingredient for living organisms)
- ◆ 5% organic matter or humus (both living and dead organisms).

A soil is composed primarily of minerals which are produced from parent material that is weathered or broken into small pieces. Beyond occasional stones, gravel, and other rock debris, most of the mineral particles are called sand, silt, or clay. These mineral particles give soil texture. Sand particles range in diameter from 2 mm to 0.05 mm, are easily seen with the unaided eye, and feel gritty. [One millimeter (mm) is about the thickness of a dime.] Silt particles are between 0.05 mm and 0.002 mm and feel like flour. Clay particles are smaller than 0.002 mm and cannot be seen with the unaided eye. Clay particles are the most reactive mineral ingredient in the soil. Wet clay usually feels sticky.

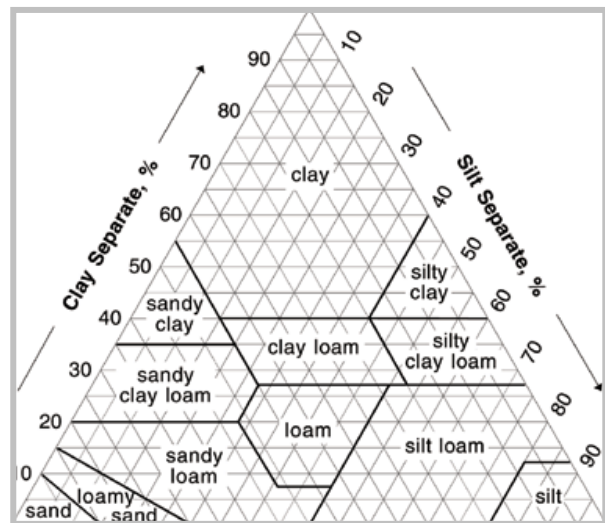
Water and air occupy the pore spaces—the area between the mineral particles. In these small spaces, water and air are available for use by plants. These small pore spaces are essential to the life of soil organisms, to soil productivity,

and to plant growth.

The final ingredient of a soil is organic matter. It is comprised of dead plant and animal material and the billions of living organisms that inhabit the soil.

Soils are developed over geological time. Climate, water, temperature and parent materials all contribute to soil creation. Parent material can include bedrock, volcanic ash and glacial outwash. It can take up to 500 years for natural processes to create one inch of topsoil.

- ◆ Soils are susceptible to erosion when not adequately protected.
- ◆ Soils have different textures consisting of sand, silt and clay.
- ◆ The depth of the soil to bedrock or the water table is often a factor in determining land use.
- ◆ Steepness or position on the landscape affects soil stability and sustainability.



Soil Textural Triangle. <http://soils.usda.gov>

Soil Testing

Performing a soil test can save you a lot of money by eliminating unnecessary irrigation, over-application of fertilizers, and loss of crops due to incompatible soil types. Common nutrient deficiencies can include nitrogen (N), potassium (K) and phosphorous (P). Soil testing is available from several laboratories. The OSU Extension office can provide a list of labs where samples can be tested. When the results are returned, OSU or Lincoln SWCD staff can help you interpret them.

Erosion Control

Topsoil is the most productive and biologically active layer of soil. Eroded soils cannot support desirable plant growth. Without the intricate network of roots and soil-dwelling organisms, the fertile topsoil would be lost through rain or wind erosion. You can maintain this valuable natural resource by using sustainable management practices such as maintaining grass or native ground cover, planting native plants in riparian and wet areas, and managing grazing and other activities for healthy vegetated cover. Vegetation will protect the soil from erosion by rain, runoff, and wind. It will also increase the uptake of water and hold soils in place on slopes and along streams.



Soil Saving Tips

- ◆ Keep all soils on your property well covered with vegetation year-round.
- ◆ Cover crops, sod-forming grasses, native plants, and ground covers are excellent soil protectors.
- ◆ The LSWCD can help select native plants suited to your property.
- ◆ Reseed immediately with weed-free grass seed after any earth-disturbing activity.
- ◆ Grade and reshape roads and building sites to direct water to safe outlets and prevent standing water on soils.

Did you know . . .

There are about 50 billion microbes in 1 tablespoon of soil?!

Pasture Plants that Protect Soil

The following pasture plant species are commonly used in Western Oregon for a healthy field consisting of a well-balanced mixture of grasses and legumes.

Grasses:

- ◆ Orchard grass is a productive grass good for hay or pasture on well-drained soils.
- ◆ Tall Fescue is a grass that grows well in a wide variety of conditions.
- ◆ Perennial Ryegrass is a “cool season grass” used in pasture or hay production. It works in wide variety of soil conditions.

Legumes:

- ◆ White Clover is a long-lived highly palatable perennial clover well adapted to pasture production in Oregon.
- ◆ Red Clover is a cool season perennial legume that is very adaptable and complements tall fescue and other grasses.

For further assistance, please contact the Lincoln Soil and Water Conservation District at (541) 265-2631 or by e-mail at info@lincolnswcd.org.



Riparian Areas, Floodplains and Wetlands

A riparian area is a transitional area located between land and water. These buffer zones are found alongside streams, lakes, and wetlands. Although they comprise only a small portion of the landscape, they are critical ecosystems, supporting both plant and animal diversity.

A Healthy System

A healthy riparian area has lush and diverse vegetation along the water's edge, which reduces water pollution by filtering out sediments, chemicals and nutrients from runoff. Water retained in soils releases slowly, enhancing stream flows and groundwater recharge. Slower water reduces erosion and property loss. Native plants such as willow, red alder and pacific ninebark serve important ecological functions, such as providing shade, fish and wildlife habitat, and stream bank stability.

Practices to Enhance Riparian Areas

- ◆ Maintain or establish riparian buffers. Studies show that buffer widths of 50 feet trap sediment, 100 feet filter pollutants, and 200 to 300 feet provide wildlife corridors.
- ◆ Fence livestock away from riparian areas. (See Wildlife-Friendly Fences on page 24).
- ◆ Delay mowing riparian grassy areas until late July, when birds have finished nesting.
- ◆ Remove or control invasive plant species, establish native plant species.

Floodplains

Flooding is a natural stream process. A floodplain is the land inundated with water during high flows. Water slows as it spreads out, reducing its erosive force and helping aquifer recharge as water seeps into the soil. These areas are nutrient-rich from accumulated sediment deposits, which build fertile soils.

Wetlands

Wetlands are specialized ecosystems that often occur at the edge of aquatic or terrestrial systems. They may be wet year-round, during certain seasons, or just part of the day. The Clean Water Act defines wetlands as "Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas." Wetlands also include tidal marshes, forested wetlands, and seasonally ponded sites, such as vernal pools. Seasonal wetlands often dry out and may not appear to be wetlands much of the year.

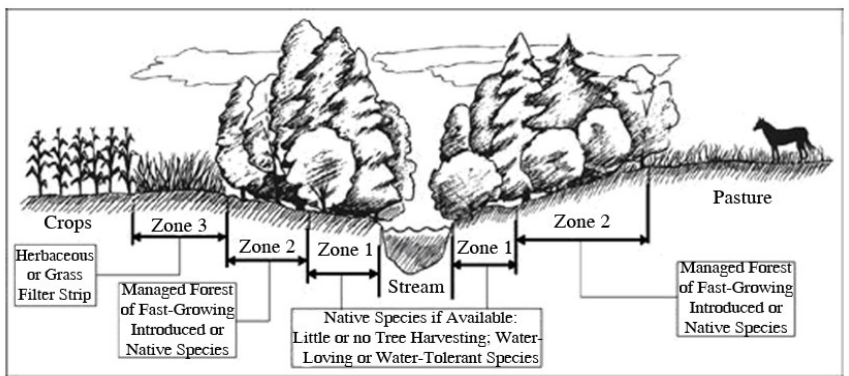
*Wetlands
aren't always
wet.....*

Wetlands are often used by animals from both wet and dry environments. A number of invertebrate, fish, reptile, and amphibian species depend on wetlands to survive or complete their lifecycles. For example, nearly all amphibians and at least 50% of migratory birds use wetlands regularly.

Wetlands provide important benefits that include: fish and wildlife habitat, erosion control, flood damage reduction, water quality, aesthetics, and recreation.

For more information visit Oregon Wetland Explorer: www.oregonexplorer.info/wetlands.

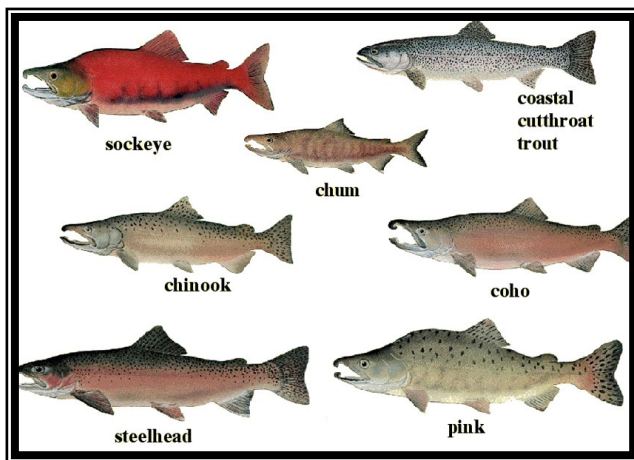
Cross section of a three-zone riparian forest buffer. (adapted from USDA NRCS Riparian Forest Buffer Conservation Practice Job Sheet 391)



Salmon

Several species of anadromous fish (moving between fresh and saltwater) use Lincoln County streams during parts of their life cycles. These species include chinook, chum, and coho salmon, steelhead, sea run cutthroat trout, and Pacific lamprey eels. If there are no barriers to fish migration, the stream on your property may be home to any or all of the above.

Generally, adult salmon return to local streams in the fall, and steelhead in the winter and spring. Sea run cutthroat return in the late summer, early fall and live in the stream. Lamprey start arriving in early spring. Adult salmon are usually easy to see,



steelhead and trout are more secretive. Salmon and lamprey die after spawning, steelhead and trout can survive the spawning cycle multiple times.

To spot spawning areas, look for hollowed out depressions in the gravel called redds that the females dig to lay their eggs in. Redds are usually found in pool tail outs or riffles where a steady flow of cool water can bring oxygenated water past the eggs, and can be from one foot in diameter for trout and lamprey to ten feet for chinook salmon. In the summer, look in pools, eddies behind logs and under cutbanks and you should be able to see juvenile salmon, trout and steelhead.

“Overhanging riparian brush, trees and logs provide juvenile fish with backwaters and eddies to escape winter flows and provide pools, cool water and cover from predators during the summer. So, these areas are critical for juvenile survival and usually well occupied,” says Lincoln SWCD fish surveyor, Kip Wood.

They all have two names!

Chinook salmon = King salmon

Coho salmon = Silver salmon

Sockeye salmon = Red salmon

Pink salmon = Humpback (Humpy) salmon

Chum salmon = Dog salmon

At some point you might be contacted by ODFW or Lincoln SWCD for permission to access the stream on your property to do a Spawning Ground Survey. These surveys usually consist of a surveyor walking a fixed part of the stream once every 7-14 days during the spawning season. They will be counting adult fish and spawning redds. The data will be combined with results on other streams to determine local and regional stock abundance and population trends. This information is a critical tool used in ODFW’s management decision process for determining seasonal harvest limits.



Resource Management Plans

There is a lot to know about owning and managing land, and even more to know if you plan to raise livestock. With a little time, some knowledge, and a modest amount of money, you can have a property of which you can be proud, while protecting Lincoln County's natural resources.

A Management Plan is the first step to successful land and natural resource management. It is easy to design: start by simply spending time on the property you propose to buy, looking around, making a sketch and taking notes on property features such as boundaries, fences, corrals, pastures, buildings, wells, septic system, water sources, bare ground, roads, driveways, soil types, cropland, weeds, trees and shrubs, land use and topography.

Next, define your management objectives. Determine your goals. Visualize how the land will be used and then how it should look. Decide what is important, what to avoid, and what you want from the resources on your property. A management plan will address the objectives that you outline and define.

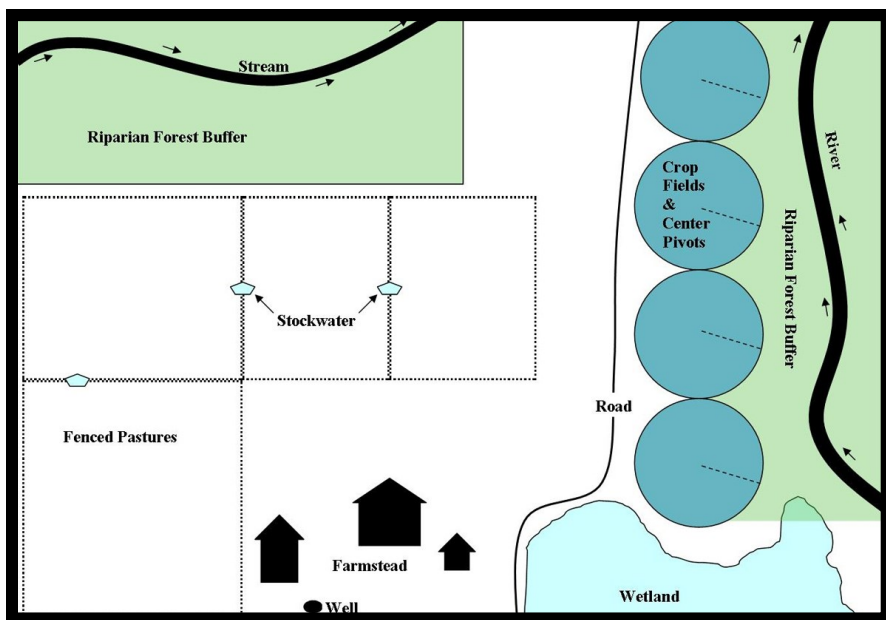
Remember to be aware of how the plan fits in with other land uses in the neighborhood. Even if your plan does not make many alterations to the existing use of the land, you will need to plan to keep weeds from becoming invasive. Understand that doing nothing is also a plan and may result in severe infestations of invasive species which reduce or eliminate wildlife habitat and are

problematic to neighbors. Land must be managed in some way, even if not for human use.

The Lincoln SWCD and the Natural Resources Conservation Service (NRCS) have staff that can assist you in developing forestry, range, farm, wildlife and wetland management plans. The Lincoln SWCD can assist in acquiring grants and financial aid to fund improvements. In addition, NRCS administers a number of cost-share programs to provide assistance with irrigation system improvements, wildlife habitat restoration and forest stand improvements.

The Lincoln County OSU Extension Office is a great source of information on a variety of topics associated with livestock, crops, landscaping, lawns, gardens, buildings, pest management, and other issues.

For Resource Management Plan assistance, contact: Natural Resources Conservation Service (NRCS) or the Lincoln Soil and Water Conservation District, 23 N. Coast Highway, Newport, Oregon 97365. Phone: (541) 265-2631, or visit the websites www.or.nrcs.usda.gov or www.lincolnswcd.org.



Example of a property map



- Step 1: Identify land management goals.
- Step 2: Inventory the resources on your land.
- Step 3: Assess conditions on your land.
- Step 4: Identify the options and actions right for your land.

Agricultural Water Quality Plans and Rules

As a landowner, you are responsible for water quality issues on your property. Be pro-active in managing your land; voluntary compliance with the law is best.

The Agricultural Water Quality Management Act passed by the Oregon Legislature in 1993 directs the Oregon Department of Agriculture (ODA) to work with farmers and ranchers to develop area-wide water quality management plans for the state's watersheds.

The focus of the Agricultural Water Quality Management Program is on voluntary and cooperative efforts by landowners, ODA, and others to protect water quality. However, the Agricultural Water Quality Management Act also provides a regulatory backstop to ensure prevention and control of water pollution from agricultural sources. Agricultural water quality regulations serve as this backstop while allowing landowners flexibility in how they protect water quality. Local area regulations describe characteristics to achieve rather than practices that must be implemented.

Lincoln SWCD has an agreement with ODA to act as the Local Management Agency in Lincoln County to provide assistance to landowners in evaluating their property and implementing conservation measures to meet the goal of the Mid-Coast Agricultural Water Quality Area Plan and Rules (Mid-Coast Ag Plan). Below are some examples of what topics and rules the Mid-Coast Ag Plan covers:

Soil Erosion

Erosion from agricultural lands due to management practices that results in sediments impacting and polluting the waters of the state is not allowed. Erosion can occur with any type of activity that disturbs the soil, including homebuilding, measures should be undertaken to avoid runoff and erosion. The Mid-Coast Ag Plan does differentiate between chronic erosion activities and temporary, short-term activities needed to enhance overall soil stability.

The intent of the soil erosion rule is to prevent erosion from agricultural and land development practices. One of the main concerns is ground being left bare going into the winter without adequate vegetation or cover to prevent the soil from washing away. Grass filter strips are just one technique that can be used to trap and settle out sediments from the runoff leaving the bare ground areas.

Riparian Vegetation

Agricultural practices should not cause stream banks to slough off at a rate more than normal for that particular system or prevent appropriate vegetation from establishing and reproducing, leaving the stream side area vulnerable to high flow events. A combination of deep rooted trees, shrubs and grasses are needed to support streamside soil systems and limit erosion. Deep rooted plants such as willows, sedges and snowberry can help protect the stream bank erosion. Conversely, there are some plants that do not provide bank protection, even during moderate flow events.

Crop Nutrient or Animal Waste Management

You must prevent manure and fertilizers from leaving your property. Small acreage landowners are especially vulnerable to this rule. Stored waste from barn cleanings or feeding areas could leave the property if water gets in it from rain, runoff, or if stored in a flood plain. Paying attention to where you put your manure pile, covering it, and diverting water away from it are all easy ways to stay in compliance with this rule. The best ways, however, are to use it right on your property or share some with your neighbors; just don't send it to them by way of the stream!

Please contact the Lincoln Soil and Water Conservation District for a copy of the current Mid-Coast Ag Plan at (541) 265-2631 or info@lincolnswcd.org.



Off-Stream watering system is a suggested best management practice

LIFE. Get good at it.

OSU Extension provides practical education that helps you solve problems, develop skills and build a better future. Our Lincoln County office provides life-long education in nutrition, youth development, child care, forestry, local foods, small farms, fishing & fishery products and gardening.

29 SE 2nd St., Newport
extension.oregonstate.edu/lincoln
541-574-6534



Liz Olsen
Master Gardener
Volunteer
Newport

Oregon State
UNIVERSITY



Natural Food Cooperative



A Full-Line Grocery!

All-Organic produce, natural meat, bulk foods, many gluten free items

Mon-Fri: Salad bar: 8-6 • Hot bar: 11-6

SOMETHING FOR EVERYONE!

159 SE 2nd & Benton, Newport behind the Newport Recreation Center
541-265-8285 • Mon-Fri: 8-7 • Sat: 8-6 • Sun: 10-6 • www.oceanafoods.org



The FEED CORRAL Inc.

634 North Coast Highway

Newport Oregon 97365

Phone: 541-265-8299 Fax:

541-265-8594

Store Hours

Monday-Friday 9:30am-

5:00pm Closed Sundays

*Tack, Feed, Pet Supplies,
Jewelry and Apparel*

Logsden Country Store

PO Box 15

7550 Logsden Rd

Logsden, Or 97357

Phone: 541-444-2088

Fax: 541-444-2339

Mon – Sat 9am to 6pm Sun 9am to 4pm

US Postal Service

Fishing / Hunting

Licenses, Bait,

*Tackle, Gaso-
line/ Diesel*

Grocery, Beer,

Wine, Coffee,

Newspapers,

and hot DELI



PROBuild

www.probuild.com



INSPIRING IDEAS FOR **YOUR HOME**

We'll turn your dream home into a reality. We offer quality products to meet your budget. Our on-site professionals can walk you through any job from new construction to remodeling. We also offer a full line of windows, doors, and cabinets to put the final touches on a product you will be proud to put your name on.

NEWPORT • 615 N COAST HWY
STORE HOURS: M-F 7AM - 6PM • SAT 8AM - 4PM

Grazing as a Pasture Management Tool

Grazing is one of the best tools available for improvement and maintenance of healthy, productive pastures. Increased infiltration rate, water quality, organic matter, rooting structure, plant health, animal production, and decreased weed invasion, soil erosion, and pesticide use are benefits of proper grazing.

Grazing Methods

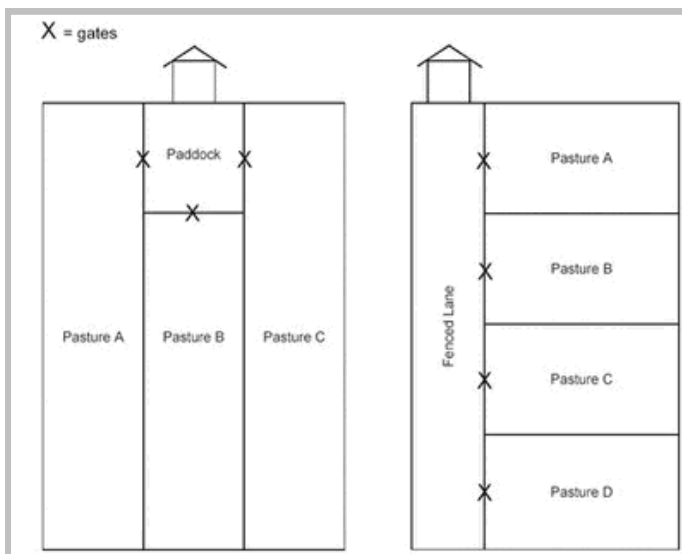
Timing, intensity, and duration of livestock grazing can have a dramatic impact on individual plant vigor and overall pasture production.

Continuous Grazing

Continuous grazing typically employs a fixed number of animals grazing a certain number of acres for a given length of time. Continuous grazing, although less labor-intensive, creates pastures that can be overgrazed and depleted. This is a result of livestock selectively grazing the more desirable plant species.

Rotational Grazing

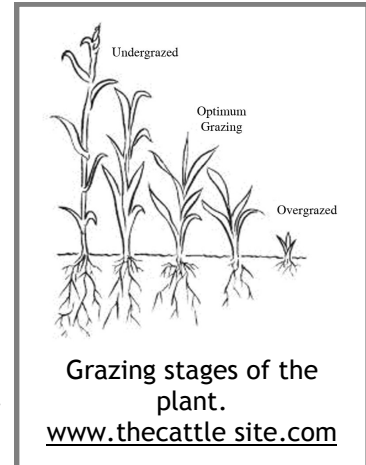
Rotational grazing requires more intensive management. Livestock typically are allowed to start grazing in a field when the forage is 8-10 inches tall. After the forage is eaten down to approximately 4 inches, livestock are removed to allow the plants some relief from grazing. This leaves adequate plant leaf area to maintain the photosynthetic capability of the plant. The more energy the plant receives from the sun, the less energy it needs to extract from root reserves. Quicker re-growth occurs from photosynthetic activity and translates into more vigorous plants



Examples of rotational grazing systems.

www.das.psu.com

Rotational grazing also results in more uniform grazing of all plant species to a desirable stubble height (length of leaf blade), increasing per-acre production.



Management

Techniques

- ◆ Determine goals and objectives in a management plan.
- ◆ Divide pastures into small units/paddocks.
- ◆ Move grazing animals between paddocks to allow recovery time for forage species.
- ◆ Drag pastures to break up and evenly distribute manure following grazing.
- ◆ Irrigate paddocks following grazing rather than prior to grazing.
- ◆ Take soil samples and apply nutrients based on the results of a soil test.
- ◆ Have water, salt and minerals available and dispersed throughout the area to help distribute livestock evenly across pasture while keeping them healthy.
- ◆ Adjust animal numbers and management based on pasture production and re-growth.

Producers should not allow livestock continuous access to the entire pasture. Avoid grazing on saturated soils or during late fall, winter, and early spring, as soil compaction and plant damage will reduce the productivity and health of your pasture. Horses only need 2-3 hours of grazing per day, allowing for partial intake of their daily nutrient requirement and for exercise.

Good grazing management should produce healthy pastures, reduce overgrazing as well as the need to seek outside feed, reduce invasive weeds, and keep livestock healthy.

Open Range and Livestock District

Lincoln County has both “Livestock District” and “Open Range” areas, so it is important to know if the land you own or lawfully lease is within a “Livestock District” (also called “Closed Range”) or “Open Range” and to understand the difference.



- ◆ An Open Range is an area where livestock are lawfully permitted to run at large.
- ◆ A Livestock District, or Closed Range, is an area where it is unlawful for livestock to run at large.

Question: Somebody’s livestock is running loose on my property. What can I do about it?

Answer: A lot depends on whether your property is in an Open Range area or a Livestock District.

- ◆ If you’re in an Open Range area and don’t want other people’s livestock on your property, you must build adequate fences or have natural barriers to keep livestock out.
- ◆ If you’re in a Livestock District, the animal owner is required to keep the animals on their property.

Landowners and/or lawful lessees of pasture for livestock, need to understand these terms:

- ◆ For this discussion, “Livestock” means cattle (any bovine), all equidae (horses, donkeys, mules, asses, etc.), sheep, and goats. Swine are not allowed to run at large anywhere in Oregon: they must be kept on the owner’s property.
- ◆ “Class of livestock” means a class, species, genus or sex of livestock, including a class, species or genus of neutered livestock.
- ◆ “Livestock District” means an area wherein it is unlawful for livestock or a class of livestock to run at large.
- ◆ “Open Range” means an area wherein livestock may lawfully be permitted to run at large. Animals must be lawfully permitted to run on open range or they will be considered stray and found to be trespassing.
- ◆ “Estray” means livestock of any unknown person which is unlawfully running at large or being permitted to do so, or which is found to be trespassing on land enclosed by an adequate fence.

Oregon law (ORS Chapter 607) defines livestock districts and open range, and sets the procedure and requirements for establishing or changing a livestock district.

Maps and/or more in-depth information that delineate current livestock districts from open

range areas and provide land and animal owners with definitions of legal responsibilities are available at the Lincoln County Offices.

Livestock Districts may be created by:

- ◆ An elector petitioning the county court or board of county commissioners to hold an election for such purpose.
- ◆ The petition shall contain the signatures of six or more electors from each precinct, or portion of precinct, included within the boundaries of the proposed district; but in no case shall the petitioners be required to obtain the signatures of more than 100 electors. No person shall sign the petition unless the person owns real property within the proposed livestock district.
- ◆ The proposed livestock district shall contain no less than 2000 acres.
- ◆ The petition shall state what livestock or class or classes thereof are not to be permitted to run at large within the proposed livestock district.

A person shall be liable to the owner or lawful possessor of land if the person permits an animal or a class of livestock to run at large upon such land and the land is located in a livestock district in which it is unlawful for such class of livestock to be permitted to run at large.



Free range cattle are free to roam

Wildlife-Friendly Fences

Barbed-wire, woven-wire, electric and other fences define and divide ranches and farms, outline property boundaries, enclose pastures and rangelands, and run for miles along highway and road corridors. Yet fences can be barriers and traps for wildlife, from big-game animals to birds, causing injury and unnecessary fatalities. Animal damage to fences is also costly and frustrating to landowners.

Not all fences are problem fences. By tailoring your fence design and placement, you can prevent injury to wild animals and lessen wildlife damage to your fence. Many of these methods are low-cost or can save you money in the long run by reducing the need for fence repair.

Wildlife are capable of jumping fences, but barbed-wire can snag animals and tangle legs, especially if wires are loose or spaced too closely together. If animals can't pull free, they die a slow and desperate death. Even when animals do clear fences, or crawl through or under strands, they often bear countless scars from wire barbs.

Some fences, especially woven wire, can be a complete barrier to fawns and calves even if adults can still jump over. Separated from their mothers, the youngsters curl up and die of starvation, stranded and unable to follow the herd.

Woven wire can also block animals that are unable to leap fences and are too large to slip through. If woven wire is topped with one or more strands of barbed-wire, the fence becomes a complete barrier, especially for fawns, calves and other animals that are incapable of or unwilling to jump over such a fence.

When you design your fence, consider the purpose, the topography (hills, gullies, streams and wetlands), the species of wildlife present, daily or seasonal wildlife movements in the area, presence of water,



Livestock in, and wildlife over and under

Make your fence more wildlife friendly by:

- ◆ Lowering the top strand of barbed wire and raising the bottom wire
- ◆ Replacing the top barbed wire with a smooth wire or rail
- ◆ Modifying sections of fence so a top rail or wire can be temporarily lowered at wildlife trails during seasonal migrations, and a bottom wire can be raised so calves and fawns can slip underneath
- ◆ Temporarily laying down sections of fence during seasonal elk and deer migration when livestock aren't present
- ◆ Replacing the top strand with highly visible white poly-wire or attaching short pieces of white vinyl "undersill" siding strips (available at most home improvement centers) to fence wires in areas where wildlife collisions or entanglements are common.

food and cover for wildlife, and the presence of young animals.

Fences that are too high to jump, too low to crawl under, have loose wires or wires spaced too closely together, are difficult for fleeing animals or birds to see, or create a complete barrier causing problems for wildlife.

There are many different ways to make a fence wildlife-friendly and still suit your management needs. For technical assistance to determine which design would work best for your property, please contact the Lincoln Soil and Water Conservation District at (541) 265-2631, or info@lincolnswcd.org.

Livestock, Horses and Clean Water

The Clean Water Act regulations for Concentrated Animal Feeding Operations (CAFOs) were changed in 2002. The revised regulations changed the permit requirements for some livestock operations. Some facilities that did not need waste management permits are now required to have them. Generally, if you have only a few animals, you won't need a permit. In either case, you still cannot pollute.

Animal Feeding Operations (AFO)

Animal Feeding Operations are agricultural operations where animals are kept and raised in confined situations. AFOs congregate animals, feed, manure, urine, dead animals, and production operations on a proportionally small land area. Feed is brought to the animals; the animals do not graze or otherwise seek feed in pasture or rangeland. An operation is an AFO if animals are confined for at least 45 days during a 12-month period and if no grass is in the confinement area during the growing season.

Confined Animal Feeding Operations

A Confined Animal Feeding Operation (CAFO) is the concentrated confined feeding or holding of animals. CAFO includes but is not limited to horse, cattle, sheep, poultry or swine. Areas can be for feeding, confinement, shipping-terminal holding pens, egg production facilities, and fur farms in buildings with prepared surfaces of concrete, rock, or fibrous material to support animals in wet weather. These facilities must prevent their livestock waste from polluting ground and surface waters. It is prohibited to place any wastes in locations where they are likely to be carried into the waters of the state by any means.

Along with the permit, all CAFOs must prepare an animal waste management plan which is a detailed description of the waste containment, treatment, storage and handling. The plan describes how compliance will be achieved and maintained.

Compliance Advice

While all producers must prevent their animal waste from polluting ground and surface waters, some operations require permit coverage to be in compliance with the Federal Clean Water Act. In 1972, the federal government defined certain animal production operations as point sources, requiring them to seek coverage under a National Pollution Discharge Elimination System permit (NPDES). For assistance in determining if your operation requires a permit, contact the Oregon Department of Agriculture, Natural Resources Division, CAFO program at (503) 986-4700.

Composting

Compost is organic matter that has been biologically decomposed under aerobic conditions. It is decomposed to a state that is safe to handle and apply to the land. Common components can include: manure, leaves, sawdust, coffee grounds, ash and more. Benefits of composting include conserving natural resources, reducing pollution, improving soil quality and nutrients, water retention, and infiltration. If you use compost to create a mulch to protect plants in your yard and garden, you'll have less household garbage, reduce the amount of waste that enters landfills, and save money on trash bags and fertilizer. Components of compost are considered waste and need to be managed to limit ground and surface water pollution.

Horses and Mud

Lincoln County sees a lot of rain and with rain comes mud. The combination can mean unhealthy conditions for your horses, pasture and nearby water resources (including household wells). Wet, muddy areas can foster organisms that cause mud fever (scratches), cracking of the hoof and sole and related lameness. A variety of undesired insects also breed in mud and manure. With careful management, it is possible to maintain healthy horses, pastures and waterways throughout the rainy season. OSU Extension's "Managing Small-acreage Horse Farm" publication is an excellent management resource for horse owners.

Healthy Horse Tips include:

- ◆ Keeping animals off wet pastures
- ◆ Creating a separate or "sacrifice" paddock area prepared with wood shavings or gravel
- ◆ Redirecting rain runoff away from paddocks with gutters and downspouts
- ◆ Maintaining a buffer strip around the sacrifice area
- ◆ Not overgrazing or overstocking your area
- ◆ Covering your manure pile to prevent runoff and leaching
- ◆ Composting your manure.

Going Organic

With a growing interest in eating healthy, many farms and ranches opt to gain organic certification through a number of different programs. Products can only be called “100% Organic” if they have a certified organic stamp.

What is Organic?

For the purposes of this handbook, organic refers to food or livestock produced by standards that prohibit the use of irradiation, sewage sludge, or genetically modified organisms (GMOs). Organic agriculture builds the health of the soil, providing the foundation for healthy crops and a livelihood for good stewards of the land.

National organic standards require producers to use organic agricultural methods and materials that apply to soil fertility, the application of manure, crop rotation, and composting. These standards prohibit the use of municipal solid waste and sewage sludge as compost ingredients.

Organic producers must follow a National List of Acceptable and Prohibited Materials concerning pest control treatments, fertilizers, and seed treatments. All agricultural materials must be evaluated for their long-term effects on the environment and not simply whether they are synthetic or natural.

Organic agriculture protects the health of people and the planet. It reduces the overall exposure to toxic chemicals from synthetic pesticides that can end up in the ground, air, water and food supply. Exposure to such chemicals has been associated with health consequences from asthma to cancer. In a nutshell, organic operations should be committed to and motivated by:

- ◆ Safe and fair working conditions
- ◆ Healthy and humane livestock care
- ◆ Conserving soil and water resources
- ◆ Protecting and enhancing wildlife habitat
- ◆ Continuing to improve upon management practices.

Standards

Organic standards are geared toward the conservation of soil and water resources. If you are considering becoming certified, here are some things you should plan to address:

- ◆ Control and minimize soil erosion
- ◆ Build soil health and productivity
- ◆ Reduce tillage practices
- ◆ Employ crop rotation and recycling of organic residues back into the soil

- ◆ Adopt water-conserving strategies.

Protect water quality by:

- ◆ Soil erosion control
- ◆ Management of nutrients, agrochemicals, and manure
- ◆ Use of landscape features such as buffer strips and riparian habitat
- ◆ Raising livestock with access to pasture or range when possible, and a system of rotational grazing to prevent overgrazing and erosion.

Certification

In order to become certified organic, crops must be grown on land free of prohibited substances for at least three years prior to harvest. Crops grown on land in transition to organic (during the first three years after switching from conventional farming) cannot be labeled as organic. The values of being certified can include a price advantage in the market, meeting niche market demands, and maintaining a share of the market.

Why Certify

Good land stewardship can come with a marketing advantage. Certification helps ensure that products are of a certain quality and meet required specifications. All certification programs have the common element of providing reference to a standard. A credible standard separates facts and reliability from marketing hype. Credible certification standards will define specifications that can be clearly measured. To a buyer or a seller, benefits of certification are reassurances of product quality.



Certifications Available

There are many organizations which certify for organic status. For more information, visit these websites:



USDA NOP (National Organic Program) - regulates the standards for any farm, wild crop harvesting, or handling operation that wants to sell agricultural products as organically produced. www.ams.usda.gov/nop



Oregon Tilth - a nonprofit research and education membership organization dedicated to biologically sound and socially equitable agriculture. www.tilth.org



Food Alliance - a third-party certification program and a market development program to connect sustainable growers with food businesses. www.foodalliance.org



Salmon Safe - a nonprofit devoted to restoring agricultural and urban watersheds so that salmon can spawn and thrive. www.salmonsafe.or



LIVE (Low Input Viticulture & Enology) - a nonprofit organization that provides education and certification using international standards of sustainable viticulture practices in wine grape production. www.liveinc.org



ODA has a USDA-accredited certifying program. www.oregon.gov/ODA/CID/organic



Direct Marketing

Direct marketing is a good way to promote local producers and buying local. Producers sell farmgrown produce directly to consumers at farm stands, farmers' markets, u-pick farms, community supported agriculture (CSA), agritourism venues, and other ever-growing innovations in direct producer-to-consumer agricultural marketing methods.

For smaller farm operations farming organically, and knowing their customer base personally is more economical than getting certified organic.

Lincoln County hosts several Farmers' Markets, from May through October.

Organic Livestock Operations

Organic livestock operations manage pasture or crop land as well as animals. Since there are two production systems, there must be an organic management plan in place for both. Any health treatment that is to be given to organic animals must contain only allowed ingredients.

For more information on raising livestock organically, visit the www.tilth.org website.



Backyard Wildlife

One of the benefits of living in the country is having an abundance of wildlife around. While most wildlife can be quite enjoyable, some species can become nuisances.

Wildlife Habitat



Threatened red-legged frogs are found locally

The three basic components of wildlife habitat are food, water, and cover. Food requirements will naturally vary by wildlife species, from seeds and berries for birds, to the grasses, flowering plants and shrubs preferred by deer and elk. Water on or near your property, in the form of pond, stream or developed stock water, will increase the variety of wildlife you will attract. Cover is

needed for hiding from predators, traveling, nesting and shelter.

Creating Wildlife Habitat is Easy

Whether you live on a small place or a large ranch, you can help increase the amount of wildlife habitat by making a few simple changes to your backyard environment. By growing a diversity of native vegetation and maintaining a water source, you will provide the necessary elements of good wildlife habitat. The type of plants you use to provide food and cover will determine the type of wildlife species that are attracted to your property.

Dead, Dying, and Hollow Trees and Logs

Many people are not aware of the value of dead, dying and hollow trees and logs for wildlife. Dead trees provide homes to dozens of species of birds, mammals, reptiles, and amphibians. Fish, plants and fungi also benefit from dead and dying trees. Consider leaving snags and downed, woody material on your property unless they pose a safety hazard.

Tips

- ◆ Consider planting native plant species first. Wildlife prefer them to non-native species.
- ◆ Plant a diversity of vegetative types and heights.
- ◆ Select plants that flower and bear fruit at different times of the year.
- ◆ Leave snags and some downed woody material for perching, hiding and nesting.
- ◆ Plant small grains or large-seeded grasses for wildlife food.
- ◆ Develop ponds, stock water tanks or other watering facilities.

- ◆ Bat boxes and bird nest boxes can be used in combination and to encourage species that feed on insects.

Predators

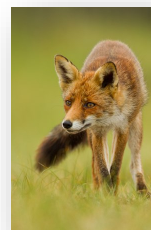
Many predators - including bear, cougar, bobcat, coyote, and fox - are common in the Coast Range. It is important to know that many species have "territory" that you are moving into. While most wild animals will avoid humans, their natural instinct is to kill easy prey, which often includes livestock and pets. Precautions can be taken to avoid or minimize conflict.



Cougar



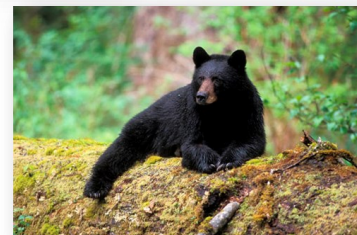
Bobcat cub



Fox



Coyote



Black Bear

Livestock and Poultry

While larger animals are rarely attacked, smaller animals are more vulnerable. All animals need shelter from the elements, and smaller animals need protection at night, a time when most predators are active. A solid barn or other sturdy enclosure that can't be entered by predators will be needed to protect your animals. Keep in mind that if you have chickens, skunks and other small predators can enter through tight spaces.



Highland cow and calf

Pets

Avoid attracting predators and pests by not storing pet food outdoors. Also, keep pets in at night. In some areas, house cats and small dogs can fall prey to predators even during the day. It is best to keep cats indoors (also for the sake of declining bird populations) and keep pets from roaming. Larger dogs can sometimes become predators, especially if roaming in packs, and can be legally shot if found chasing livestock.

Dealing with Pests

When you move into rural areas, you are moving into areas populated with deer and elk. While they are fun to watch, they are also attracted to gardens and landscaping. You may wake up to find your prize roses have been browsed, or that everything in your garden has disappeared. Netting can be draped over roses and ornamentals as a deterrent, but you can also select landscaping varieties that deer and elk don't prefer. A tall fence around a vegetable garden is recommended.

Ground squirrels, raccoons and other small animals can also pose a problem. It is not recommended that poison be used to eliminate them since non-target species and pets can die from eating the poison or poisoned animal.

For tips on dealing with nuisance animals and how to avoid wildlife conflicts, consult the book "*Wild Neighbors: the Humane Approach to Living with Wildlife*", by John Hadidian, or call the Oregon Department of Fish and Wildlife (ODFW).



North American beaver

Living with Wildlife

Wildlife is an important component of the rural lifestyle in Lincoln County. As a rural landowner, you can apply a number of simple practices to enhance the natural habitat and diversity of wildlife on your property.

A variety of native vegetation including small grains, native grasses, shrubs and trees is important habitat for wildlife.

A year-round water supply on your property will increase the variety of wildlife on your land. Remember, domestic animals can prey upon and become the prey of wildlife.

You can get advice from the ODFW on measures to take to protect your pets, as well as the wildlife that surrounds you.



Blacktail Deer Fawn

Native Plants and Pollinators

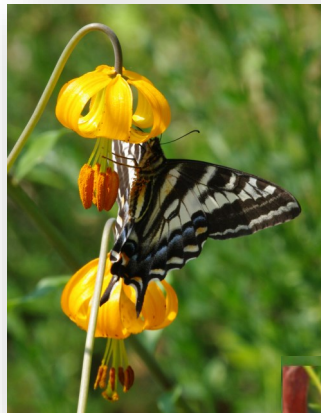
Pollinators are responsible for assisting over eighty percent of the world's flowering plants. Without them, humans and wildlife wouldn't have much to eat or look at!

When you think of pollinators, honeybees are probably the first thing that comes to mind. But pollinators come in many forms, including native bees, European honey bees, bats, butterflies, hummingbirds, beetles, and moths, and they play an important role in plant fruiting and reproduction.

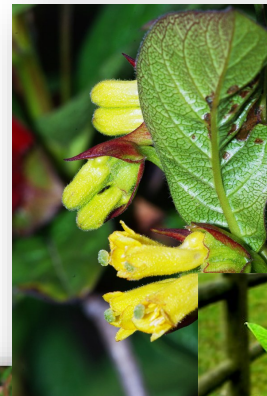
Pollination occurs when these creatures, other animals, water, or the wind carry pollen from flower to flower, or move it within flowers. The successful transfer of pollen in and between flowers of the same plant species leads to fertilization, successful seed development, and fruit production.

Many of these plants and the pollinators they attract are beautiful and you will be pleasantly rewarded with their presence. They also provide other valuable functions such as shade, stream bank stabilization, and food for wildlife. Consider using native plants that will attract or are critical host plants for these pollinators. When choosing which species to plant on your property, consider the site conditions, plant preferences and desired habitat value. OSU extension's master gardeners can also provide planting information. Try these pollinator favorites native to Lincoln County:

- * Big Leaf Maple
- * Bleeding Heart
- * Cascara
- * Currant
- * Dogwood
- * Douglas Spirea
- * Elderberry
- * Indian Plum
- * Kinnikinnick
- * Lupine
- * Mock-Orange
- * Oceanspray
- * Oregon Iris
- * Oregon Grape
- * Pacific Crabapple
- * Pacific Ninebark
- * Red Columbine
- * Salal
- * Salmonberry
- * Serviceberry
- * Snowberry
- * Thimbleberry
- * Twinberry
- * Wild Rose
- * Willow
- * Yarrow



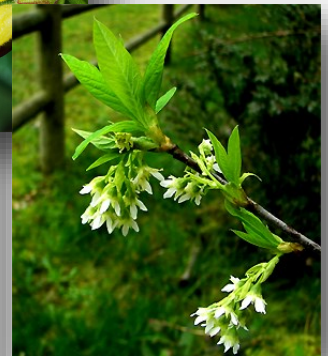
Western Tiger Swallowtail on Columbia Lily



Twinberry



Salal



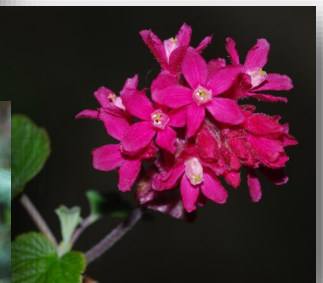
Indian Plum



Pacific Ninebark



Spiraea



Red Currant

Feral and Invasive Species

A feral organism is one that has escaped from domestication and is living as if wild. An invasive species is one which invades a habitat to the detriment of native species. Invasives can be plants or animals. To learn about invasive plants, see page 14. Many feral animals are considered invasive.



Nutria

managed areas. Invasive animals such as bullfrogs and nutria are extremely destructive to native wildlife and habitats. Nutria can cause problems such as pond dike failure and can harbor diseases. Bullfrogs kill birds and native amphibians such as western pond turtles and redlegged and pacific tree frogs.

Feral animals are becoming a danger to many habitats and the food supply of native wildlife. If you have animals you can no longer care for, take them to the local shelter or use free advertising in the paper or online to find a new home for them. Abandoned or dumped domestic animals such as cats, rabbit, or swine can cause great harm to the environment. Feral cats are responsible for killing numerous threatened birds each year. Rabbits can reproduce rapidly and cause hardships on vegetation, dilute the wild gene-pool, and spread diseases. Feral swine are extremely destructive. They destroy habitat, contribute to population declines of wildlife, ruin crops, and spread disease. Swine are very prolific and revert to a 'wild' version within a couple generations.

If you see feral animals (especially



Feral Rabbit

All invasive plant and animal infestations start from a source. Be responsible and do not unwittingly become the source or contribute to invasive problems. They cause damage to ecosystems and spread beyond

swine) or would like more information, please contact ODFW immediately. Rapid response to a potential infestation is of utmost importance to preventing its spread!



New Zealand mud snail



Feral swine



Bullfrog

Easy thing YOU can do to prevent invasions

- ◆ Clean your boat thoroughly before, after and between launches!
- ◆ Clean your boots before and after hiking!
- ◆ Don't pack a pest when traveling!
- ◆ Don't release aquarium fish and plants, bait or other animals into the wild!
- ◆ Volunteer with local groups to remove invasive species. Help educate others about invasives!
- ◆ Make sure you are using only non-invasive plants in your garden! Buy native plants.

**CLEAN, DRAIN & DRY
YOUR BOAT EVERY TIME!**

Growing a Healthy Forest

A healthy forest is characterized by vigorous trees that are resistant to disease, insect infestation, and animal damage. Trees are spaced far enough apart to allow sunlight to reach the plants on the ground and are comprised of a diversity of species.

Tips for a Healthy Forest

By maintaining a diversity of trees appropriate to the site, you will encourage the overall health of your forest. Tree species should be selected for the soil conditions and climate of your land. New trees will have a higher survival rate if fenced to prevent foraging. The removal of competitive vegetation from around saplings will also improve their survival rate. Good management practices, including harvesting, thinning, brush and weed control, and erosion control allow for healthy forests.

Thinning trees will improve the growth, health and vigor of your forest. While reducing the loss of trees due to pathogens, thinning will allow more light, water and nutrients for the remaining trees. In turn, thinning will also increase forage for livestock and wildlife. Thinning is the opportunity to encourage species diversity and improve resistance to wildfire. Heavy accumulations of downed material should be disposed of to reduce fire hazards.

The healthiest trees should be left as seed stock for future trees. Snags, or standing dead trees, should be left except where they pose a risk of falling on a house or other valuable areas. Large logs and a few brush piles should be retained to provide habitat for wildlife and facilitate forest nutrient recycling.

Access roads should be located away from streams. Cut slopes should be reseeded promptly to reduce erosion, water pollution and weed infestations. Continuous, uninterrupted grazing by livestock will compact soils and damage trees.

Replanting soon after harvest helps to prevent erosion and weed infestations by keeping soil covered.



Forest Insects and Diseases

Some of the most prevalent threats to trees in western Oregon include Swiss needle cast, laminated root rot, bark beetle, and other diseases related to stress. Good management practices will help keep trees healthy, reducing the risk of disease and insect infestations. Western Spruce Budworm is the most destructive defoliator of coniferous forests in Western North America. Trees usually recover unless repeated severe defoliations occur for a period of 3 to 5 years, or longer. Life cycle takes 1 year. Extended periods of defoliation also increase susceptibility to the other forest pests and diseases.



Swiss
needle
cast

Help in Managing Your Forest

Private forestry consultants can help you conduct inventories, set up timber sales, and help you achieve your forest management goals. Some consultants have multi-resource specialists on staff. They are usually well versed in federal and state cost-share programs, laws and regulations. A directory of consultants is available from the Oregon Department of Forestry (ODF). Additionally, the ODF offers both technical assistance and financial programs for forest landowners.

The USDA Natural Resources Conservation Service provides technical and financial assistance through the Environmental Quality Incentives Program (EQIP) and Farm Services Agency provides assistance for riparian buffers through the Conservation Reserve Enhancement Program (CREP).

Small Woodland Management

If you have recently purchased forest land, you may be faced with the daunting task of managing these resources. Luckily, unlike seasonal farming or gardening, small woodlands tend to operate over longer time frames of years rather than months.

Developing a Management Plan

To begin planning, walk your land. Legal boundaries and access to the property should be well established. Take inventory and familiarize yourself with the resources on your property. You can educate yourself with the help of classes and programs offered through OSU Extension and local small woodlands associations. Neighbors may also be able to assist in identifying resources. Afterward, begin to formulate and outline a set of objectives. The decisions you make regarding the management of the property will have short- and long-term ecological and economic consequences. There is less need to make immediate decisions due to the longer time parameters of managing woodlands.

Information Sources

OSU Extension Service is one of the first places to look for advice on managing your small woodland. The forester focuses on education and outreach to landowners and has direct contact with faculty at OSU. Extension offers many programs and training sessions, including the Master Woodland Manager program for small woodland owners. See information about programs at www.extension.oregonstate.edu.

The Oregon Department of Forestry (ODF) is the state regulatory agency of forest management. It administers the Oregon Forest Practices Act, which guides all forest activities in the state. A Notification of Operations from the ODF is required for all owners initiating a forest operation.

As an owner of private forest, you must notify ODF of any commercial forest activity at least 15 days before beginning. There may be special requirements you must meet. If you're ready for this step, you will need to complete and submit a Notification of Operations form to your nearest ODF office. Copies of the form can be obtained from ODF's website or the Toledo Field Office.

The Notification of Operations form serves the three following purposes as required by Oregon State Law:

- ◆ Notification to the States Forester that a forest operation will be conducted (ORS 527.670)
- ◆ Application for permit to use fire or operate power-driven machinery (ORS 477.625)
- ◆ Notice to the State Forester and the Department

of Revenue of the intent to harvest timber (ORS 321.550).

The ODF also offers technical advice and cost share programs for various non-commercial forest and resource management. For additional forestry program information visit the ODF website at www.oregon.gov/ODF.

Other sources of information include local chapters of Oregon Small Woodland Association, watershed councils, trade publications, and federal agencies such as the Forest Service and Bureau of Land Management.

The Next Step

The natural systems and processes that operate in forestlands do not recognize property lines. Talk with your neighbors; you will need to work together to address problems such as insects, disease, water, wildlife, and fire. Only through cooperative work and collaborative effort will you be able to effectively address these concerns.

Cost-share assistance through ODF and NRCS can help pay for preparation of a forest stewardship plan by a consulting forester or other trained professional. These plans should provide an initial inventory of the various forest resources on your property.

Based on that inventory and your objectives, a management plan should include wildlife management, soil protection and erosion control, wildfire management and fuels reduction, pertinent forest insects and diseases, reforestation, stand management, management for timber and other marketable resources, protection of riparian and aquatic biodiversity, long-term site productivity, roads and access concerns, and other opportunities and topics.



Fire Prevention

Each year, more people move into previously uninhabited forested rural areas which have dry, hot summer weather and an increased danger of wildfire. These remote areas have as high a risk of structural fires as urban areas, but also an increased risk of losing your home to fire due to longer response times, limited water hydrants, and unpaved roads.

A defensible area, where firefighters can safely make a stand to protect your house from fire, is 30 - 200 feet around all sides of the building. If your home and landscape are properly maintained, it is likely to survive a fire even without fire department intervention. The exact size of your defensible space depends on the slope of the land and type of vegetation around your home. For more information, visit www.firewise.org.

Simple Fire Prevention Measures

- ◆ Maintain at least 30 feet of short, green lawn or fire-resistant plants around your home.
- ◆ Remove fuels under large trees.
- ◆ Trim branches away from your house. Keep gutters clean of debris.
- ◆ Trim branches along driveway at least 14 feet high and wide.
- ◆ Replace wood shake roofs. Screen vents and areas under decks with metal mesh.
- ◆ Store firewood away from your house.
- ◆ Ensure water and firefighting tools are available and ready for use.
- ◆ Maintain good access to your home and ensure that your address is highly visible.

Firebreaks

A firebreak around your home and along your driveway is important to protecting your property. Initially this can be a major undertaking, so start a little at a time. Once the work is complete, annual maintenance will be much less demanding. Since protecting your home is the primary concern, start there and work outward. Fire burns 16 times faster uphill, so start on the downhill side of your home.

Fire Season Preparation

During fire season, both the public and industrial operators are required to follow the Oregon fire prevention laws. Fire season typically begins in mid-June. The end of fire season varies and is typically around mid- to late-September. It only takes about one hour for light fuels such as grass to dry out enough to cause a fire.

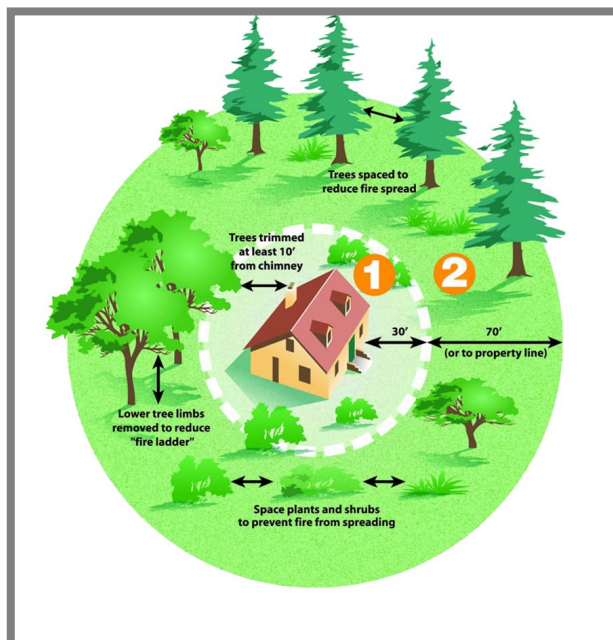
When fire season is in effect, all open burning is prohibited. If burn barrels are allowed, a permit

from the local fire department or ODF is needed to use them. Subject to change, a Public Regulated Use Closure prohibits or regulates times that the public can perform various activities on forest land. These activities include off-road vehicle use, campfires, smoking, dry grass mowing, use of chain saws, fireworks and welding.

**Call 911 for
ALL Fire
Emergencies**

Fire Ecology

Fire is a fundamental and essential component of a healthy forest ecosystem. Oregon forests have co-adapted with fire, which is an integral part of forest regeneration, cleansing and renewal, and the maintenance of plant and animal diversity. Away from homes and communities, fire is needed to remove undergrowth that chokes trees and facilitates disease. Burned trees replenish nutrients to the soil. Standing burned snags and downed trees in streams creates habitat for wildlife. Many plants require fire as part of their lifecycle.



Create a defensible space to be Fire Space

Lincoln County Planning, Development and Zoning

Check with your local county offices to find permit information specific to your location and desired projects. Always call 811 before you dig! Oregon has a statewide land use planning program, established by state law and implemented at the county level. Each county maintains a Comprehensive Plan and a Zoning Ordinance. While administered at the county level through local land use plans, statewide goals are set by law and administered by the Department of Land Conservation and Development. For more specific information on zoning ordinances and zoning maps in Lincoln County, check out the County Planning Department website at www.co.lincoln.or.us/planning/.



All proposed building on your property must be reviewed and approved by the County Planning Department. Depending on the size and use of a structure you may need a building permit. Submit complete and

accurate application information for timely processing. You will also need to submit an accurate -to-scale plot plan showing your proposal. Include all existing structures, septic drain field and tank, well, and any proposed new structure or addition with distances to property line.

Areas of Special Concern

Areas of special concern include wetlands, vernal pools, floodplains, airport approach, wildlife habitat, city Urban Growth Boundaries and more. Allow additional time to acquire permits if you propose to develop in or near these overlays. Streams move over time and are prone to flooding, so can threaten homes if built too close.

Access

For development purposes, parcels must have legal access in accordance with requirements in effect at the time the parcel was created. Practical physical access to the development site must be possible.

Setbacks

Structures must comply with the standard structural setbacks for the zone in which it is located. Additional setbacks may be required if the property is adjacent to or near a Resource Zone Boundary or in a designated Fire Hazard Area.

Fire Safety and Fuel Break

Consider access (driveway) standards, address signs, and steep slopes, as a 100-foot minimum fuel break

may be required around each structure on property in fire hazard areas.

Lawful Parcel Creation

To be developed, a parcel must have been lawfully established. Existing structures also must have been properly permitted if further development is to be allowed. Once your proposal has been authorized, you may apply for your building, electrical, plumbing and sanitation permits.

Zoning Districts and Types

Every piece of property is zoned. There are many different zoning districts in Lincoln County, each with a list of permitted and conditional uses that outline how the property can be developed. As a landowner, you should become familiar with the rules of any zones relevant to your property. Make sure the property you are interested in will support what you want to do.

For example, if you want to build a house, you would not want to buy a property zoned commercial because you may be unable to build a residence. There are many types of zones.

Two of the most familiar zones for rural landowners are Agricultural Conservation (A-C) - agricultural land for farming and conservation of agriculture, and Timber Conservation (T-C) - used for forestry and timber production and conservation. Other common zones are: Commercial - zoned for businesses; Industrial - used for operation such as factories and mills; Residential & Rural Residential - for living quarters; and Public Areas - such as parks and common areas that are open to the public.



Know what's below.
Call before you dig.

Siuslaw National Forest Stewardship results in Watershed Restoration

In 2002, the Siuslaw National Forest (SNF) piloted the Forest Service's congressionally approved Stewardship Authorities, which allows retained receipts from stewardship style timber sales to fund approved watershed restoration projects in and around (private land) the SNF. Stewardship Groups were formed within each SNF District, comprised of local stakeholder groups and SNF staff. These Stewardship Groups meet monthly to provide input to the SNF, review Stewardship funded watershed restoration projects, and discuss upcoming issues and events to further goals of protecting public and private forest ecosystem, within the SNF basin, that ultimately benefits public land. Stewardship timber sales focus on legacy timberlands on public land that that are overstocked and often in a poor ecological state. Prescriptions focus on thinning, retention of tree species and age diversity, creation of wildlife snags and forest floor woody debris, and road decommissioning rather than clear cutting.

Siuslaw National Forest Stewardship Groups:

Siuslaw Stewardship Group: formed in 2003, focuses on the Siuslaw River watershed/SNF

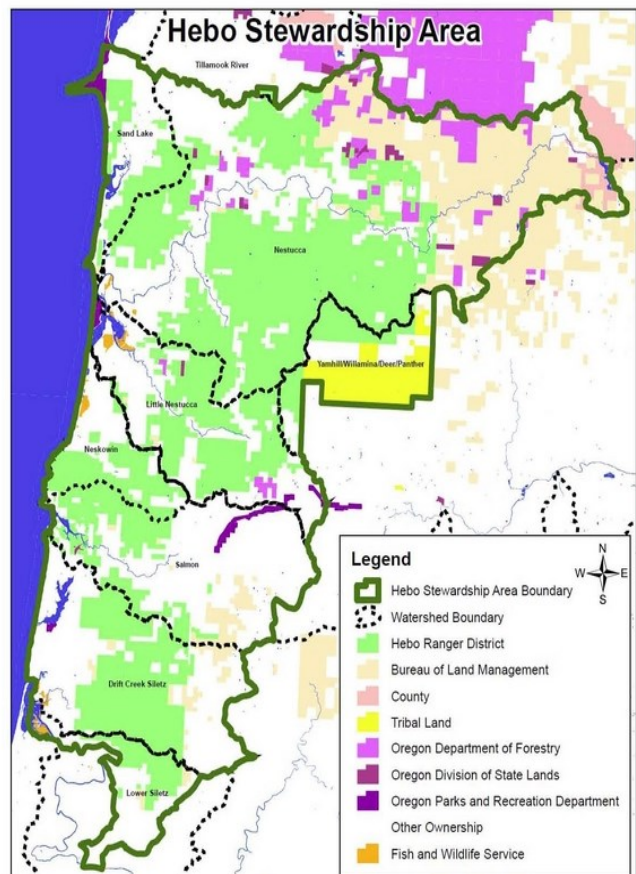
Alsea Stewardship Group: formed in 2006, focuses on central to southern Lincoln County watersheds/SNF

Marys Peak Stewardship Group: formed in 2007, focuses on the Marys River watershed/SNF

Hebo Stewardship Group: formed in 2011. This newest Stewardship Group focuses on northern Lincoln County and southern Tillamook County watersheds. The Hebo Stewardship is profiled below

In-depth Profile: The Hebo Stewardship Group

The Hebo Stewardship Group (HSG), formed in 2011, is one of four collaborative groups working with the Siuslaw National Forest (SNF) in addition to the Alsea, Mary's River, and Siuslaw Stewardship Groups. The groups are a collection of individuals and organizations from the local area that are working with the SNF to promote forest resource restoration and enhancement on and around the forest that meets the needs of local communities. The HSG includes participants from Tillamook to the Siletz River areas surrounding the Forest. The HSG helps plan, evaluate, and monitor stewardship projects on public and private lands. The group also helps evaluate and prioritize proposals for future funding with stewardship funds. The SNF provides funding for stewardship restoration projects both on and off national forest land. This funding is generated through the sale of timber that is harvested during some restoration thinning projects on the SNF. Projects that have been developed in partnership between the SNF and HSG have restored endangered fish and wildlife habitat, improved water quality, reduced invasive species, and built relationships between rural landowners and the managers of neighboring public land. These projects also benefit local communities in that they provide employment and contract



opportunities to area businesses. The Siuslaw National Forest, in partnership with stewardship groups, has an impressive history of success restoring the land and contributing to local economies.

Sample Hebo Forest Stewardship Restoration Projects

Lower Schooner Creek

Fish Passage Barrier Replacement by Salmon Drift Creek Watershed Council: The project replaced an undersized culvert on a Schooner Creek tributary to allow access to more than .5 miles of excellent upstream salmonid habitat. The project also included riparian plantings to further enhance habitat.



Schooner Creek Riparian Planting

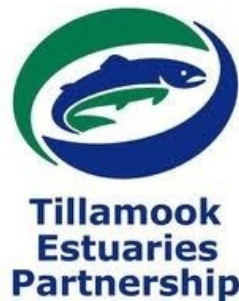
Butte Creek

(Neskowin) culvert replacement project by Nestucca-Neskowin Watershed Council: A cooperative effort of private landowners and public agencies to replace a high priority fish passage barrier with a 26 foot bridge. Results include improved passage to 1.7 miles of spawning and rearing habitat for coho salmon, steelhead and cutthroat trout, and pacific lamprey.

HSG Meetings

The HSG meets monthly and organizes field trips to project locations to monitor the ecological and economic impacts of the projects. It also organizes public outreach and education events. The HSG is open to all landowners and organizations who are interested in learning more about this unique relationship with the USFS and how local communities and watersheds can benefit. For more information, contact Cascade Pacific Resource and Conservation District, which administers the program. [stewardship@cascadepacific.org and www.cascadepacific.org/stewardship]

Regular participants include:



**Public Works
Department**



**Salmon Drift Creek
Watershed Council**



If Your Neighbor is the Bureau of Land Management or U.S. Forest Service

These agencies manage public lands in Lincoln County, and many of these lands are adjacent to or intermingled with rural private properties.

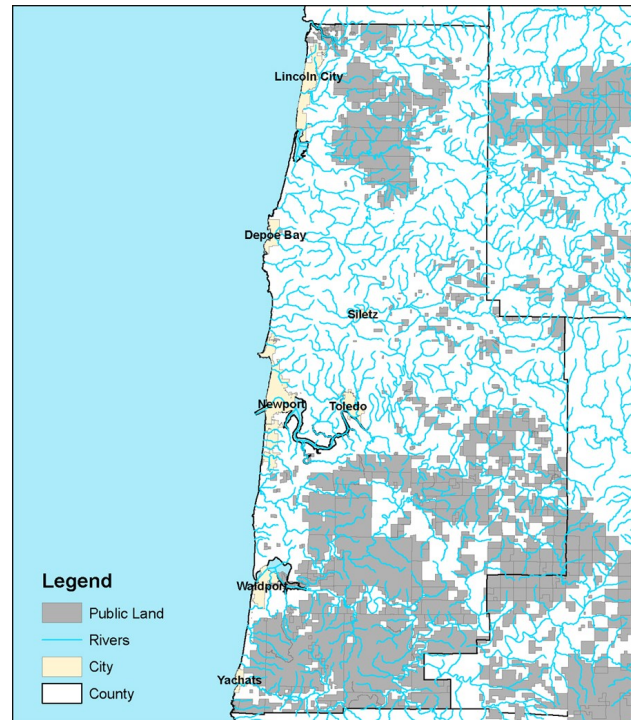
Management of Public Lands that Surround Rural Communities

Much of the beautiful landscape that adds to the quality of life in western Oregon is made up of public lands that provide open space, recreation, and resources that contribute to the local economy.

The BLM and the U.S. Forest Service manage public land and natural resources in a variety of ways. Public lands are managed to reduce the risk of wildfire, restore healthy ecosystems, protect endangered species, and produce timber to contribute to the economic stability of local communities and industries. Other uses of public land include recreation, grazing and mining.

Why do BLM and Forest Service Manage Forests?

Forests are managed to maintain or restore conditions more resilient against fires, droughts and insect infestations, and provide wood products to the community. The need for treatment of forests to restore vigor and reduce fire hazard stems from our understanding that, until the early twentieth century, frequent fires played a critical role in maintaining the structure and health of forest stands. The exclusion of fire over the last eighty years has had profound ecological consequences, resulting in dense, low vigor conifer, hardwood and shrub lands. Forest management activities include prescribed burning, forest thinning, commercial timber logging, and tree planting.



Off-Highway Vehicle Use

Ride responsibly! Stay on existing roads and trails. Off-road riding damages streams and creeks, kills vegetation and disturbs the soil. Timberlands are private property; while some access may be permitted, this isn't always the case. Know where you are permitted to ride so to avoid trespassing. The U.S. Forest Service prohibits off-road vehicles.

Pacific Northwest Old Growth Forests

Under the direction of the Northwest Forest Plan, some public forests are currently being managed for late successional or old growth characteristics. The intent is to protect current old-growth forests and wildlife habitat, as well as develop future old-growth habitat. The Pacific Northwest old-growth forest is a conifer forest, dominated by large, old trees. The most common type of old-growth ecosystem is forests dominated by Douglas-firs and western hemlocks, generally 350 to 750 years old. The youngest old-growth forests are 200 years old, and the oldest are about 1,000 years old. We also have old-growth forests dominated by Sitka spruce and western hemlock along the Pacific Coast.

Local, State and Federal Agencies



Bureau of Land Management

The BLM Salem District's northern boundary is the Columbia River and its southern boundary lies halfway between Salem and Eugene. From east to west the District stretches from the crest of the Cascades to the Pacific Ocean. Seventy three percent of Oregon's population lives within the boundaries of the Salem District. The District manages its forests for recreation, wildlife, lumber production, and more. Sightseeing, camping, hiking, boating, hunting, fishing, cutting fire wood, and collecting mushrooms are just a few of the activities Oregonians enjoy on Salem BLM lands. The Salem BLM uses an ecosystem land management approach. Salem employs 150 foresters, land surveyors, wildlife biologists, hydrologists, fish biologists, botanists, outdoor recreation planners, civil engineers, computer specialists, fire managers, law enforcement officers, and other specialists to manage BLM lands in the Salem District.

BLM Salem Office: 1717 Fabry Road SE, Salem, OR 97306

Phone: (503) 375-5646 www.blm.gov/or



Lincoln Soil and Water Conservation District

The Lincoln Soil and Water Conservation District serves Lincoln County communities and residents of the central Oregon coast by providing assistance to implement resource conservation, watershed restoration and habitat enhancement projects to improve and conserve natural resources on agricultural, forested, private, urban and rural lands. The District's mission is to improve and conserve natural resources in Lincoln County by:

- ◆ Providing information, education, and outreach.
- ◆ Providing an interface between agencies and landowners.
- ◆ Collaborating with federal, state, and local government agencies and groups.
- ◆ Providing technical assistance to private landowners to develop and implement conservation plans on their property.

Lincoln SWCD: 23 North Coast Highway, Newport, Oregon 97356

Phone: (541) 265-2631 www.lincolnsxcd.org info@lincolnsxcd.org

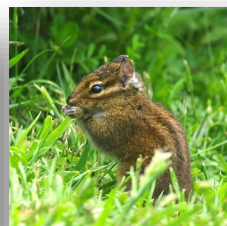
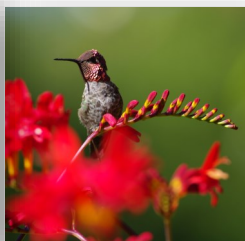


Natural Resources Conservation Service

Since 1935, the Natural Resources Conservation Service (originally called the Soil Conservation Service) has provided leadership in a partnership effort to help private landowners and managers conserve their soil, water, and other natural resources. With the mission of "Helping People Help the Land", locally-based NRCS staff works directly with farmers, ranchers, and others to provide technical and financial conservation assistance. NRCS helps landowners develop conservation plans and provides advice on the design, layout, construction, management, operation, maintenance, and evaluation of recommended voluntary conservation practices. There are six mission goals: high quality, productive soils; clean and abundant water; healthy plant and animal communities; clean air; an adequate energy supply; and working farms and ranchlands. Activities include farmland protection, urban conservation, and local community projects designed to improve social, economic, and environmental conditions. Many programs are available to provide funding for conservation projects.

Lincoln County NRCS Office: 23 N. Coast Highway, Newport, OR 97365

Phone: (541) 265-2631 www.or.nrcs.usda.gov





Oregon Department of Agriculture

ODA was created in 1931 to provide leadership, service, and regulatory functions for food production and processing. ODA has a three-fold mission: food safety and consumer protection; protecting the natural resource base; and marketing agricultural products. These policy areas are interdependent. Without a strong and healthy natural resource base - particularly land and water - there is little or no agricultural production to promote and market. Without assurance that the food produced in Oregon is safe, there is little chance that many agricultural products will be of interest to potential customers. **ODA Salem Office:** 35 Capital Street NE, Salem, OR 97301
Phone: (503) 986-4550 www.oregon.gov/ODA



Oregon Department of Fish and Wildlife

The Department of Fish and Wildlife (ODFW) is responsible for protecting and enhancing all Oregon fish and wildlife. The agency has a wide range of responsibilities from operating hatcheries to selling hunting and angling licenses to advising on habitat protection for Oregon's diverse wildlife populations. ODFW works closely with other agencies, volunteers, property owners, hunters and anglers to balance protection of fish and wildlife with the economic, social and recreational needs of Oregonians. **Newport Field Office:**
2040 SE Marine Science Drive, Newport, OR 97365
Phone: (541) 867-4741 www.dfw.state.org.us



Oregon Department of Forestry

The Oregon Department of Forestry (ODF) was established in 1911. A State Forester appointed by the State Board of Forestry acts on all matters pertaining to forestry, including collecting and sharing information about the conditions of Oregon's forests, protecting forestlands, and conserving forest resources. The mission statement of the ODF is "To serve the people of Oregon by protecting, managing, and promoting stewardship of Oregon's forests to enhance environmental, economic, and community sustainability." Contact the ODF for information on forestry programs and management. **Toledo Unit:** 763 NW Forestry Road, Toledo, OR 97391
Phone: (541) 336-2273 www.oregon.gov/ODF





Oregon State University Extension

The Oregon State University Extension Service engages the people of Oregon with research based knowledge and education that focuses on strengthening communities and economies, sustaining natural resources, and promoting healthy families and individuals. OSU Extension has five core program areas: 4-H Youth Development, Agriculture, Family and Community Development, Forestry, and Marine Science/Sea Grant Program. Other Extension activities have a level of participation to be considered programs, such as Master Gardeners, Master Food Preservers, Master Woodland Managers, Master Watershed Stewardship, Sustainable Living, Oregon Small Farms, and 4-H projects such as the Oregon Outreach and Global Education programs. OSU Extension promotes sustainable resource management and stewardship.

OSU Extension: 29 SE 2nd Street, Newport, OR 97365

Phone: (541) 574-6534 www.extension.oregonstate.edu/lincoln/



Oregon Watershed Enhancement Board

The Oregon Watershed Enhancement Board (OWEB) is a state agency led by a 17-member policy oversight board. The Board fosters the collaboration of citizens, agencies, and local interests. OWEB programs support Oregon’s efforts to restore salmon runs, improve water quality, and strengthen ecosystems that are critical to healthy watersheds and sustainable communities. OWEB administers a grant program funded from the Oregon Lottery, as a result of a citizen initiative in 1998, federal funds, and salmon license plate dollars. The grant program supports voluntary efforts by Oregonians seeking to create and maintain healthy watersheds.

OWEB: 775 Summer Street NE, Suite 360, Salem, OR 97301

Phone: (503) 986-0178 www.oregon.gov/OWEB

Alsea Watershed Council: P.O. Box 187, Tidewater, OR 97390

Phone: (541) 528-3390

MidCoast Watersheds Council: (including the Siletz and Yaquina Basins)

23 N. Coast Highway, Newport, OR 97365

Phone: (541) 265-9195 www.midcoastwatershedscouncil.org

Salmon Drift Creek Watershed Council: P.O. Box 112, Neetsu, OR 97364

Phone: (541) 996-3161 www.salmondrift.org



USDA Farm Service Agency

The Farm Service Agency (FSA) administers and manages farm commodity, credit, conservation, disaster and loan programs as laid out by Congress through a network of federal, state and county offices. These programs are designed to improve the economic stability of the agricultural industry and to help farmers adjust production to meet demand. Economically, the desired result of these programs is a steady price range for agricultural commodities for both farmers and consumers.

Linn County Farm Service Agency: (services Lincoln County)

33630 McFarland Road, Tangent, OR 97389

Phone: (541) 967-5925 www.usda.fsa.gov





USDA Rural Development

USDA Rural Development (RD) is committed to helping improve the economy and quality of life in rural America. They have financial programs to support essential public facilities and services. They promote economic development by supporting loans to businesses through banks and community-managed lending pools. Rural Development achieves its mission by helping rural individuals, communities, and businesses obtain financial and technical assistance needed to address their diverse and unique needs. Rural Development works to make sure that rural citizens can participate in the global economy.

USDA State Office: USDA Rural Development, 4077 SW Research Way, Corvallis, OR 97333
Phone: (541) 750-7126 www.rurdev.usda.gov/or



United States Fish and Wildlife Service

Working in the local community, the USFWS collaborates with federal, state, tribal, county, local agencies, and watershed councils, as well as private entities to address natural resource issues. They provide technical and financial assistance for watershed assessment, restoration, management, and Endangered Species Act consultation. The USFWS manages the Siletz Bay National Wildlife Refuge.

Oregon Coast NWR Complex: 2127 SE Marine Science Drive, Newport OR 97365
Phone: (541) 867-4550 www.fws.gov/oregoncoast/



United States Forest Service

The Pacific Northwest Region (Region 6) of the US Forest Service has 17 National Forests, a National Scenic Area, a National Grassland, and two National Volcanic Monuments, in Oregon and Washington. The Forests provide timber, forage for cattle and wildlife, habitat for fish, plants and animals, and recreation for people. The Siuslaw National Forest is very diverse and productive. It extends from Tillamook to Coos Bay along the Coast. It is over 630,000 unique acres, with more that 170,000 acres located within Lincoln County.

Siuslaw National Forest: 4077 SW Research Way, P.O. Box 1148, Corvallis, OR 97339
Phone:(541) 750-7000 www.fs.fed.us/r6





Acknowledgements

This handbook was made possible with the support from the following:

- Lincoln Soil & Water Conservation District Staff and Board Members
- Plum Creek Foundation
- Lincoln County OSU Extension
- Oceana Natural Food Cooperative
- The Feed Coral Inc.
- The Logsden Country Store
- Newport Probuild
- Oregon Department of Agriculture
- Oregon Department of Environmental Quality
- Kate Danks - Soil Conservationist, NRCS
- Diane Disse - Oregon Coast History Center
- Devils Lake Water Improvement District
- Oregon Department of Fish and Wildlife
- Polk SWCD and Jackson SWCD for the use of their handbook templates
- Montana Fish, Wildlife and Parks - Wildlife Friendly Fences Handbook

A very special thank you to Carol Cole for spending countless volunteer hours on the original handbook design.

Photography and Graphics by: Stacy Polkowske, Josh Lambert, Wayne Hoffman, Thomas & Erica Leaton of Sitka Springs Farm, Lincoln County Historical Society, Katie Duzik, Mark Stone, Christine Dennett, Kate Danks, USDA, NRCS, OWRD, Robin Ade, Newport Farmer's Market.

Note: While every attempt has been made to correctly paraphrase and/or quote laws, codes, and regulations, if any discrepancy between this handbook and official wording should arise, the official wording should prevail.



