

Living in Rural Clark County



Clark Conservation District

Assisting Landowners with Natural Resource Conservation

Living in Rural Clark County

A Resource for Country Living and Land Stewardship

Prepared by
Clark Conservation District



813 West Main Street, Suite 106
Battle Ground, WA 98604
(360) 859-4780
www.clarkcd.org

Funding for this document has been provided in part through EPA Grant No. C900044905 - 0 to the Department of Ecology from the United States Environmental Protection Agency. The Department of Ecology allocates and administers funding for this project. The contents of this document do not necessarily reflect the views and policies of either the United States Environmental Protection Agency or the Department of Ecology, nor does the mention of trade names or commercial products constitute endorsement or recommendation for their use.

What's in this book

The Rural Living Handbook is a guide to connect current and prospective rural landowners to various resources available to help protect and enhance the rural lifestyle. While there is a considerable appeal and enjoyment to living in the country, with rural living also comes responsibilities and inevitably numerous questions. This handbook has been developed by the Clark Conservation District to provide Clark County landowners with tips and information to provide guidance in choosing wise and appropriate land-use and natural resource management decisions.

About Clark Conservation District

Clark Conservation District (Clark CD) was formed in 1942 by the state under RCW 89.08. We are self-governed by local citizens who volunteer to serve on the District board. We work with landowners on a voluntary basis to assist in the conservation of natural resources on their property. The Conservation District is a grant funded non-regulatory, sub-division of state government, similar to fire districts or school districts.

Clark Conservation District services are unique because:

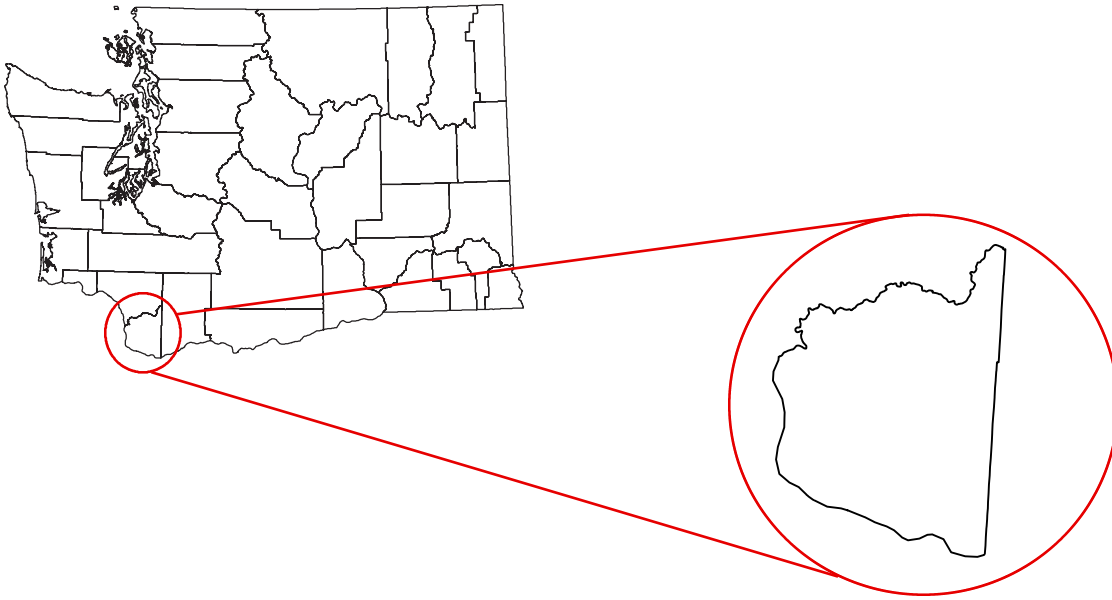
- We have extensive technical expertise through our partnership with the USDA Natural Resources Conservation Service (NRCS).
- We work directly with private landowners to solve their site-specific concerns.
- District programs are developed in direct response to local needs and are not the mandate of an unseen government.
- The District is not a regulatory or enforcement agency. Our programs are based on education and technical assistance through voluntary cooperation of landowners.
- We help landowners implement practices on their property by providing technical and financial assistance.
- We don't conduct studies or spend years writing plans. Our time is spent getting projects on the ground.

Clark Conservation District
813 West Main Street, Suite 106
Battle Ground, WA 98604
(360) 859-4780
staff@clarkcd.org

Contents

Clark County, Washington	4
An Overview of the County's Geography	4
Know Your Land	6
Buying Rural Land Utilities, Property Access	6
Living a Rural Lifestyle Rural Landowner Responsibilities, The Rural Neighborhood, Private Property and Privacy, Respect for the Land, Being Neighborly	7
Land Planning and Managing Assistance With Plan Development, For Additional Help in Resource Conservation	12
Natural Resources	14
Soil Soil Protection, Erosion, Soils Testing	14
Water Water Rights, Water Quality Management, Riparian and Wetland Management	17
Plants Native Plants, Non-native Plants and Weeds, Clark CD Plant Sale	22
Forests Growing A Healthy Forest, Christmas Trees, Help Managing Your Forest	24
Wildlife Backyard Wildlife, Attracting Wildlife, Discouraging Nuisance Animals	27
Property Management	30
Land Gardening and Landscaping, Protect Well Water, Waste Disposal, Composting, Recycling, Septic Systems	30
Livestock Raising Livestock in Clark County, Pasture and Grazing Management, Manure/Waste Management	40
Fire Fire Prevention in Rural Homes, Burning on Your Property, Fire Prevention Agencies	48
Resources	52

Clark County, Washington



Clark County is in the southwest corner of Washington State. The county's southern and western boundaries are the Columbia River, the northern boundary is the Lewis River and the foothills of the Cascade Mountains provide the eastern boundary. Clark county covers an area of 628 square miles (405,760 acres).

The county's climate is influenced by its location between the Pacific coast and the cascades and its rise in elevation from the southwest to the northeast. The result is generally milder weather with fairly wet winters. Rainfall averages from 41 inches a year in Vancouver to 125 inches a year in the northeastern part of the county.

The geography of Clark County changes dramatically from the southwestern corner to the northeastern boundaries. The county rises in elevation from low lands along the Columbia through the terraces and bench lands to foothills 3,000 feet above sea level in the northeastern reaches of the county. The county lies in a geographical region

known as the Willamette-Puget Trough, formed by the Cascade and Pacific mountain ranges. Two thirds of the county lie within the foot hills of the Cascade Mountain Range. This region is predominantly forested and soils are generally classified as silt and clay loams of low fertility. The higher terraces and bench lands inland from the Columbia River are of average productivity in terms of farming. The soils in this area are classified as silt and clay loams with some areas of gravelly silt and clay loams. The southwestern most portion of the county is predominantly flood plain from the Columbia River. The soils are rich and fertile silt and clay loams and provide good fertile farm land.

From a densely populated urban hub along the Columbia, the land use shifts to a rapidly growing suburban area in the central portion of the county. The suburban areas are starting to reach into the agriculture lands and into the slopes of the Cascades. The north and eastern portions of the county still remain predominantly rural with forested lands.

Clark County, Washington



Buying Rural Land

Living a Rural Lifestyle

Planning and Managing Land



Know Your Land

Buying Rural Land

Country living can be a satisfying way of life. Whether the objective is raising crops or livestock or simply enjoying the cleaner air, open space and solitude, careful consideration must be given to the expectations of living on rural land.

Purchasing rural land is quite different than buying a suburban property. If working with a realtor to purchase property, be sure the real estate agent specializes in rural properties. It is important to be familiar with land use restrictions and know where to get answers. There are also attorneys who specialize in rural property sales to assist in closing processes.



Utilities

Often rural properties are 'unimproved' meaning basic utilities such as water, septic, or electricity have not been established. To develop the land by installing these basic utilities can be costly, especially if the nearest power lines are miles from the site.

Basic utilities include

electricity, gas

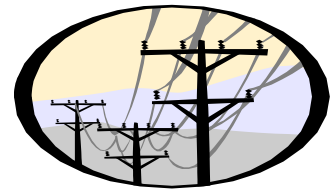
and telephone.

Electricity in
Clark County is
provided by Clark
Public Utilities

(Clark PUD). Gas is

provided by NW Naturals and telephone
providers include TDS Telecom and AT&T.

Each of these utility companies can
advise you on how service is installed and
initiated.



Water is the most important factor of any development. In some rural developments, community wells are established, however, in most cases a well will need to be drilled on the property. If a well is already in place, it should be professionally tested for purity and adequate flow.

Know Your Land

Septic systems are likely necessary on rural properties as most rural lands are far from sewer connections. If there is a septic system present, it should be professionally tested to ensure that it works. If there is no septic system, percolation tests should be done in order to assure that a new septic system installation will be approved by the county. Clark County Public Health is responsible for permitting septic systems, overseeing the septic operation and maintenance program, and reviewing land use plans. See page 39 for more information about septic system maintenance.

Property Access

It is important to consider access points to the property. Sometimes the only access point to rural lands involves crossing private property. Easements may already be in place for the property or they might need to be established. With either scenario, it is recommended to seek legal guidance to understand the easements associated with the property. Access from a county road requires a permit from Clark County Community Development. Access from a state road is managed by the State Department of Transportation.



Road maintenance on county roads is done by the county. However, the maintenance of private and easement roads are to be done by the landowners using it. Many mortgage companies will not lend money for new houses unless there is a "Road Maintenance Agreement" as part of the package.



Know Your Land

Living a Rural Lifestyle

When living in a rural setting, there is an even greater importance to being a responsible land steward and a good neighbor. We all have an impact on the land and our environment. Typically, the more land you own, the greater the potential impact. Fulfilling your responsibilities can be accomplished in a manner that doesn't scar the land, pollute the water, or cause problems with your neighbors.

Rural Landowner Responsibilities

The responsibilities associated with rural living are very different from those of urban and suburban residents. Many services that are provided to urban residents are not available to rural property owners.

For Example:

- Garbage collection is not available to all areas of Clark County. It might be necessary to locate a landfill or transfer station where garbage, junk and recycling items can be taken. (It is unlawful to burn garbage or to allow it to pile up in such quantities that it attracts rodents and insects.) Refer to waste disposal section on page 34 for more information.
- Utilities including wells, septic systems, and power systems for the property are the landowner's responsibility. If the land is undeveloped and there are plans to build on it, all underground cables need to be identified before excavation begins. Call 811 or 1-800-424-5555 at least two working days before you plan to dig.
- The property's access road maintenance is the landowner's responsibility. County road crews do not do remove snow or make repairs on access roads.
- Rural school districts provide bus service on public roads. If the home is a distance from the nearest public road, it is the homeowner's responsibility to get their children to and from the bus stop.
- Although mail delivery is a federal service to all addresses, it is the landowner's responsibility to purchase, erect, and maintain a mailbox, including maintaining access to the box for postal vehicles in winter or other inclement weather. Some rural areas have clustered mailboxes so the deliver only has to make one stop, check with the nearest Post Office before you install a mailbox.
- The landowner is legally responsible for removing any noxious weeds on the property. Clark County Vegetation Management (formerly the Weed Management Department) is available for weed identification and recommendations for best controlling weeds on private property.
- Fire department services are provided by local taxes. Many rural districts have volunteer fire departments and timeliness of the emergency response may depend on the availability of the firefighters. There are no water mains in rural areas so firefighters must also bring their own water. Due to these limitations, it is extremely important to practice fire prevention practices on rural lands. Refer page 48 for more of fire prevention.

Know Your Land



The Rural Neighborhood

Living in rural areas means that there will be neighbors who will be participating in rural activities. Sometimes these rural activities involve livestock that produce objectionable odors and make noises at all hours. Larger scale farms, such as dairy and chicken operations, by their very nature also produce large amounts of manure. Farmers spread manure and fertilizers on their land to produce crops and animal feeds. Most farmers manage their manure wisely, but many people new to rural living will find themselves unprepared for the associated odors.

There are also noises associated with rural farming. Roosters crow, cows bellow and horses neigh and stomp at all times of the day or night. While everyone should take as many measures as possible to reduce the impact their activities create, some are unavoidable.

The bottom line is to research the land before a purchase is made. Many areas have covenants that specify any animal restrictions, but they must allow a grandfather clause (meaning that the businesses existing prior to the covenant are allowed to continue business.) It is best to determine, prior to purchase, if the neighboring property's agriculture or forestry practices will be tolerable.

Dogs

Clark County has a leash law that applies to the entire county. It requires dogs to be under control by their owners while off the owner's premises. Animals may not run loose anywhere in the county. Free roaming dogs can be a nuisance not only to your own pets; they can also be troublesome to children, livestock and wildlife. Livestock owners have the right to protect their animals and can destroy dogs that threaten their animals.

Clark County has a Right To Farm/Log policy which recognizes the importance of and protects the agricultural production and forestry operations in rural areas.

Know Your Land



Fences

Fences are to keep livestock on your property. Under Washington law, agriculture landowners with a fenced shared property line must maintain half the existing fence or equally share in the construction of one. Contacting adjacent landowners and working out a fence maintenance schedule will help both landowners and prevent unwanted livestock use and improve communication. It is important to keep in mind that fences do not always indicate property lines, know where the property's lot pins or surveyed boundaries are located.

Private Property and Privacy

Newcomers to rural areas are often unaware of private property delineations regardless of whether it is fenced or posted. It is always the responsibility of the individual to know whose land they are on regardless of whether it is fenced. To prevent unintended trespasses, use a county map that clearly shows public lands and roads. Always ask permission before going onto someone's land.

Respect For the Land

While landowners have the right to utilize the land in a manner they see fit, there are benefits to taking care of your land responsibly. Responsible land use practices on rural lands will benefit the landowner, the environment, and the prosperity of the region. By taking care of the property's natural resources, not only will the natural environment benefit, but the livestock, other agricultural activities, and the neighbors in the local area and downstream will thrive as well.



Know Your Land

Being Neighborly

The importance of positive neighbor relationships is heightened in rural areas; however, it is often more difficult for rural neighbors to get along. Become familiar with the area and the community before moving to a new area. Conflicts, both real and perceived, between new and existing rural landowners are common. By gaining a better understanding of the reasons for the conflicts, some tension may be avoided.



Tips On Being A Good Neighbor

1. Recognize that being neighbors is a two way street.
2. Respect your neighbor's endeavors.
3. Cooperatively build and maintain property fences to keep livestock from trespassing onto your land or the neighbor's.
4. Control your dogs to prevent from harassing, harming, or causing undue tension to neighboring livestock.
5. Recognize that moving livestock and farm equipment on country roads is necessary. Be cautious and prepare for delays.
6. Understand that some actions, such as burning ditches or running farm machinery after dark are necessary farm activities.
7. Prevent noxious weeds from moving from your property to others via wind, water, or other means.
8. Remember that it is unlawful to use county roadway as a parking area for overflow traffic during yard sales and family gatherings.
9. Insure that you have the proper land base to support your livestock and other agriculture activities.
10. Realize that people who live in rural areas value their privacy and their space.

Know Your Land

Land Planning and Managing

Through conservation planning and implementation of a farm management plan, landowners can reduce environmental impacts and increase farm production. By establishing a management plan, landowners are contributing to supporting a healthy landscape and prosperous region. These plans take a whole property approach and are useful for both farmers and rural residential landowners.

A management plan or a conservation plan, is the first step to successful land and natural resource management. It is easy to design, starting by simply spending time on the property, looking around, making a sketch and taking notes

on the property boundaries, fences and corrals, buildings, wells, septic systems, water sources, bare ground, roads and driveways, soil type, weeds, lawns and gardens, pasture and cropland, trees and shrubs, soil type, land uses, and topography.

The next part is to determine your goals on the property. Determine how the land will be used then

visualize what it should look like. 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. Keep in mind, even if your plan does not make many alterations to the existing use of the land, you will want to consider ways to keep weeds from becoming too invasive.



Know Your Land



Assistance With Plan Development

Clark Conservation District (Clark CD) has staff available to help you develop and implement a conservation plan. The plan is custom made you. It is a working document to reflect the current land use conditions and can be modified as the plans or circumstances change. The plan will include an inventory of the soils, water (drainages and wetlands), plants and animals. Factors unique to the property will be included. Clark CD can recommend alternative management practices to existing problems on the property. The landowner will determine a plan of action and a timeline for completion. In certain cases, financial assistance is available to help cover the costs of implementation. Landowner objectives are the initial consideration when developing these alternatives. The decision to develop and implement the plan is voluntary. By developing and implementing a plan, landowners can rest assured that they are doing their part to protect and enhance the land. Clark CD's staff is highly qualified and experienced. Many of them are farmers, gardeners, and/or livestock owners. If you would like to develop a conservation plan, need technical assistance, or desire more information, please call (360) 883-1987 ext. 5.

For Additional Conservation Help

The WSU Clark County Extension Office has information on a variety of things associated with livestock, crops, landscaping, lawns, gardens, buildings, pest management and others. (See page 55 for contact information).

The Natural Resource Conservation Service (NRCS) has staff that can assist in developing forestry, farm, wildlife and wetland management plans. In addition, NRCS administers a number of cost share programs to provide assistance with wildlife habitat improvements, commercial agriculture production and forestry improvements. (See page 55 for contact information).

Clark CD is available to provide both technical and oftentimes financial assistance to Clark County landowners looking to conserve their natural resources.

The Washington Department of Natural Resources (DNR) has a program for owners of small forests and is a source of potential help in developing a forest management plan. Refer to page 26 for more information.



Soils

Water

Plants

Forests

Wildlife



Natural Resources

Soils

The earth beneath our feet is referred to by scientists as soil. Soil is developed over geological time from climate, water, temperature and parent materials. It can take more than 500 years for mother nature to create one inch of top soil from parent material such as bedrock, volcanic ash and glacial wash. Soils are also very fragile and are susceptible to erosion when not adequately protected. Without productive soils plants would not be able to grow. Plants that provide food, medicine, industrial products, wildlife habitat and aesthetics.

Soils have a variety of diverse textures based on their particle size and shapes. These basic textures are silt, sand and clay. The combination of these textures determines the characteristics of the soils. Land uses are often directed by soil characteristics such as depth of the soil to bedrock or the water table. In addition, steepness of slope or position on the landscape can affect soil stability and sustainability.

*It can take
500 years
or more to
create one
inch of top
soil!*

These characteristics and how they affect the potential of a soil are outlined in a document called a soil survey. The soil surveys for Clark County are available online through the Clark CD or through the Natural Resources Conservation Service Web Soil Survey.

The soil survey database has up-to-date charts and interpretations. Soils of our area have been mapped using field testing and examination by resource professionals, such as soil scientists, engineers, foresters, agronomists, range managers and others.

Consulting your soil survey is a great place to start when you want to know the general properties of the soils comprising your land. Soils information and maps are also FREE and available upon request from the NRCS and Clark CD.

To access Web Soil Survey, go to:
<http://websoilsurvey.nrcs.usda.gov>

Natural Resources

Soil Protection

Topsoil is a valuable resource containing nutrients for pastures, crops, and for the growth of native species. America's topsoils, combined with intensive technological management, are the most productive soils on earth. This productivity has improved the national standard of living and helped the country thrive in the global economy. Without deep, healthy topsoil the land would be a wasteland of desert-like conditions. When unprotected soils are allowed to be swept away, they are not able to support desirable plant roots. When soils lack the intricate network of plant roots and life forms below the surface, water and snow do not penetrate and percolate throughout the watershed. Stormwater flushes through the system, removing more soil particles with each storm event. This erosion strips the valuable and productive soil from the land, polluting creeks and rivers with muddy water that is overloaded with nutrients. Try planting a garden in subsoil or bedrock! How do we maintain our natural resource base? By using sustainable best management practices. To find out which management practices are best suited to your land and management objectives, contact Clark Conservation District.

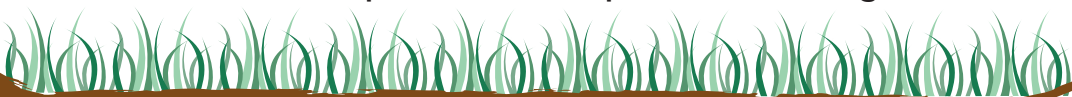


Erosion

There are various forms of erosion including sheet, rill, gully, stream bank, in-stream and wind erosion. Some soils are more susceptible to erosion than others due to soil texture and other factors such as slope, rainfall intensities and natural ground cover. Land use methods also influence erosion rates. For instance, over-stocking or over cultivating pastures can contribute to soil loss. By maintaining adequate ground cover with various best management practices, erosion can be minimized and topsoil can be kept in place.

Is your soil covered?

...not by insurance, but **vegetation!** Vegetation protects the soil from erosion by rain, runoff and wind. Vegetation increases water uptake by soils and holds soils in place on slopes and along streams.



Natural Resources

Soils Testing

Soil testing is a good way to determine the nutrients present in soils, as well as, the pH or acidity/alkalinity. Soils found in Clark County tend to have lower pH levels in the 5.5 to 6 range. Common nutrient deficiencies in our area include nitrogen (N), phosphorus (P) and sometimes boron (B). Soil testing information is available from WSU Extension office or Clark CD. Contact Clark CD for a list of soil testing labs where soil samples can be tested. When the test results are returned, the Extension and/or District staff can help you interpret them.



To avoid contaminating your soil sample:

- Use clean sampling tools.
- Mix the sample with clean hands and use clean, nonabsorbent packaging materials.
- A small amount of fertilizer residue on tools or hands can seriously contaminate a soil sample. An open-face sampling tube is the tool most commonly used for soil sampling. Soil sampling probes are available to borrow from both the Extension and District offices

For Help...

The NRCS and Clark CD can provide technical help with soil and water conservation problems on your property. NRCS and Clark CD offer technical assistance and information on cost sharing opportunities in order to address soil erosion issues. Contact WSU Extension office for information on recent soil and agronomic research, soil testing tips and recommendations.

Soil Saving Tips

- To the extent possible, keep all soils on your property well covered with vegetation.
- Cover crops, sod-forming grasses, native plants and ground covers are excellent soil protectors. Clark Conservation District and the WSU Clark County Extension Master Gardeners can help you select native plants well 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 your soils.

Natural Resources

Water

Managing water is a vital part of successfully managing property. Using water efficiently will minimize costs and maximize water quality to benefit the landowner, the property, the livestock and downstream users.

Water Rights

A water right is a legal authorization to use a certain amount of water for specific purposes. Washington State law requires certain users of public water to obtain approval from the state prior to actual use of the water. Approval is granted in the form of a water right permit or certificate. In addition to state authorized rights, Washington recognizes valid water right claims and federal reserved water rights.

A surface water right is necessary for those planning to divert any amount of water from surface waters (water above ground). Surface water sources include: lakes, rivers, streams and springs.

A ground water right is necessary for withdrawal of water from a well: If you plan to withdraw more than 5,000 gallons per day, or if you plan to irrigate more



than a half-acre of lawn or non-commercial garden. For use of either surface or ground water, a permit must be obtained from the Washington Department of Ecology.



Attributes of Water Rights

Water right authorizations contain the following information:

- A specific location for each surface diversion or well that was authorized under the right.
- A legal description of the place in which the water may be used.
- The specific purposes for which the water may be used.
- The authorized season of use.
- A maximum diversion or withdrawal rate.
- The maximum annual quantity that may be used.
- For irrigation, the number of acres that may be irrigated in a season.

Water rights may also include specific provisions which limit the manner and use of water under the right. Right holders may apply to change attributes of a water right, such as the place of use or the point of diversion or withdrawal. Failure to adhere to the specific limits and provisions set forth in the right without an authorization, constitutes an illegal use of water and may subject the water right holder to enforcement action.

Natural Resources



Why Compliance With Water Laws Is Important

Laws regulating water date back to the early days of settlement. Laws were established to reduce conflicts among competing water users and to protect the resource. The state legislature established the current surface water code in 1917, the groundwater code in 1945, and added provisions addressing water for fish and wildlife in 1949.

As the needs and demands for water use in Washington increase, compliance with water laws becomes more important. Compliance with water laws serves a number of purposes:

- Protecting legal water users from impairment or loss of water by those using water illegally.
- Protecting those with senior (older) water rights from harm by those with junior (newer) rights.
- Keeping enough water in streams to protect the environment, restore fish runs, and meet requirements of the Endangered Species Act.

- Keeping enough water in streams for other in-stream uses including recreation, aesthetics, and production of electricity.
- Ensuring that water being used without authorization is returned to the streams for allocation to others who are waiting in line for new water rights and to assist in restoring stream flows.
- Ensuring that water use can be sustained for the long term rather than drying up streams and depleting aquifers faster than they can be recharged.
- Ensuring that water laws and the permitting system are credible and deter further illegal use.
- Creating awareness about the importance of water use and the need for wise use of our limited water resources.

Water rights may be transferred to another landowner. If you have questions about the process of water rights transfer, you may contact the Washington Department of Ecology in Lacey, WA at (360) 407-6872.



Natural Resources

Water Quality Management

Clean, abundant water is one of the county's greatest treasures, whether it comes from the ground or from lakes, streams, or rivers. Water quality can't be taken for granted. As our population grows, the demand for water increases as does the potential for pollution. Without realizing it, ordinary people can:

- Waste water
- Pollute water
- Increase the amount of runoff

Everyday activities may send oil, pesticides, fertilizers, and sediment into nearby waters. To keep water clean - and to make sure we have enough to go around - everyone needs to help.

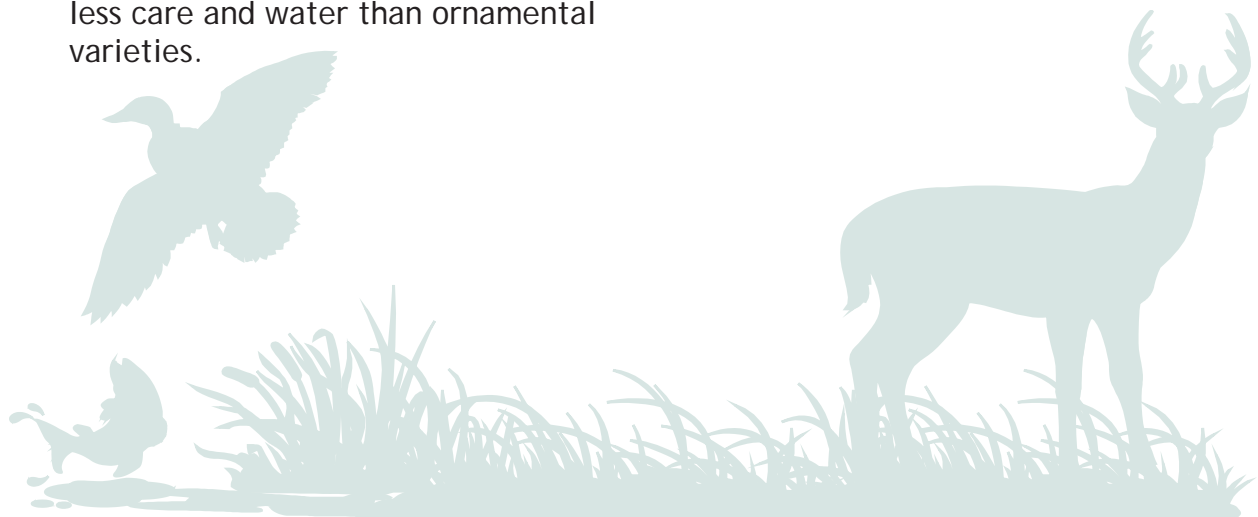
Reduce runoff

Trees, shrubs, and other vegetation help rain soak into the soil. Plants filter pollutants from runoff, keep stream banks, and slopes from eroding, and provide habitat for fish and wildlife.

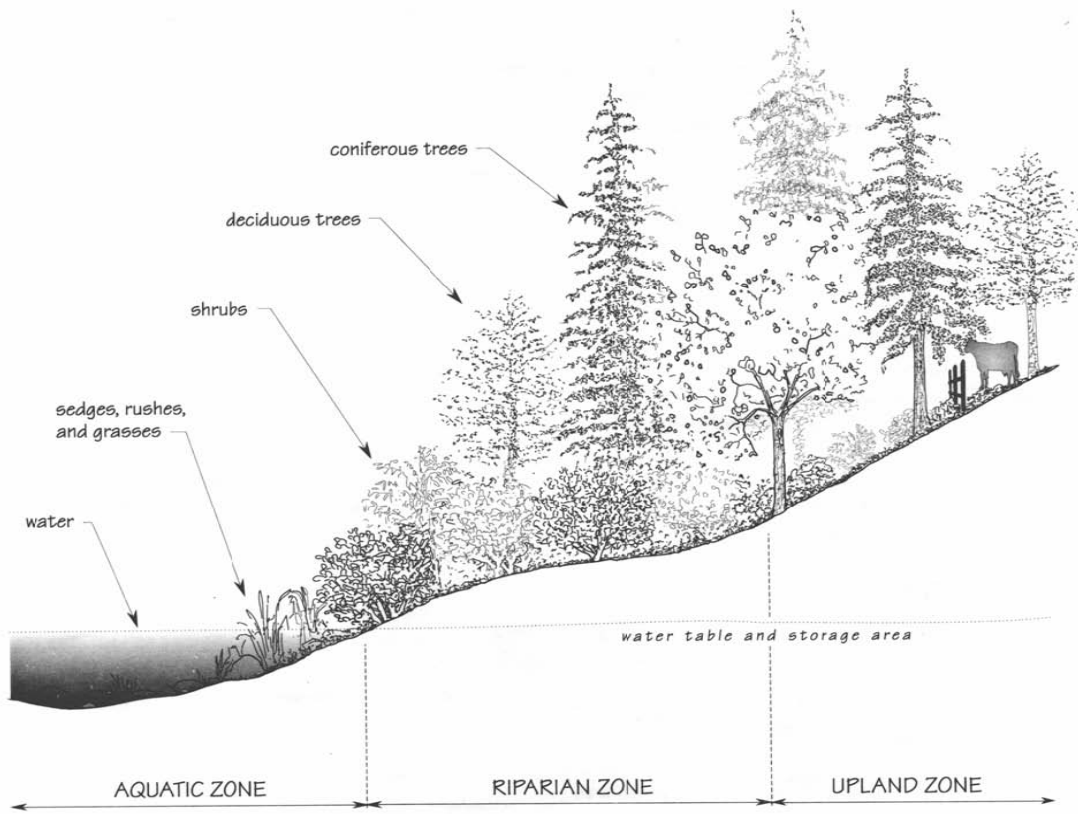
- When landscaping or building on a new site, work with your land. Leave as much existing vegetation as possible. Native plants usually need less care and water than ornamental varieties.



- Plant more trees, shrubs, and ground covers. Minimize impenetrable surfaces like concrete.
- Control and manage animal access to streams. Livestock eat the vegetation that protects the stream banks. Their hooves can cause further erosion, and their waste degrades water quality.
- Pick up pet wastes. Runoff can carry pollution into water bodies.
- Refer to the next section on Property Management (beginning on page 30) for more actions to take on your own property to protect water quality.



Natural Resources



Riparian and Wetland Management

Riparian areas are found along streams, lakes and wetlands. They are the transition zone between the water and the surrounding land. They are comprised of water loving plants, such as willow, alder, cottonwood and various grasses, sedges and brushes. Riparian areas are home to turtles, beaver, ducks, muskrats, songbirds, frogs, insects, aquatic organisms, cattail, wapato, lilies and more. Balancing a healthy riparian area with multiple-use needs, such as road crossings, livestock watering and travel corridors, recreation and fish and wildlife habitat, can be accomplished with careful management.

A healthy riparian area is key to a healthy stream system. Benefits of lush riparian and wetland vegetation along the water's edge include:

- Slow flows and reduce erosion and property loss.
- Secure food and cover for fish, birds and other wildlife.
- Keep water cooler in the summer and help prevent ice damage in the winter.
- Reduce water pollution by filtering out sediment, chemicals and nutrients from runoff.
- Provide important breeding habitat for birds and other animals.
- Shelter animals during calving and fawning.
- Provide protective travel corridors and hiding cover for wildlife.
- Hold water in the soil, slowly releasing it for longer season stream-flows and groundwater recharge.

Natural Resources

Riparian areas make up
less than 5% of the landscape
but contain
up to 75% of our plant and
animal diversity!

Techniques for Riparian Improvement and Enhancement

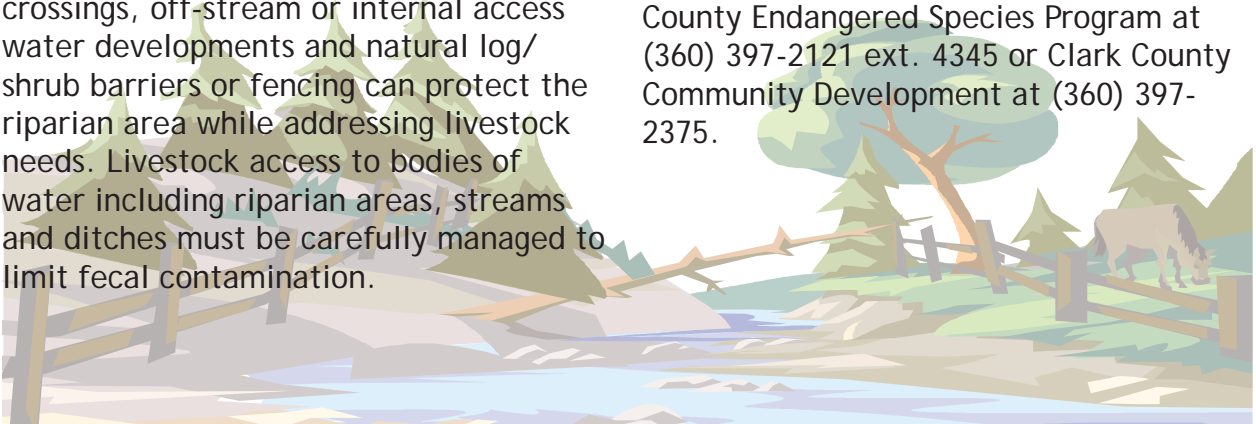
The keys to riparian improvement and enhancement are healthy vegetation and managed access. Oftentimes, the best vegetation is what is naturally occurring. However, sometimes the current vegetation is not **healthy for the overall habitat**. By planting fast-growing native trees and shrubs in riparian zones, you can help restore damaged areas and choke out invasive species. The Clark Conservation District can help you select the best species for your landscape. In addition, Clark CD has an annual native plant sale making native bare root plants available at low costs. Look for our announcement every November. The sale is held in late February.

To maintain healthy riparian vegetation, access to the area by livestock should be controlled. Grazing rotation, hardened crossings, off-stream or internal access water developments and natural log/shrub barriers or fencing can protect the riparian area while addressing livestock needs. Livestock access to bodies of water including riparian areas, streams and ditches must be carefully managed to limit fecal contamination.

Agriculture and Riparian Areas

If you live along side a stream in Clark County and practice agriculture, you may be affected by habitat protection requirements. The regulations were adopted to protect existing riparian habitat characteristics from substantial degradation due to agriculture activities. The Habitat Conservation Ordinance was originally enacted in 1997 to protect habitat from development and other land clearing activities. In response to a state mandate, it was amended in the summer of 2006 to include protections on agriculture lands. The ordinance allows a landowner to choose a habitat protection method from two options: the Habitat Protection Plan option, and the Default option. Implementing a Habitat Protection Plan enables the landowner to continue agriculture practices within the habitat area so long as existing habitat characteristics are protected.

A committee of citizens, technical staff, and interest groups developed a set of guidelines to help landowners prepare a Habitat Protection Plan. The guidelines contain detailed instructions in an easy-to-use kit format. Kits are available from the Clark Conservation District, (360) 883-1987 ext. 5. For more information about the ordinance, contact the Clark County Endangered Species Program at (360) 397-2121 ext. 4345 or Clark County Community Development at (360) 397-2375.



Natural Resources



Plants

Vegetation not only provides a pleasing aesthetic quality to your property, its abundance is also a valuable natural resource. Plant roots hold soil in place preventing erosion and filtering out excess nutrients and other pollutants that could harm water sources. In addition, plants slow down water flows across the ground keeping soil loss to a minimum. Finally, plants provide shelter and food for countless wildlife species and insects.

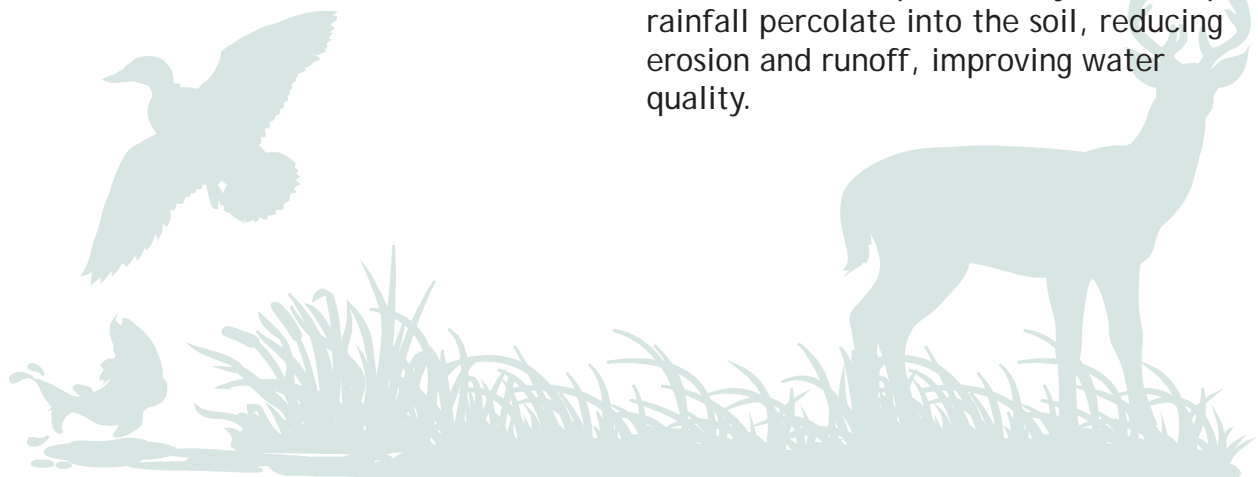
Native Plants

Native plants (also called indigenous plants) are plants that have evolved over thousands of years in a particular region. They have adapted to the geography, hydrology, and climate of that region.

Due to the adaptation of native plants to their native region and climates, they are a vigorous and hardy plant, able to survive winter cold and summer heat. Once established, they require no irrigation or fertilization. They are resistant to most pests and diseases. Thus, native plants suit today's interest in "low-maintenance" gardening and landscaping.

Each native plant species is a member of a community that includes other plants, animals and microorganisms. The natural balance keeps each species in check, allowing it to thrive in conditions where it is suited, but preventing it from running amok. Thus, native species rarely become invasive, as plants introduced from other areas can be.

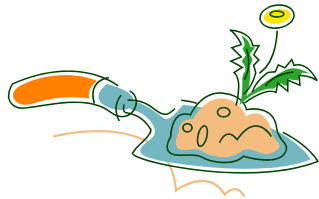
Native plants provide food and shelter for birds, butterflies, and other desirable wildlife. Many natives help to enrich the soil. Well adapted root systems help rainfall percolate into the soil, reducing erosion and runoff, improving water quality.



Natural Resources

Non-Natives, Invasive Species and Just Plain Weeds!

Non-native plants (also can be called non-indigenous plants, exotic species, or weeds) are plants that have been introduced into an environment in which they did not evolve. Introduction of non-native plants into the landscape has been both accidental and deliberate. Purple loosestrife, for example, was introduced from Europe in the 1800's in ship ballast and as a medicinal herb and ornamental plant. It quickly spread and can now be found in 42 states.



In general, aggressive, non-native plants, or invasive species, have no enemies or controls to limit their spread. As they move in, complex native plant communities, with hundreds of different plant species supporting wildlife, will be converted to a monoculture. This means the community of plants and animals is simplified, with most plant species disappearing, leaving only the non-native plant population intact.

Weeds are plants growing where they are not wanted. Any undesirable grass or broad-leafed species, from a small herbaceous plant to a woody shrub, vine, or tree, may be considered a weed if it is growing in a landscape bed, pasture, lawn, rangeland or other area where it is not desired. For example, a corn plant growing in the middle of a lawn would be considered a weed, although easy to control. The most troublesome weeds, however, are those that rapidly multiply to dominate a site and are extremely difficult to control. These are referred to

as "invasive" weeds, and may be named in state or federal laws as "noxious" species. A noxious weed is any plant designated by federal, state or county governments as injurious to public health, agriculture, recreation, wildlife, or property. If there are noxious weeds on a property, the owner of that property is required, by law to control them. A list on noxious weeds and how to identify and control them can be obtained through Clark County Vegetation Management. (360) 397-6140.

Clark CD Native Plant Sale

At the beginning of each year, the conservation district holds a plant sale. The purpose of this sale is to promote the use of native plants in local landscapes. Because these plants are naturally occurring in Western Washington, they do not require additional water or fertilizers to grow. Natives are also more resistant to disease and pests than non-native ornamental plants. Native trees and plants provide food and shelter for our Northwest wildlife. Clark CD sells tree protectors to shield the seedlings from rodent damage and deer browse. The preorder sale starts in October and plants are available for pick up in late February. Sale information is available at www.clarkcd.org



Natural Resources

Forests

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 plants on the ground and are comprised of a diversity of species. Woody material on the ground is scattered rather than piled. Clark county soils and climatic conditions are just right for forests and Christmas tree farms. In fact, nearly half of all the land in the county is covered in forests.

Tips for Growing a Healthy Forest

- Maintain a diversity of tree species.
- Reduce loss of trees to problem insects and disease by thinning to allow more light, water and nutrients for the remaining trees.
- Thin trees to improve growth, health and vigor. Thinning will also increase forage for livestock and wildlife. Leave the largest and healthiest trees as seed stock for future trees.
- Avoid continuous livestock grazing that can compact soils and damage trees from browsing or rubbing.
- Locate access roads away from streams; construct adequate drainage. Re-seed cut slopes promptly to reduce erosion, water pollution and weed infestations.
- Dispose of heavy accumulations of downed woody material to reduce fire hazard. Leave snags (standing dead trees), and larger logs for habitat and forest nutrient cycling.
- When controlling weeds with chemicals, take special precautions to protect trees.
- When planting trees, select species adapted to your soil, climate and site. Care for new trees by removing competing vegetation in a two foot diameter around the trunk. Prevent browsing by livestock and wildlife.
- Seek professional help when planning a timber sale in order to get top dollar, handle the various permits needed and see that the remaining stand is in good shape when the harvest is over.



Natural Resources



Christmas Trees

There are a number of Christmas tree growers in the county. Science, technology, and selective breeding have turned what once was a small, part-time hobby into a highly profitable business. Christmas trees can be grown on land that is unsuitable for other crops, serving as both erosion controls as well as making marginal land profitable. As with any agricultural endeavor, Christmas tree culture is a full-time job. The trees require planting, pruning, fertilizing, and harvesting. The trees must be fresh when they reach the marketplace, so some growers harvest with helicopters to transport sling loads of trees to refrigerated vans, which then transport to market. However, many tree growers also operate as a "You Cut" operation. This is an enjoyable holiday tradition for many families. Many "You Cut" operators turn their business into a seasonal occasion, with free hot cocoa or cider and horse-drawn hayrides. Most offer the free use of saws and will help carry and attach the tree to the buyer's vehicle. In addition, some farmers are now allowing people to 'adopt' a Christmas tree, where someone chooses next year's tree and visits it throughout the year to check on its progress.

Washington State is the third largest producer of Christmas trees, behind only Oregon and North Carolina. In 2004, the crop value for Washington trees was \$51 million dollars, with the Douglas fir being the most preferred species. A Douglas fir tree, managed and cared for the tree market, will take only 7 years to grow to marketable size. More information can be had by contacting the Northwest Christmas Tree Association at their website (www.nwchristmastrees.org).



Natural Resources



For Help 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 Washington Department of Natural Resources (DNR), and from WSU extension - see the website:

<http://extension.wsu.edu/forestry>

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).

The DNR's Small Forest Landowner Office (SFLO) administers the Forestry Riparian Easement Program. It issues cutting permits and provides technical advice when streams or rivers are present in the forest. It can assist landowners in understanding how the Forest Practices Act affects forestland owners. In addition, the Forest Stewardship Program assists non-industrial, private forest owners in managing their properties. A private organization, the National Woodland Owners Association, can be reached at www.woodlandowners.org

To apply for a permit, call Washington DNR's SFLO Division office headquartered in Olympia. The office phone number is (360) 902-1415.



Natural Resources

Wildlife

Clark County possesses a wide variety of habitat providing homes for a vast array of wildlife species across the county. While there can be a particular draw for landowners to have wildlife on and around their properties, there are also drawbacks when coexisting with wildlife when there is conflict. Measures can be taken to protect and enhance wildlife habitat as well as actions that can be adopted to live with wildlife that can be a nuisance.

Backyard Wildlife

Whether you live on a small lot or a large acreage parcel, you can help increase the presence of wildlife habitat by making a few simple changes to your backyard environment. Landowners are not required to provide habitat

Food requirements will naturally vary by wildlife species, from seeds and berries for birds to the grasses, forbs and shrubs preferred by deer and elk. Water on or near your property in the form of a pond, stream, or developed stock

$$\text{Wildlife Habitat} = \text{Food} + \text{Cover} + \text{Water}$$



for wildlife, but it is not difficult to do so, even with small or unusually shaped acreages. Simple actions, like fencing off a portion of marginal land and allowing it to 'go wild' provides habitat for reptiles, small mammals and birds. By growing a diversity of 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.

water will increase the variety of wildlife you will attract. Cover is needed for hiding from predators, traveling, nesting and shelter. Even a brush pile can serve as excellent cover for small mammals, song birds, amphibians and other animals. Leaving native trees in place, like our native Garry or white oak, provides food, cover and habitat for squirrels, raptors, and songbirds. A couple of bat houses set up near your home may attract bats that will repay you by eating tremendous numbers of insects that annoy and stress your livestock, especially mosquitoes. Barn swallows nesting in a barn will do the same.



Natural Resources



Dead, Dying and Hollow Trees and Logs

Many people are not aware of the value of dead, dying, and hollow trees, as well as downed logs for wildlife. Dead trees provide homes and food to over 80 species of birds, mammals, reptiles, and amphibians in our area. 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.

If your property was previously farmed or is currently in use, and you would like to restore part of it to attract wildlife, please call Clark CD. Resource Planners can develop a restoration plan for you that will create a diverse and balanced haven for wildlife or improve one that is already there. We can identify plants, shrubs and trees for you and provide assistance in dealing with and attracting wildlife. In addition, we can advise you on the selection of native plants through our annual Native Plant Sale held in February.

Call the Clark Conservation District at (360) 859-4780

Tips for attracting wildlife

- Consider planting native species first; wildlife prefer them to non-natives.
- Plant a diversity of vegetative types and heights.
- Select plants that flower and bear fruit at different times of the year.
- Leave snags and 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.

Refer to Russell Link's book, *Living With Wildlife in the Pacific Northwest*, for more information on promoting wildlife on your property.



Natural Resources

Living with Wildlife

Coexisting with wildlife sometimes brings about conflict. Although it might not appear so at the time, the animals, which are often referred to as nuisance or problem animals, are innocent. When a conflict exists between humans and animals it is usually because the animal is only doing what it needs to do to survive. It is simply following its own instincts, and intends no harm or discomfort

Discouraging Nuisance Animals

If you are experiencing problems with skunks, raccoons, possums, squirrels, or other small wildlife there are steps you can take to discourage them from your property. Make sure you are not leaving pet food or water outside, or food scraps in your compost, and secure the lids on your garbage cans. You can generously douse problem areas with white vinegar or cayenne pepper as a sensory deterrent. Trim tree branches to eliminate easy access to roofs and other trees. Bright light and loud music may also encourage the animal to leave.



Black Bears

If you live in or near black bear habitat:

- Keep pet and livestock food indoors.
- Store garbage in secure, wildlife-resistant containers.
- Wash barbecue grills after use.
- Enclose beehives and fruit trees with chain-link or electric fencing where practical



Deer

- A properly constructed fence may help keep deer out of sensitive areas.
- Cattle guards can provide the most effective protection for driveways without gates on properties that are otherwise fenced to keep deer out.
- Deer repellents use a disagreeable odor or taste, or a combination of both, to dissuade from eating the treated plant.
- Scare tactics can be visual (scarecrows, bright lights, spare blankets), auditory (noisemaking devices such as exploders), or olfactory (predator urine or droppings)

Visit the Washington Department of Fish and Wildlife website for fence construction tips and more information at <http://wdfw.wa.gov/living>



Land

From inside the home to out in the field, garden or yard, there are a number of management techniques and practices that when adopted when will help make a property more environmentally friendly and sustainable.

Gardening and Landscaping

The number of home gardens is on the rise in Clark County. Common garden frustrations can be kept to a minimum by finding out what grows best in your area before you plant, and how to protect your plot from pests and disease. This type of information is available through the Master Gardeners at the WSU Extension Office.

Climate

Due to varying soil types, terrain features, and climactic conditions, Clark County climates are more of a collection of microclimates. For successful gardening in this part of Washington, plant in accordance with the guidelines for Zones 7 or 8. Cooler summer nights are not favorable to growing heat loving crops like tomatoes and melons. However,

season extenders such as hotbeds, cold frames, greenhouses, plastic and compost piles can help boost the ability to grow in these crops. In addition, planting in movable pots or in garden beds against the south end of the buildings are also effective season extenders.



Property Management

Tips for Your Lawn and Garden

1. There can be too much of a good thing. Used excessively, pesticides and fertilizers can be washed from yards into waterways and ground water. Pesticides can be toxic to aquatic life and people. Fertilizers can encourage rapid growth of plants and algae in lakes in streams. Over watering can cause disease in plants.
2. Compost yard waste. Keep grass clippings out of ravines and waterways, where they will pollute the water when they break down.
3. Avoid the use of gardening chemicals by using non-toxic products whenever possible.
4. If fertilizers or pesticides must be applied, do so when there is no chance of rain. Buy and mix only enough to do the job and always follow instructions.
5. When watering, make sure the water goes only where it is wanted and needed and adjust the schedule to the weather.
6. Limit watering during the heat of the day when evaporation is at its peak.

Native plants are recommended for landscaping since they are suited to the climate of this region. They are likely to be more tolerant of disease and require less water than non-natives. Because the summer months in Clark County tend to be drier, consider planting drought resistant varieties and installing a drip irrigation system to conserve water.

Choosing a Garden Spot

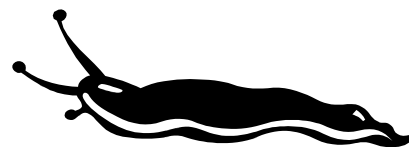
Quality garden produce comes from having good soil. A site with loamy soils will provide appropriate drainage and essential plant nutrients. To improve the texture of other soils, you can add amendments to the soil such as organic matter, sand or vermiculite. Perhaps the most important practice to maintain healthy soils is to regularly add compost.

If purchased soil or manure will be added to the garden, be sure that the place from which it came was not treated with a long term residual pesticide.

Pests and Other Problems

Pests can range from tiny insects to larger, furry four legged mammals. Insect problems can often be addressed with inexpensive homemade solutions. Household agents and even beer can be used in controlling insects. The WSU Master Gardeners can help with insect identification as well as providing useful recipes for do-it-yourself control methods.

Pests can also be controlled through a variety of means including natural predation. By working with wildlife rather than against it, unintended consequences can be avoided. The use of poisons can be a short term solution with long term consequences. They can poison pets, absorb into plants, and leach into water supplies. Consider alternative methods to competing with wildlife.



Property Management

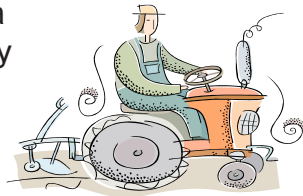
Deer can become a major nuisance to any garden. Given the chance, they will eat almost anything you are growing, including your flowers and shrubs! A tall fence may be your best defense, but other options are available. For ornamental garden areas that cannot be



practically fenced, try planting deer resistant plants. Contact the Master Gardeners at the WSU Extension Office for more information.

Seedbed Preparation

Garden preparation is all about timing. Soil should be turned when it is moist but not wet. Tilling wet soil compresses the soil particles into clods which are difficult to pulverize later into a fine seedbed. To test if the soil is dry enough to till, squeeze a handful into a ball in a fist. If the soil ball crumbles when tapped with a finger, the soil is dry enough to till. If it remains in a mud ball, it is too wet.



The **Naturally Beautiful Backyards (NBB)** program promotes the creation of healthy and productive ecosystems in residential yards and gardens by providing education on earth-friendly gardening techniques. Using earth-friendly gardening techniques can greatly reduce the use of synthetic chemicals, increase beneficial organism activity, enhance habitat and wildlife areas, and contribute to the overall health of the community.

NBB is housed at Columbia Springs Environmental Education

Center and funded primarily by Clark County Solid Waste Program. Clark County Solid Waste Program strives to educate county citizens through

workshops, lectures, demonstration sites, displays, and written materials about the benefits of reducing chemical use in the yard and garden to decrease the amount of hazardous materials entering the waste stream. www.naturallybeautifulbackyards.org



Property Management



Protect Your Well Water

Rural landowners in Clark County depend on wells for their drinking water. Wells are direct conduits from aquifers (underground water supply). Wells have the potential to be contaminated if precautions are not taken to protect the health of upstream riparian areas.

Further measures to take to prevent the contamination of well water include:

- Locate livestock confinement areas and septic tanks downslope and at least 100 feet from drinking water well.
- Livestock confinement areas and waste storage areas must be at least 100 feet from wellhead.
- Avoid over-irrigation that can result in runoff and leaching of topsoil, fertilizer, and pesticides.
- Properly manage and dispose of manure, feed, and bedding wastes by composting and then spreading on pastures or croplands. Spreading composted waste will significantly reduce the need for expensive commercial fertilizers. Be sure the soil is not too wet or frozen to absorb wastes.
- Abundant manure sources can be added to Clark Conservation District's manure exchange service that can match you to someone needing manure.
- Use farming practices that increase water infiltration and reduce soil erosion such as "no-till", minimum till, filter strips, and grassed waterways.
- For disposal of pesticides, used motor oil or other house hold hazardous wastes, contact Clark County Public Works - Recycling and Solid Waste Program (see page 35).

*For more information and rates
on waste disposal options visit:*

www.clark.wa.gov/recycle/disposal/selfhaul.html

Property Management



Waste Disposal Options

Clark County residents may “self haul” their waste to any of the three transfer stations in Clark County.

West Van Materials Recovery Center

(360) 737-1727

6601 NW Old Lower River Road

Hours: Monday - Friday 6am-6pm

Saturday 8am-4pm

Central Transfer and Recycling Center

(360) 256-8482

11034 NE 117th Avenue

Hours: Monday - Friday 6am-6 pm

Sunday and Saturday 8am-4pm

Washougal Transfer Station

(360) 835-2500

4020 S. Grant Street

Household garbage accepted

Wednesdays from 8am-5pm

Saturdays from 8am-4pm

Recyclables accepted

Monday - Friday 8am-5pm

Saturday 8am-4pm

Waste Connections (360) 892-5370 provides garbage and recycling pick up services in Vancouver, Unincorporated Clark County, Yacolt, Ridgefield, Battle Ground, La Center, and Washougal.

The City of Camas provides garbage service to its residents. To set up garbage service, call (360) 834-2462.

Garbage service in northwestern Clark County, in the Woodland Vicinity, is provided by Waste Control, Inc., call (360) 225-7808.

Waste reduction, or “pre-cycling”, is an effort to prevent waste before it is created. We can help reduce waste by making careful choices about what we buy, use, and throw away. The following are some pre-cycling tips:

- Look for items with less packaging or items packaged in recycled materials.
- Choose durable rather than disposable products.
- Look for opportunities to reuse items instead of disposing of them.
- Ask for recycled products to help create a demand for recycled materials.
- Buy recycled content materials.

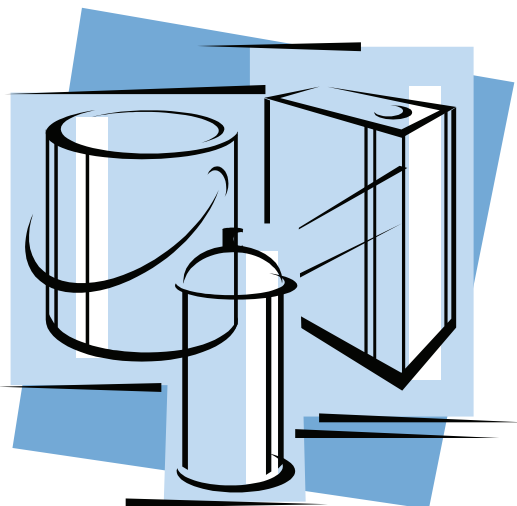


Property Management

Household Hazardous Waste

Household hazardous waste (HHW) is any waste generated from the use of a product containing a hazardous material that, if misused or improperly disposed of, pollute water, harm wildlife and threaten drinking water and well-being. Any products labeled with any of the following words is considered hazardous: “danger”, “flammable”, “warning”, “corrosive”, “poisonous”, “caution”, “explosive”, “reactive”, “combustible”, or “toxic”. Preventative measures can be taken to reduce the amount of household hazardous waste produced in the home by adhering to the following guidelines:

- Consider using non-toxic, or less hazardous products. When possible, use water-based, not solvent or oil-based products.
- Try alternative cleaning products, such as vinegar and water for washing windows, and lemon and mineral oil for dusting fine furniture.
- Buy only what is needed, use it all, or give what’s left to somebody who can use it. Only non-banned products, in their original non-leaking containers with readable labels, should be given away.



HHW Disposal Sites:

Residents of Clark County and its cities may dispose of unwanted household hazardous waste products at one of the following county sponsored HHW collection sites.

Central Transfer and Recycling Center

(360) 256-8482

11034 NE 117th Avenue,

Vancouver, WA 98662

Saturday & Sunday, 8am- 4pm

West Van Materials Recovery Center

(360) 737-1727

6601 NW Old Lower River Rd,

Vancouver, WA 98660

Friday & Saturday, 8am-4pm

Washougal Transfer Station

(360) 835-2500

4020 S. Grant Street

Washougal, WA 98671

Third Saturday of every month, 8am-4pm

Philip Services Corporation

(360) 835-8594

625 S. 32nd Street

Washougal, WA 98671

First Tuesday, 10:30am-3:30pm

Mobile Collection Events

Call Clark County Public Works, (360)

397-6118 ext. 4944 for collection event

schedules or for more information about

household hazardous waste.

Property Management



Yard Waste Recycling

Yard debris makes up a significant amount of the waste discarded by residents of Clark County. There are much better alternatives for disposal of this material than putting it into the garbage and sending it to the landfill. By recycling yard debris, the amount of material placed in your garbage can is reduced significantly, resulting in less garbage costs to the household you and less yard debris ending up in the landfill. With the ban on backyard burning in many areas, this service provides residents with an alternative disposal method. The yard debris will be turned into compost, which is a beneficial resource. Many people choose to compost yard debris in their own yard and for more information about how to do this call the Master Composter/Recyclers at (360) 882-0936 ext. 224.

Waste Connections provides curbside collection of yard debris to residents of Vancouver, Ridgefield, La Center, Camas, Washougal, Battle Ground and the unincorporated urban boundary areas of the county. This service is NOT currently available in Yacolt or rural unincorporated Clark County. Yard debris is accepted at a number of facilities across the county.

They produce high quality finished compost, generally free of weeds, seeds and pathogens. Many of these companies also accept landscape timbers and wood wastes from remodeling and construction. Resources include:

Central Transfer and Recycling Center
(360) 256-8482

See page 34 for more information

H & H Wood Recyclers
(360) 892-2805
8401 NE 117th Avenue
Vancouver, WA 98662

McFarlane's Bark
(360) 892-6125
8806 NE 117th Avenue
Vancouver, WA 98662

Triangle Resources
(360) 834-7253
612 SE Union
Camas, WA 98607

West Van Materials Recovery Center
(360) 737-1727
See page 34 for more information

City Bark
(360) 253-8461
2419 NE Andreson Road
Vancouver, WA 98661

Property Management



Composting

Composting is a simple technique that turns organic materials, like yard debris and food scraps, into a rich soil conditioner that can be used in yards and gardens. The process occurs in nature continually as vegetation falls to the ground and slowly decays. Composting is simply a technique we can use to accelerate this natural process.

In Clark County, approximately 19% of what goes into our landfills is yard debris and food scraps. When these materials break down in the landfill they produce the foul smelling, flammable gas methane. Methane control is one of the factors leading to increased landfill costs and is one of the greenhouse gases believed to be responsible for global warming. When we remove organic materials from our land, particularly yard debris, we are robbing our soil of the ability to feed and replenish itself. This results in decreased plant health and disease resistance and increased use of expensive synthetic fertilizers and pesticides which pollute our ground water.

Composting enables us to keep and use our valuable organic material at home safely, cleanly, and inexpensively.

The Master Composter/Recycler Program is a cooperative effort of Clark County, the City of Vancouver, Camas, Washougal, Battle Ground, Ridgefield, Yacolt, La Center, and Columbia Springs Environmental Education Center. The program educates and inspires the community on backyard composting and organic waste diversion methods, waste reduction and recycling. Trained volunteers do this education through backyard composting workshops, attending community events with composting and recycling how-to information, low-cost community workshops, composting demonstration sites, teacher worm bin workshops and speakers for neighborhood or community groups. For more information on the Master Composters/Recyclers Program visit: <http://www.columbiasprings.org/mcr>



Property Management



Recycling

Each resident of Clark County discards the equivalent of 5.45 pounds of waste daily. More than 50% of that waste is reusable or recyclable. The loss of natural resources, energy and increasing costs of disposal make home source separating and recycling an important alternative. In an effort to reduce the large amount of recyclable items (non-liquid, non-hazardous recyclables) that are presently disposed of at the transfer stations, curbside recycling service is available to all residents of Clark County. In some cities and urban growth areas, curbside recycling is mandatory. In all areas, recycling is picked up on the same day as garbage (self-haul garbage customers are given a recycling schedule). Residents are assigned a pick-up day when they sign up for garbage service.

Clark County residents have blue recycling carts for most recyclable materials and a separate bin for glass. There are a number of recycling drop off locations at public and private drop-off recycling sites in Clark County. The following recyclable items are accepted at no charge at each of the Clark County

Transfer Stations in Vancouver:

Newspapers and magazines, mixed waste paper, empty aerosol cans/tin cans, aluminum cans, scrap metal, glass (sort by color), milk jugs, plastic bottles, corrugated cardboard, antifreeze, motor oil, vegetable oil, auto batteries, household batteries



Property Management



Septic Systems

A properly working septic system will save a homeowner money and last many years. Septic systems are usually not considered an essential part of a home, however, replacing a failing septic treatment system can cost between \$6,000 and \$15,000. Periodic inspection and timely repair of system components can prevent damage to the soil and water in the ground around the home, and may extend the useful life of the system.

Clark County residents whose property is not connected to a municipal sewer system to are required to ensure that the property includes an approved, correctly functioning on-site septic system. Proper maintenance is defined in the code as:

- Determining the level of solids and scum in the septic tank every three years.
- Employing an approved pumper to remove septage from the tank when necessary.
- Protecting the system components and required reserve septic area from damage by structures or materials, surface drainage, soil compaction, soil removal or grade alteration.
- Keeping the sewage flow at or below designed quantity and waste strength.
- Directing roof drains away from the area of the sewage treatment system.
- Operating and maintaining alternative sewage disposal systems if directed by the County Health Officer.

More information on septic inspection and Clark County Public Health can be accessed via: <http://www.clark.wa.gov/public-health/septic/index.html> or call: (360) 397-8428



Property Management



Livestock

The number of rural landowners with livestock is on the rise in Clark County. While larger production farms are not as prevalent as they once were in the county, the numbers of small acreage, low production farms are seeing a steady growth in numbers and with the local food movement, they are gaining popularity. Livestock take consistent care and regular feeding and can cause considerable impacts to the land over time. It takes careful planning and management to insure animal health and longevity and minimize the impacts on the land.

Raising Livestock in Clark County

Clark County has a diverse and growing livestock population. An area that was traditionally dominated by cattle, horses, sheep, and swine is increasingly seeing new species such as llamas, alpacas, and expanding populations of chickens, goats, and other species that can be managed on small acreages.

Horses

The horse industry is the largest of the livestock ventures in Clark County, with roughly 30,000 horses in the county. Horses are raised for personal pleasure, competition, and commercial breeding

programs. People purchasing horses for the first time should seek the advice of competent horsemen as well as veterinarians. They should learn the care and costs of keeping horses before they purchase. Horses need pasture during the growing season and winter feed during the off-season. Winter feed for horses in this county is commonly baled and stored hay. Good pasture management can provide your horses with grazing throughout most of the year. If your pastures are in poor condition, your horses will need supplemental feeds such as hay and grain. Contact Clark Conservation District for information on how to properly manage your pastures and appropriate densities. Horses require regular hoof



Property Management

maintenance. This service is provided by a horseshoer or 'farrier'. Horses need daily care, feeding, clean, fresh water, and supplemental minerals and salt. During freezing weather, one should check their horse's water supply daily to see it's not been frozen.

All riders and drivers need to be alert and considerate when traveling on county roads. A rider is considered a pedestrian. Safety for both the horseman and motorists should be of the highest priority when on public roads.

Beef Cattle

Beef cattle have been, and are still, commonly raised in Clark County. Recently, the number and size of beef cattle operations has decreased. There has been an increase in the number of smaller acreages with smaller herds. Some landowners have breeding cattle and sell the offspring every year, while others run yearlings or 'stocker' cattle as a way of harvesting pasture during the growing season. Due to the wet winters in this part of Washington, livestock needs to be confined in well surfaced holding areas. Grazing saturated pastures with dormant forage species will cause damage to pastures requiring years to correct. Livestock managers need to provide for animal handling and care by constructing appropriate corrals and chutes.



Dairy

The dairy industry in Clark County has long been an important part of the area economy. Dairy numbers have decreased dramatically in recent years, however, animal numbers have remained constant. Dairies in Clark County tend to be confinement operations with feed hauled to the livestock. Truck traffic, delivering feed, and milk pickup are all normal activities associated with dairies. Dairy cattle produce a lot of manure. It must be collected, transported, and applied at agronomic rates to crop and forage fields. There are smells associated with these activities that may be unpleasant to the neighbors.



Sheep & Goats

Sheep and goats are a strong presence in Clark County agriculture industry. Current interest in niche marketing, local food production and youth programs has increased the popularity of these animals in the past few years. Additionally, sheep are conducive to small landholdings. Sheep and goats complement a grazing system for cattle and horses. Cattle and horses prefer grass, while sheep prefer grass, forbs and brush. Goats prefer forbs and brush. Many of our weeds are forbs and sheep and goats are often used as a low cost way of reducing undesirable forb populations.

Property Management



Llamas and Alpacas

Clark County has experienced strong growth in camelid numbers in recent years. Llamas and alpacas are well adapted to the cool wet climate and are particularly well suited to living on small acreage farms. A number of producers are working their way into marketing and sales of fiber from these animals. Camelids are popular for protecting herds from predators as well as youth programs.

Swine

A good share of the current swine population of Clark County resides at the homes of 4-H and FFA youth. Hogs grow fast, are intelligent animals, are relatively easy to train and consequently make good projects for young people.

Poultry

Commercial poultry operations producing both eggs and fryer chickens are present in Clark County. These operations are often fairly large industrial sites, and

have significant amounts of truck and laborer traffic associated with them. Trucks hauling feed to the sites, and removing eggs, birds, and manure from the sites are often on the road late at night or early in the morning. Poultry manure is commonly used as a fertilizer on pasture and field crops in the area. While this material is a very good plant nutrient source, it does have objectionable odors associated with its use.

There has been an increase in small flocks of poultry for landowners in the county. Chickens and turkeys can produce healthy eggs and meat for a family and their neighbors. Any type of poultry needs insulated housing and additional lighting during the short days of late fall and winter in order to keep laying.

Chickens can be housed in a mobile pen on pasture during the growing season. The pen can be moved on a regular basis to provide access to insects and fresh grass. Small scale commercial production is possible through niche markets, such as range or pasture chickens and organic eggs or broilers.



Remember that Clark County has a "Right-To-Farm" ordinance that allows for appropriate farming practices and associated sights, sounds, traffic and odors. Whether or not you own livestock or produce crops, remember a farming operation is one way a rural lifestyle is preserved. Farming is essential for our livelihood.

Property Management



All livestock need a daily source of clean, fresh water and most require supplemental minerals and salt. Provisions for these needs should be included in the landowner's planning. Likewise, careful consideration should be taken in establishing pastures and livestock keeping areas in order to protect natural resources.

What is Forage?

Forage is what your animals consume by grazing. Forage production is measured in animal unit months (AUMs). One AUM is equivalent to the amount of forage consumed by a 1,000 pound animal in one month.

Feed is the hay or other material, such as silage, grain or straw, that you provide an animal when forage is not available. Hay production is measured in tons per acre. The above requirements are an average. Feed requirements vary with the season, level of use, and condition, age and size of the animal. The good stockman knows his animals well enough that he can tell when an animal is doing well or needs to have the amount of feed adjusted.

Animal Feed Forage

	Tons/Mo	AUM/grazing/mo
Cow	0.4	1.2
Horse	0.5	1.25
Sheep	0.1	0.2
Llama	0.15	0.3
Goat	0.1	0.2

Forage Needs

Are you growing enough forage for your livestock? In Clark county, livestock are usually grazing pastures from sometime in May through most of October. Hay is typically fed through the remaining months. How do you determine if you have enough feed and forage for your animals?

To prevent the over use of your pastures, rent or purchase additional pasture or reduce the number of animals. Improving pasture management results in increased pasture health and production.

To learn how much feed/forage your land can produce, or how to improve its production capability, please call Clark CD.



Property Management



Pasture and Grazing Management

A good grazing management program will enhance your animals' health, improve your pasture condition and increase its production, while lowering your costs.

Tips for a successful grazing program:

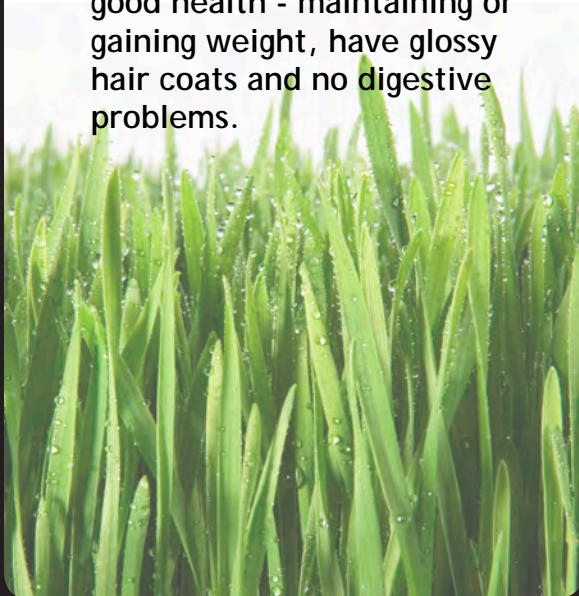
- **Practice pasture rotation.** This means removing all livestock from a pasture and allowing it to rest.
- **Subdivide pastures.** Breaking pastures down into small sections (paddocks) and moving your animals between them insures that the animals eat all the available fodder. Allow each paddock a recovery period after being grazed.
- **No overgrazing!** When your animals have grazed the plants down to **three inches in height**, it's time to remove them and allow the paddock to rest. Don't allow animals on pasture until the plants are **six inches in height**.
- **Mow.** Mow a paddock after removing animals. This not only prevents uneaten weeds from taking over a pasture, but also keeps the pasture in a vegetative state. Allowing a pasture to go to seed may send it into dormancy rather than regrowth.
- **Do a "pull test".** If you have a newly seeded pasture, do the pull test. Pull on a tuft of grass. If it pulls out easily, it hasn't established a root system yet and is not ready for grazing.
- **Fertilize.** Plants, like any other growing thing, need to be fed in order to grow. Fertilize pastures by spreading composted manure or commercial fertilizer at agronomical appropriate rates between grazing periods. Clark CD can provide you information on having your soil tested and information on what fertilizer to apply.
- **Irrigate.** Irrigate a paddock or pasture as soon as possible after grazing to get the plants growing again. Don't graze on saturated pastures, as extreme soil compaction may result.
- **Restrict Access.** In limited space situations, you may only be able to use the pasture for exercise purposes and feed hay to your animals year-round.

Call Clark CD for assistance with a grazing program

Property Management

Signs of good grazing management:

1. Animals are moved from a pasture before plants are damaged from overgrazing.
2. Plants are being allowed time to recover from grazing before being grazed again.
3. Animals have adequate forage and are not seeking food from other sources.
4. Animals are showing signs of good health - maintaining or gaining weight, have glossy hair coats and no digestive problems.



Manure/Waste management

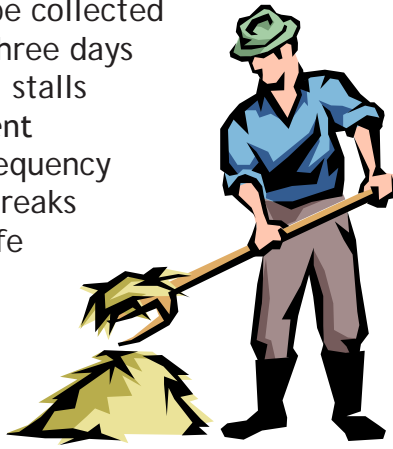
While raising animals is an enjoyable experience for many landowners, there is one aspect of animal management that is often overlooked: manure. Because animals produce waste daily, manure can quickly become an overwhelming problem if manure management is not addressed. Proper management includes regular collection, storage, and disposal of livestock manure. The appropriate management of waste will result in a reduction of mud, a waste volume reduction by up to 50%, a reduction in parasites, pests and weeds and savings of both time and money. Overall, proper manure management benefits animal health, water quality and the general aesthetics of the property and even family well being.

Contact Clark CD or Clark County WSU Extension Small Acreage Program for more information on how to better manage the manure on your property.

Property Management

Waste collection, storage, and disposal options

Manure must be collected every one to three days from turnouts, stalls and confinement areas. This frequency of collection breaks the parasite life cycle and prevents re-infestation since many worm species can hatch as frequently as every three days. Regular collection will also aid in mud reduction since manure retains moisture and can become a source of mucky organic material over time. This organic mulch also creates an ideal breeding ground for flies, mosquitoes and other pests. Rainwater flowing through turnouts and confinement areas with uncollected manure picks up raw manure (with nutrients such as nitrogen and phosphorus) and sediment. This polluted runoff can enter the nearest water body or drinking water source.



Once collected, manure will need to be stored in an area until it can be utilized or disposed of. The waste storage area should be located in a dry, level, and convenient area to keep mud, run-on, and runoff to a minimum and make chores easier. Keep storage area covered to keep out rain to prevent the leaching of bacteria and nutrients. The cover can be as simple as a pinned down tarp or as elaborate as a roofed structure. Covering the manure pile is also a key step in composting.



When the manure is stored, it is rather easy to convert manure into compost, a more valuable and stable soil amendment for pastures and gardens. Composting manure speeds up the natural decomposition process by creating an ideal environment for the microorganisms that break down the manure and bedding materials. By keeping the right mix of air and water and keeping the proper carbon/nitrogen balance, manure composting will happen in a short time period. There are several options to dispose of manure. While it could easily be seen as a undesirable by-product of animal ownership, it can also be seen as a valuable nutrient rich resource for gardens and pastures.



Property Management



Spreading composted manure on a pasture is one of the best ways to dispose of manure. Composted manure fertilizes and improves the structure of soil, thus reducing fertilizer costs and minimizing runoff. The easiest way to spread manure on pasture is to use a manure spreader. A tractor, truck or strong lawn tractor can pull a ground driven manure spreader. Clark CD has two manures spreader available to borrow in the spring and fall months. Composted manure will have the greatest benefit when plants are actively growing from April to July. Spreading compost on wet fields can also cause soil compaction. As a general rule, apply about $\frac{1}{4}$ inch at a time in three to four applications throughout the year. For more specific application recommendations, have your composted manure and soil tested.

Resources are available to help you determine which soil tests to conduct and how to interpret the results. Contact WSU Extension or Clark CD for more information on soil testing. Dragging the pasture with a harrow will help incorporate the compost or fresh manure more quickly.

If there is too much manure for the size of the fields, consider giving it away.

Composted manure is often easier to give away or even sell than fresh manure. Two common ways to spread the word about manure availability are to post an advertisement in a local newspaper or placing a sign in front of the farm. Clark CD also hosts a free manure exchange list linking those with compost and/or manure with those who want compost or manure. Contact us at staff@clarkcd.org to inquire about the manure exchange list. If you are interested in selling your compost, please contact Clark County Health Department Solid Waste Division about local regulations.



Property Management



Fire

Each year, more and more people move into the previously uninhabited, forested rural areas of Clark County. Each summer dry weather brings increased danger from wildfire to homes located in these settings. This section provides information to homeowners to help prevent structural fires. In remote areas, structural fire protection is more limited than in urban areas. However, the risk of structural fire is just as high. Longer response times, limited water hydrants, difficult terrain, and unpaved roads all increase the risk of losing a home to fire.

Fire Prevention in Rural Homes

- Make sure that the electrical wiring and breakers in all buildings are up to code and in good condition.
- Do not store any flammable liquids or highly flammable material in the home or garage.
- Keep the lint filters and vent piping of clothes dryers clean.

- Keep multi-purpose fire extinguishers in areas of fire risk (kitchen, laundry room, garage) and know how to operate if a fire occurs.
- Do not leave portable heaters unattended. Keep the area around them clear of flammable materials.
- Check to make sure the heating system is properly installed and cleaned regularly. Wood stoves and chimneys for wood stoves must be properly installed and cleaned often.
- Install at least one smoke detector outside every bedroom and on every level according to building codes. Follow the instructions to regularly test the detectors.
- Keep matches and lighters from children.
- Make sure that the driveway can accommodate a fire truck and has a large turnaround space.
- If possible, provide access for firefighters to large supplies of water (swimming pools, ponds, streams or water tanks).

If A Fire Occurs In Your Home

Crawl low, under the smoke. Feel closed doors with the back of your hand. If hot, do not open and use another escape route. If not hot, open slowly and check for fire and smoke.

Except for very few fires, such as one in a frying pan, don't attempt to fight the fire. Fumes and smoke can render you unconscious in just a few minutes. Never re-enter a home that is on fire or filled with smoke.

Call 911 for all fire emergencies!!

Property Management

Before lighting ANY fire and on the day you plan to light the fire, call (800) 323-BURN for permission to light and to obtain information and burning instructions specific to that day and to your location.

Burning on Your Property

The best way to prevent unwanted wildfires and save thousands of dollars in suppression costs is to burn responsibly. Washington State and Clark County have devised a number of burning regulations in an effort to encourage responsible burning. A complete guide to burning and permitting can be obtained from Washington State Department of Natural Resources: http://www.dnr.wa.gov/Publications/rp_burn_outdoorbrochure.pdf

Recreational fires under 3'x3'x2' are allowed in all of Clark County without a permit. Only charcoal or seasoned firewood (not lumber) may be used as fuel for a recreational fire. Recreational fires must be used solely for recreational purposes and may not be used for disposal of yard debris or any other material. Recreational fires may not cause a smoke



or odor nuisance to surrounding properties. Recreational fires in excess of 3'x3'x2' need a special written permit from Southwest Clean Air Agency (SWCAA).

Residential Burning

(Outside the no-burn boundaries) Residential burning is allowed in piles smaller than 10'x10'x6' outside the southern Clark County, Ridgefield, La Center, Yacolt, and Battle Ground no-burn areas with a written permit. If you would like help determining if you are within a no burn area, call SWCAA at (360) 574-3058 or visit <http://www.swcleanair.org>. These permits can usually be picked up at a local fire department and are generally free. The Clark County Fire Marshal Office at (360) 397-2186 also supplies permits or one can be obtained from <http://www.clark.wa.gov/development/fire/burning.html>

Land Clearing Burning

(Outside the no-burn boundaries) For piles larger than 10'x10'x6' and land clearing operations a written permit and site inspection is required. You need to fill out a land clearing permit application, prior to scheduling the site inspection, with the Clark County Fire Marshal. Depending on the time of year it can take up to a week to schedule the site inspection so please fill out your permit application in advance. Call (360) 397-2186 for the nearest office location. There is a permit fee.

Property Management



An annual Fire Safety Burn Ban from July 15 through September 30 prohibits residential and land clearing burning throughout Clark County to protect public safety. This Fire Safety Burn Ban may extend beyond these dates by fire marshal recommendation. Outdoor burning is prohibited within the permanent No Burn Areas year-round, regardless of the Fire Safety Burn Ban. The pre-designated Fire Safety Burn Ban and aggressive complaint and enforcement program are designed to promote clean air, good health and reduced fire danger for everyone.

Fire Prevention Agencies and Their Responsibilities

Washington State Department of Natural Resources - Wildland fire protection and suppression on all state owned and private forest and range lands in unincorporated Clark County. These responsibilities include:

- Suppressing wildfires
- Regulating outdoor burning and industrial operations on forest lands.
- Providing landowner assistance by inspecting and offering advice on fire prone rural property.

Department of Natural Resources (DNR) cooperates with other agencies in mutual aid, prevention and education. However, county rural fire districts' obligations are limited to protecting improved property and structures, whereas federal agencies' responsibilities are limited to federally managed land under their jurisdiction.



Property Management

U.S. Forest Service - Within Clark County the Mt. St. Helens Ranger District is responsible for fire protection of national forest lands. Through cooperative agreements with agencies, such as DNR, service districts assist other agencies and jurisdictions with wildland fire protection and suppression. Fire protection assistance to county rural fire protection districts is requested of the U. S. Forest Service through DNR.

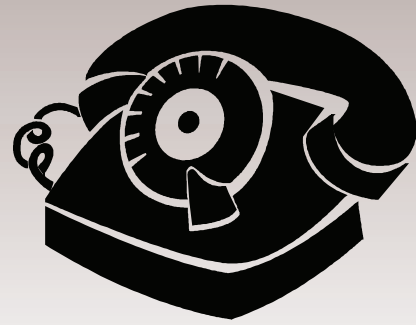
Clark County Rural Fire Protection Districts

Fire protection within county rural fire protection district boundaries is provided by highly trained volunteer firefighters. They respond to both wildland and structural fires. Their primary responsibility is the protection of lives and improved property. However, they also respond to wildland fires within their respective districts and assist other wildland agencies such as the DNR and U.S. Forest Service.



Land Use and Contacts

Local Agencies and Organizations



Resources

Landuse and Contacts

Rural Landowners often participate in activities that impact the land. There are a number of agencies available to help provide more information to assist in taking precaution to ensure impacts are not negative. This chapter provides a list of land impact activities and contacts for associated agencies.

Building Codes and Permits

Before building, contact your city or county planning department for zoning requirements and permits.

Clark County Community Development
Customer Service Permit Center
(360) 397-2375 ext. 4078
www.clark.wa.gov/development

Burning

Permits may be required, often at no charge. Bans occur during fire hazard or air pollution periods (see page 49).

Southwest Clean Air Agency
(360) 574-3058
www.swcleanair.org

Buried Utilities

Washington law requires that you notify utility companies no less than two days and no more than 10 days before digging.

Northwest Utilities Notification Center
1-800-424-5555 or 811
www.callbeforeyoudig.org

Clearing Permits

Before you clear any land, especially near creeks or wetlands, you'll need to find out if a Habitat Review is required.

Clark County Community Development
(360) 397-2375 ext. 4489
www.clark.wa.gov/development

Grading Permits

When moving 50 cubic yards or more of material, a grading permit is required.

Clark County Community Development
(360) 397-2375 ext. 4489
www.clark.wa.gov/development

Resources

Floodplain Protection

Permits may be required for work within a 100-year floodplain. Insurance and financing may be restricted.

Clark County Community Development
(360) 397-2375 ext. 4489
www.clark.wa.gov/development

Forest Practices

The Forest Practices Act requires permits for many activities on wooded land such as harvesting, reforestation, road building, salvaging trees, and applying chemicals. Check for requirements and exemptions.

Department of Natural Resources
Small Forest Landowners Office
(360) 902-1415
www.dnr.wa.gov

Septic Systems

For installation of septic systems or problems with existing systems, call for advice or permits.

Clark County Public Health
(360) 397-8428
www.clark.wa.gov/public-health

Streambank and Wetland Protection

Permits are required to fill, drain, or dredge water areas and to modify stream channels, stream banks, or wetlands. Technical assistance is available for stream and wetland protection.

Washington State Department of Ecology
Governor's Office of Regulatory Assistance
1-800-917-0043 or (360) 725-0628
www.ora.wa.gov/resources/water.asp

Clark County Community Development
(360) 397-2375 ext. 4489
www.clark.wa.gov/development

Clark Conservation District
(360) 859-4780
www.clarkcd.org

Trash and Recycling Disposal

Locate licensed landfills, private trash disposal companies, and recycling centers (see page 34, 36). Burning household trash on private land is not allowed (see page 29, 34).

Clark County Public Works
Recycling and Solid Waste Program
(360) 397-6118 ext. 4352

Water Quality

You are responsible for managing manure, erosion, pesticides, fertilizers, irrigation and near stream areas to protect surface water and groundwater quality.

Clark Conservation District
(360) 859-4780
www.clarkcd.org

WSU Clark County Extension
(360) 397-6060
<http://clark.wsu.edu>

Washington Department of Ecology
Vancouver Field Office
(360) 690-7171
www.ecy.wa.gov

Clark County Public Works
Water Resources
(360) 397-6118 ext. 4345
www.clark.wa.gov/publicworks

Resources

Water Rights

A permit is needed for well water uses of more than 5,000 gallons of water per day or more than 1/2 acre of garden or lawn irrigation. A water right is required for any surface water withdrawal

Washington Department of Ecology

Vancouver Field Office

(360) 690-7117

www.ecy.wa.gov

Weed Control

This department is responsible for controlling noxious weeds in Clark County. Noxious weeds crowd our forage and destroy wildlife habitat. Many are toxic to animals and humans. This department can provide you with information on identifying and controlling noxious weeds.

Clark County Vegetation Management

(360) 397-6140

www.clark.wa.gov/weed

Wells

Wells need to be registered with the Washington State Department of Ecology. Well logs must then be submitted to Clark County Health Department. Contact Clark County Public Health for any well activity.

Washington Department of Ecology

Vancouver Field Office

(360) 690-7171

www.ecy.wa.gov

Clark County Public Health

(360) 397-8428

<http://www.clark.wa.gov/public-health/water/individual.html>

Wildlife Protection

Endangered Species

The law protects threatened and endangered species. Your land management may be affected if these species are present.

Clark County Habitat Biologist

(360) 397-2375 ext. 4598

Vancouver Audubon Society

(360) 695-3116

www.vancouveraudubon.org

Washington Department of Fish and Wildlife

(360) 696-6211

<http://wdfw.wa.gov/conservation/endangered/>

Resources

Local Agencies and Organizations



Clark Conservation District provides technical assistance, educational handouts, classes, and workshops on livestock, water quality issues, and much more. District staff can provide you with information on many aspects of manure management, mud management, pasture management, stream restoration projects, fencing, and wildlife habitat improvement. They can also help you develop a farm plan to help you meet your goals for your property while protecting water quality and natural resources. Farm plans consider farm size, soil types, slope of the land, proximity to streams and waterways, and resources such as machinery or buildings and finances available. Clark CD also has two manure spreaders available for use as well as the manure exchange list to connect gardeners looking for natural fertilizer to those with an excess.

The Conservation District may be able to help fund (or help you find funding) for certain types of livestock management and water quality improvements, including fencing along streams, animal watering stations, and bank stabilization. Conservation districts have no regulatory authority, which means they do not enforce the law or report you to regulatory agencies.

813 West Main Street, Suite 106
Battle Ground, WA 98604
(360) 859-4780
www.clarkcd.org



The USDA Natural Resource Conservation Service (NRCS) supports the efforts of the Conservation Districts and provides many of the same technical services. NRCS provides financial assistance programs to assist agriculture producers with resource conservation projects. There are NRCS field offices in each region to provide local technical assistance.

Vancouver Service Center
500 West 12th Street, Suite 135
Vancouver, WA 98660
(360) 768-3045
www.wa.nrcs.usda.gov



Each county in Washington has a WSU Extension office. The Extension provides a wide variety of educational materials and programs on livestock and water quality issues. It administers many educational programs such as the Master Gardener Program, Watershed Steward Program, Small Acreage Programs, and 4-H Youth education.

11104 NE 78th Street
Vancouver, WA 98665
(360) 397-6060
<http://clark.wsu.edu>

Resources



Washington State Department of Agriculture supports the agriculture community and promotes consumer and environmental protection.

1111 Washington Street SE
Olympia, WA 98504
(360) 902-1800
<http://agr.wa.gov>



Washington State Department of Ecology (DOE)'s mission statement is to protect, preserve, and enhance Washington's environment, and promote the wise management of our air, land and water. DOE administers state water quality regulations and permits; provides technical assistance and oversight to local governments in administration of the Shoreline Management Act, in management of wetlands, non-point source pollution and stormwater; and approves local groundwater management.

Vancouver Field Office
2108 Grand Blvd
Vancouver, WA 98661
(360) 690-7171
www.ecy.wa.gov

