#### **Appendix A: Educational Resources**

#### Resource List

# Do you Qualify for Reduced Property Taxes? CURRENT USE TAXATION

WHAT CAN YOU DO ON YOUR LAND?
FREQUENTLY ASKED QUESTIONS FOR SMALL ACREAGE LANDOWNERS

Constructing Ponds and Water Features: What Does it Take?

SIMPLE STEPS TO PROTECT YOUR SURFACE AND WELL WATER

KEEPING CLEAN WATER CLEAN & REDUCING MUD - MANAGING ROOF RUNOFF

Keeping Water Clean – Management Practices for Small Acreages



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Compiled by Penny Ramey (February 2004).

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# Do You Qualify For Reduced Property Taxes? Current Use Taxation

Current Use Vs. "Highest & Best Use"

Current Use Taxation designations provide landowners a tax break when their land use meets the criteria for farm/agricultural, timber land, open space, and forest land. Current use lands are taxed according to the value of the current use instead of the market value for development, such as residential, commercial, or industrial use. The development value is often called a land's "highest and best use" which means its highest economic value if sold. However, these programs only defer taxes while the land remains in the designated current use. For this reason, landowners should plan to maintain these designations for the long-term. As outlined later, penalties make short-term classification costly.

Current use taxation promotes residents' quality of life by preserving working landscapes that provide aesthetic, economic, and social benefits in the form of farms, forests, and open space. Encouraging these land uses also protects the quality of our water by maintaining vegetation and landscapes that filter and absorb storm water.

#### **Types of Current Use Taxation**

#### Farm and Agricultural Land

Requirements. For the three options below, applications require the signature of all owners of the land, a legal description, a site plan, and copies of IRS Farm Income Schedules for three of the previous five years. In some cases, a Farm Management Plan may be required.

Option One Criteria. Parcels or adjoining parcels must be twenty acres or more: 1) devoted mostly to livestock production or commercial agricultural commodity production; OR 2) registered in a federal conservation reserve program.

Option Two Criteria. Parcels or adjoining parcels must be less than twenty acres, but at least five acres in size generating at least \$200 per acre annually in commercial agricultural products during three of the preceding five years.

*Option Three Criteria.* Parcels must be less than five acres generating at least \$1,500 per acre annually in commercial agricultural products during three of the preceding five years.

Qualifying lands can include up to 20% of the land in compatible incidental uses (such as a woodlot) along with buildings necessary to produce, prepare, or sell the agricultural products (e.g., barns, sheds). (Note: potted nursery stock and greenhouse production may not count in Clark County.)



#### Timber Land and Designated Forest Land

Requirements. Applications require the signature of all owners of the land and a Timber Management Plan.

*Timber Land.* This current use classification applies to parcels, or adjoining parcels, equal to or greater than five acres growing and harvesting commercial timber.

Designated Forest Land. This designation applies to parcels, or adjoining parcels, equal to or greater than 20 acres growing and harvesting commercial timber. Residences are excluded (minimum one acre) from this designation and therefore require at least 21 acres.

#### Open Space

*Requirements.* Applications require the signature of all owners of the land and relevant documentation supporting the classification.

Conservation & Enhancement of Natural Resources. This classification requires: 1) 20 acres or more that have mineral deposits of economic significance not currently being mined; OR 2) archaeological sites registered with Washington State.

Stream Protection. This classification requires at least 10 acres that: 1) contain significant springs delineated by Washington State Department of Natural Resources (DNR); OR 2) adjoin or contain major streams considered shorelines of the state or listed in the county's Shoreline Master Plan.

Soil Conservation. Requiring at least 10 acres (or 11 if the land includes a homesite), the land must: 1) consist of at least ten acres of Class I and II soils (NRCE classification) and be at least 80% devoted to agricultural production.

Enhancement of Recreational Opportunities. This classification requires at least 10 acres (or 11 if the land includes a homesite), and includes only: 1) public airstrips, or private airstrips with public facilities, 2) ballfields, 3) non-public parks and lakes listed in the county's Shoreline Management Plan.

*Historic Sites*. This classification is limited to historic sites and structures of historic significance listed on local, state, or national registers.





#### **Application Costs and Determining Land Value**

Classification	Current Use Value	Cost to Apply *
Farm and	Based on earning capacity on similar land	\$150 application
Agricultural Land	determined by soil class and commodity.	
Timber Land	Based on land grades (composite of soil class and	\$150 application
	utility) used to determine per acre values supplied by DNR.	\$371 inspection
Designated Forest Land	Based on land grades (composite of soil class and utility) used to determine per acre values supplied by DNR.	recording fee
Open Space	Based on soil classification.	\$150 application
		\$371 inspection

<sup>\*</sup> As of February 2004, subject to change. Fees are non-refundable.

#### **Timeline & Review Process**

It takes over a year to process current use applications. Applications before December 31st of a given year will be processed during the following year and will apply to the taxes in the third year (application in 2004, processed in 2005, reduction in 2006 taxes if accepted).

Classification	Review Process for Accepted Applications
Farm and	Application review. Physical inspection. Assessor records tax
Agricultural Land	lien with Auditor.
Timber Land	Application review. Physical inspection. County Planning
	Commission Public Hearing. County Commissioner Public
	Hearing. Applicants sign Community Development
	agreements. Assessor records tax lien with Auditor.
<b>Designated Forest</b>	Application review. Physical inspection. Assessor records tax
Land	lien with Auditor.
Open Space	Application review. Physical inspection. County Planning
	Commission Public Hearing. County Commissioner Public
	Hearing. Applicants sign Community Development
	agreements. Assessor records tax lien with Auditor.

#### Withdrawal from Current Use Taxation

Removing a property's current use taxation designation prior to ten years automatically triggers a 20% penalty (mandated by state law) in addition to back taxes. When a property is withdrawn, the landowner must pay the deferred taxes for the previous seven years. The taxes are the difference between what was paid at the current use tax rate and what would have been paid had the property been taxed at the normal highest and best use tax rate. In other words, that is the amount of tax that was deferred while in the current use tax designation. In addition, the landowner will owe interest on the deferred tax amount consistent with the interest rate on delinquent taxes.

**Selling Land in Current Use Taxation Status.** The seller must pay the deferred taxes and any penalties and interest on the land being sold unless the buyer signs a Notice of Continuance on the *Real Estate Excise Tax Affidavit* and the *Intent to Continue Current Use Classification* form that demonstrate the buyer's intent to maintain the property in the current use designation. Plan for this to take some extra time to be processed. In this case, the buyer assumes the responsibilities required for the current use classification.

#### **Current Use Example**

In the following example, the owner of an 11 acre parcel wishes to place her land in the farm and agriculture current use designation. In this case, the homesite is considered one acre and is taxed at market value. The remaining 10 acres will be taxed at its current earning capacity. All parcels are unique and depend on specific conditions of each property. This example is for illustrative purposes only.

	Market Value Taxation	Current Use - Agricultural Land
Land Value	\$129,500 for 11 acres	\$3,790 for 10 acres One acre (homesite) @ \$21,910 Total = \$25,710
Structure Value	\$48,500	\$48,500
<b>Total Value</b>	\$178,000	\$74,210
Taxes	\$2,670 per year	\$1,120 per year
Deferred Tax		\$1,550 per year

In this example, the landowner defers \$1,550 each year while in the current use classification. When that land is withdrawn, the landowner will owe the last seven years of deferred taxes, plus seven years of interest on the deferred tax amount and any applicable penalties.



#### Who to Contact

For further details, contact Lori Schanno, the Current Use Specialist at the Clark County Department of Assessment & GIS, 360-397-2092, ext. 4604 or lori.schanno-ballentine@clark.wa.gov. General office telephone 360-397-2391.

To request an application packet, call 360-397-2391 or visit the Assessor's office on the second floor of the Public Service Center 1300 Franklin in Vancouver.

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Written by Doug Stienbarger with research assistance from Penny Ramey (February 2004).

The infomation in this publication is for informational purposes only and does not substitute for legal advice or obtaining guidance and advice directly from relevant Clark County departments. For specific and current information, contact Clark County.

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# What Can You Do On Your Land? Frequently Asked Questions

The information in this publication is intended for informational purposes and while all effort has been made to present current summary facts, the reader should contact the appropriate entity for details and up-to-date information. In no circumstance should the reader use the information contained here as a substitute for the appropriate legal advice.

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The Clark County Unified Development Code contains much of the information in this fact-sheet. (See <a href="http://www.clark.wa.gov/commdev/development/developcode.html">http://www.clark.wa.gov/commdev/development/developcode.html</a>.)

Small acreage landowners often find it difficult to navigate the maze of Clark County and state codes pertaining to land use. Many elements of these codes are required by state and/or federal laws. These codes attempt to balance your rights with your neighbor's rights, while promoting a clean and healthy environment that maintains livable communities for all Clark County residents. County ordinance states that county codes "safeguard public health, safety, and general welfare of the citizens of Clark County."

| I'd like to build a barn. Do I need a permit?                                                                                                                     | 2 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| What projects need a building permit?                                                                                                                             |   |
| I want to build a tool shed, but a neighbor told me I need a permit to build it. Is that true?                                                                    | 2 |
| What are the setback requirements?                                                                                                                                | 3 |
| Do I need a permit to clear vegetation from my property? What about next to my creek?                                                                             | 3 |
| Can I cut down a tree or use a tree for firewood on my property?                                                                                                  | 4 |
| Can you explain the notice I received from the Weed Board?                                                                                                        | 4 |
| Can I outlet rainwater from the roof of my house, barn, or outbuilding directly to the ditch along the county road by my property?                                | 5 |
| Can I deepen or work in an existing ditch on private property that may have silted in over the years?                                                             | 5 |
| I've heard that farmers don't need to get any permits. Is that true?                                                                                              | 5 |
| What kind of activities will trigger the need for a grading permit?                                                                                               | 6 |
| If I want to build a pond on my property, what do I need to know before I build one? What if I just like the sound of running water, can I build a water feature? | 6 |
| Can I raise trout? How about other fish species?                                                                                                                  | 6 |
| Can I draw water from the small stream that flows on my property?                                                                                                 | 7 |
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#### I'd like to build a barn. Do I need a permit?

No permit is necessary if the structure you plan to build is 100% for agricultural use. This means that you cannot use the building to park your RV, but you can use it to park a tractor and store agricultural implements. Of course, housing livestock and/or related supplies (feed, hay, etc.) is fine, too. However, this



building could not be used for processing or packaging agricultural products (no cooking up your favorite salsa recipe) or be open to the public (e.g., farm produce stand). Additionally, no one may live in the structure. Even when a permit is not required, you will still need to follow the current county Uniform Building Code and meet setback requirements.

However, if you plan to plumb water or wire the place for electricity, you will still need a permit even if you do the work yourself (see below).

#### What projects need a building permit?

Other than the agricultural building above, most construction projects require permits. Any work on a building's structural components, plumbing, and mechanical work requires a permit regardless of the dollar value of the work. This includes re-roofing, re-siding, retaining walls over four feet high, fences over six feet high, or building a deck. Projects valued at \$1500 or more (including labor and materials) need a building permit. All commercial projects, regardless of value, require a permit.

**Plumbing** permits are also required in most cases and are obtained through the Clark County Customer Service Permit Center.

For information on construction and plumbing work, contact the Customer Service Permit Center at 1300 Franklin Street, Vancouver, WA or call 360-397-2375 extension 5019. Assistance is also available at the Battle Ground office at 701 East Main. Contact Susan Davidson at 360-687-7126, extension 211.

Electrical work can be done either by an electrical contractor or the homeowner. Permits must first be acquired from the Department of Labor and Industries 360-896-2300, located at 312 SE Stonemill Drive Suite 120, Vancouver, 98684-3508. Completed electrical work must be inspected by an L&I licensed inspector. To determine the fee for the permit, look at <a href="http://www.lni.wa.gov/tradeslicensing/electrical/files/feetrainnotes063004.pdf">http://www.lni.wa.gov/tradeslicensing/electrical/files/feetrainnotes063004.pdf</a>.

#### I want to build a tool shed, but a neighbor told me I need a permit to build it. Is that true?

Codes require a permit for sheds (or other accessory buildings) over 120 twenty square feet (10x12) in area or eighteen feet or more in height. Even when your project does not require a permit, these buildings must conform to the current county Uniform Building Code (found in public libraries), meet setback requirements, be separated by eight feet from any other building on the property, and meet other environmental requirements. As of July 1, 2004, Clark County began using the International Code Council (ICC) standards. Copies can be found in public libraries.



The permit center provides sample plans for commonly built private and commercial buildings. You can also talk to a plans examiner at the permit center who will answer your specific questions. In some cases, you may need to hire a professional engineer to ensure that your building project complies with the current standards.

For information on requirements, contact the Customer Service Permit Center (1300 Franklin Street, Vancouver, WA) at 360-397-2375, extension 5019. You will need to leave a message for a customer service



representative who will return your call by the next business day. Assistance is also available at the Battle Ground office at 701 East Main. Contact 360-687-7126, extension 211.

#### What are the setback requirements?

Setback requirements vary by how your property is zoned and what type of structure you are building. Based on information found at on the Clark County website at http://www.clark.wa.gov/longrangeplan/documents/coderewrite/40-210.pdf, the table below summarizes setback requirements for most rural zoning classifications.

| Zoning        | Building  | Minimum Setbacks (feet) Side Front Street Interior Rear |    | Max. Building |            |          |
|---------------|-----------|---------------------------------------------------------|----|---------------|------------|----------|
| Designation   | Type      |                                                         |    | Height (feet) |            |          |
| FR-80, FR-40, | Res       | 50 *                                                    | 25 | 50            | 50         | 35       |
| AG-20         | Non-Res   | 50 *                                                    | 25 | 50            | 50         |          |
| R-5, R-10,    | Res       | 50                                                      | 25 | 20            | 20, (50 +) | 35       |
| R-20          | Ag        | 50                                                      | 25 | 50            | 20, (50 +) | 35       |
| RC-2.5, RC-1  | Res       | 25                                                      | 25 | 10            | 10 (50 +)  | 35       |
|               | Ag        | 25                                                      | 25 | 50            | 50         | 35       |
| UR10, UR-20   | Res<br>Ag |                                                         | 20 | 20<br>50      | 20 (50 +)  | 35<br>50 |

Ag = agricultural structure; Res = Residential structure; Non-Res

The site <a href="http://www.clark.wa.gov/longrangeplan/documents/coderewrite/40-220.pdf">http://www.clark.wa.gov/longrangeplan/documents/coderewrite/40-220.pdf</a> lists requirements for Urban residential zoning.

#### Do I need a permit to clear vegetation from my property? What about next to my creek?

In most cases, mowing, cutting, and legal herbicides can be used to maintain your property and keep brush and other vegetation in check.

If you plan to use heavy equipment to clear brush or if you plan to clear brush within 200 feet of your creek or wetland, a Habitat Permit review may be required, except when clearing nuisance vegetation like blackberry, Scotch Broom, and Tansy Ragwort. Clearing these are exempt from the Habitat Permit review if you use hand tools and do not disturb the soil or other vegetation. Disturbing soils near streams can lead to erosion that harms aquatic life in the stream.

Before you start clearing in these areas, call Clark County Community Development at 360-397-2375, or the Battle Ground office at 360-687-7126, extension 211 for the appropriate methods to use. They can also direct you to any other agencies that you may need to work with.

<sup>\* =</sup> From public road right-of-way or private road easement

<sup>+ =</sup> Fifty feet when abutting property zoned for natural resource or surface mining use



A Habitat Permit review is required for proposed clearing in riparian or priority habitat areas. Begin by calling Clark County Community Development at 360-397-2375, extension 4489, or the Battle Ground office at 701 East Main, at 360-687-7126, extension 211.

On more projects involving multiple permits and agencies, completing a joint aquatic resource permit application (JARPA) can streamline the permitting process since several permitting agencies accept this single application form. The time frame for permits varies greatly depending on the work and the sensitivity of the area, but can take up to seven weeks for the process.

#### Can I cut down a tree or use a tree for firewood on my property?

Interested in providing habitat? Leave that snag! As long as the snag does not present a danger to buildings or people, they supply important nesting sites for birds. The decaying wood also returns organic matter to your woodland soil.

Removing trees for firewood for your own personal use does not usually require a permit. You can also remove a hazard tree without a permit if it is within one and a half tree lengths from an existing building.

You will need to obtain a Forest Practices permit from the Department of Natural Resources (360-577-2025) when:

Removing over 5,000 board feet (equivalent to a full load on a logging truck);

Removing timber commercially;

Selling firewood.

Any activity in streams, wetlands, rivers, and on unstable slopes also requires a habitat permit from Clark County Community Development at 360-397-2375, extension 4489, or 360-687-7126, extension 211 at the Battle Ground office.

#### Can you explain the notice I received from the Weed Board?

The notice most likely tells you that your property harbors weeds considered noxious by the state. State law declares that landowners are responsible for controlling the spread of noxious weeds.

The notice includes color photos of the noxious weed(s) and instructions on what to do next. You will need to contact Weed Management and tell them what you intend to do to control the weed(s). Advice and recommendations for controlling weeds are available from either Weed Management or from licensed applicators. Your notice includes a list of mowing and licensed herbicide applicators.

Weed Management staff follow-up within twelve days to see that you have taken steps to control the weed. If you have not taken measures to control the noxious weed, you will receive a violation notice by certified mail. You have ten days from receipt of the violation notice to stop seed propagation. Weed Management tries to work with landowners, but for those few who will not work to control their noxious weeds, failure to heed the violation notice can result in an "infraction" (a misdemeanor) and Weed Management obtaining a warrant to enter your property and to have a contractor control the weeds at the landowner's expense.

A landowner can contest this action and ask for a hearing, but remains responsible for court costs, the contractor's fee, and a possible fine (minimum \$250 per weed species, per day, up to a maximum of \$1,500 per weed species, per day).

A list of noxious weeds can be obtained through the Weed Management. Controlling weeds is important since weeds often compete with crops, poison people and livestock, and create fire hazards. Weeds also



threaten wetlands, rivers, and lakes and other native plant communities. For information, contact Clark County Weed Management at 360-397-6140.

## Can I outlet rainwater from the roof of my house, barn, or outbuilding directly to the ditch along the county road by my property?

You can divert this runoff to the ditch along the county road as long as it is just clean water. However, if the rainwater becomes contaminated or muddy, you cannot route it to the ditch. Contamination may come from animal manure, vehicle oils, chemicals (herbicides, pesticides), or other sources. Once these contaminants enter a ditch, they flow downhill until they enter into a creek. Contaminants can affect not only the health of aquatic life, but also that of humans when they recreate.

In general, infiltrating the rainwater on site presents the best solution. This recharges ground water, reduces erosion, and helps maintain a healthy watershed. For structures such as a house, one alternative would be a rain garden, a shallow depression planted with native flowers, shrubs or grasses that collects rainwater from gutters and allows it to soak back into the ground. Larger structures, such as barns, would need more than one rain garden. For more information on rain gardens, contact the WSU Extension Watershed Stewards program at 360-397-6060, extension 7703.

Constructing drywells or diverting rainwater to other vegetated areas offers other possible solutions.

## Can I deepen or work in an existing ditch on private property that may have silted in over the years?

Every property is different and needs to be evaluated separately. If you want to deepen a ditch, the best advice is to contact Clark County's Land Use Infoline at 360-397-2375 extension 4489. It is necessary to be careful when digging to avoid stirring up sediments or contaminants that might be transported to streams or other waterbodies since these can damage aquatic life and sometimes degrade the stream habitat as well.

Many older ditches were dug years ago to drain wetlands. Work in these ditches may require a Wetland or Habitat permit from Clark County. Some projects might require a Hydrological Project Approval (HPA) permit from Washington State Department of Fish and Wildlife (306-696-6211), especially if the ditch flows into a fish bearing stream. To avoid disturbance (sediment and other contamination) to nearby creeks, any grading should be done during the drier summer months.

You can visit the Clark County Public Service Center Permit Center at 1300 W. Franklin in Vancouver or the Battle Ground office at 701 East Main, to speak with someone in person about your project. Doing this ensures that you are doing everything necessary before beginning any work.

#### I've heard that farmers don't need to get any permits. Is that true?

No, but some agricultural activities are exempt from permit requirements. Generally, activities considered "normal farming practices" are exempt. For example, farmers can generally maintain and repair existing agricultural facilities such as agricultural buildings, animal waste management structures, roads (they may not change culvert sizes or the embankment), and ponds (they may not enlarge a pond).





Agricultural operations may clear vegetation, stumps and undergrowth without a permit unless clearing is within 200 feet of a stream or wetland. This may require a habitat or wetland permit. These operations may also use soil amendments such as fertilizer, compost and animal waste. However, these should not be applied where they are likely to be washed into streams or other waterbodies due to the harmful effects this might have on the stream or its aquatic life.

When in doubt, an ad hoc committee from the USDA Natural Resource Conservation Service (360-883-1987, extension 3), the Clark Conservation District, and WSU Extension make recommendations to Clark County on what constitutes normal farming practices.

Farming activities that require importation or excavation of over 50 cubic yards of fill material (exclusive of soil amendments) are *not* exempt. This might include constructing an agricultural building pad, new drainage ditches, ponds, roads, or bridges.

#### What kind of activities will trigger the need for a grading permit?

The total amount of material imported and/or excavated triggers grading permits, not the specific activity. When moving 50 cubic yards or more of material, a grading permit is required. Since this is not a large amount of material, most grading activities will need permits. (Consider that a 20' x 20' x 3 1/3' deep hole produces 50 cubic yards.)

What is a "yard" or "cubic yard" of material? Calculate the length times the width times the depth of the area (measured in feet) to be excavated or moved, and divide the result (cubic feet) by 27. This provides the number of cubic yards of material. For example, a mound 30 feet long, 12 feet wide and 2 feet tall, equals 26.7 cubic yards.

*Grader Beware!* Grading and inspection fees double if you grade without a permit, even if you were unaware you needed a grading permit.

For information, contact, Clark County Community Development, 360-397-2375, extension 4347.

#### If I want to build a pond on my property, what do I need to know before I build one? What if I just like the sound of running water, can I build a water feature?

This is a complex question so we have written a separate factsheet to help you out. Start by reading *No Easy Task: Builing A Pond* so you know what agencies you might need to talk to.

#### Can I raise trout? How about other fish species?

Stocking a pond with fish requires a permit from the Washington State Department of Fish and Wildlife (WDFW) to assure that stocked fish do not escape into streams and other water bodies. Stocked fish that escape can replace native fish species by competing for habitat and food, introducing diseases, and predation.

Fish suitable for Washington include rainbow trout, largemouth bass, bluegill, sunfish, and channel catfish. You can contact the WDFW for a list of certified disease-free fish growers.

Getting the permit. Along with a \$24 fee, submit the permit application (<a href="http://www.wdfw.wa.gov/fish/fishtran.pdf">http://www.wdfw.wa.gov/fish/fishtran.pdf</a>) to the SW Regional WDFW office at 2108 Grand Boulevard in Vancouver. WDFW will arrange for a fish biologist to inspect your site's water quality, source, inlet and outlet structures, and other param-



eters, in addition to your proposed source of fish. Stocking permits may take 30 days to process. If other permits are required, it could take longer.

For more information, see the WDFW site at <a href="http://www.wdfw.wa.gov/fish/trnsport.htm">http://www.wdfw.wa.gov/fish/trnsport.htm</a> or call 306-696-6211.

#### Can I draw water from the small stream that flows on my property?

The short answer is no. Stream water belongs to the public and altering flows requires a "water right." A water right grants individuals or groups the use of a certain amount of water, but not ownership. Legally, a water right "is a legal authorization to use a predefined quantity of public water for a designated, beneficial purpose."

Water rights law involves a very complex set of rules throughout the western U.S. For more information, contact the Department of Ecology at Washington State Department of Ecology, Southwest Region 360-407-6300 or view their web site on water rights at <a href="http://www.ecy.wa.gov/programs/wr/rights/water-right-home.html">http://www.ecy.wa.gov/programs/wr/rights/water-right-home.html</a>.

#### If I cannot use surface waters, what about using my well water?

Landowners do not need a water right to use well water if consumption is less than 5000 gallons per day when the water is used for single or group domestic purposes, stock watering, industrial purposes, or lawns and non-commercial gardens of a half acre or less. Amounts over 5000 gallons require a water right.

Considering that an average household uses 300 gallons of water per day, a 5,000 gallon limit does not impact most landowners.

This information can be found on the Department of Ecology's web site at <a href="http://www.ecy.wa.gov/programs/wr/rights/water-right-home.html">http://www.ecy.wa.gov/programs/wr/rights/water-right-home.html</a>.

#### What is an easement and how does it affect the use of my property?

An easement allows another person or entity to use a part of your property for a specified purpose, even though you own the land. Your property title or deed should state any easements recorded on your property. If you cannot find this, your title company will usually provide a copy of the paperwork to you at little or no charge. The Clark County Auditor's office (360-397-2391) can also provide a copy for a fee.

**Not all easements are created equal.** The county road easements allow the county to build or expand a road without obtaining your approval. Power line easements usually allow utility company access and restrict the height of vegetation growing under the lines. It is not uncommon for "landlocked" properties to have easements on a property to allow access to a nearby road. In this latter case, you would not be able to build or otherwise limit vehicle access to the landlocked property.

Buying property? Make sure that you understand and are comfortable with any restrictions or easements placed on the use of your property before you sign. The bottom line is, if an easement shows on the title search, ask your realtor and be sure you understand what it means before you sign.

#### What general advice would be good when looking at doing projects on my acreage?

Always ask questions. Ask until you understand exactly what permits are required, from which agency, and in what sequence before starting on a project. While permits can get complicated and restrictive at times, remember that codes are in place to protect you, your property, your neighbors and their property, and the environment.



#### Permits & Permitting Agencies - A Short Guide

Archaeological Predetermination - (Clark County Community Development)

Determines whether cultural resources exist on a site without the cost or time expenditure of a full Archaeological Survey.

**Dam Safety Construction Permit** – (Department of Ecology)

Required before constructing, modifying, or repairing any dam or controlling works for storage of 10 or more acre-feet (3.25 million gallons) of water.

Electrical Permit – (Department of Labor and Industries, Electrical Division)
Provides for inspection by an L&I licensed inspector when work is complete.

Fish stocking permit – (Washington State Department of Fish and Wildlife)

Grants permission to place certain fish species in a privately owned pond.

Forest Practices permit – (Department of Natural Resources)

Relates to forest practices defined as any activity conducted on or directly pertaining to forest land and relating to growing, harvesting, or processing timber.

**Grading permit** – (Clark County Community Development)

Grants permission to import or excavate 50 or more yards of earth material to or from a specific location.

Hydraulic Project Approval (HPA) – (Washington State Department of Fish & Wildlife)

Required for work that will use, divert, obstruct, or change the natural flow or bed of any of the salt or fresh waters of the state.

**Habitat Conservation Ordinance -** (Clark County Community Development)

Intended to protect fish and wildlife habitat. It also assures that you can build a single family home on an existing legal lot with appropriate habitat mitigation measures.

Habitat Permit – (Clark County Community Development)

Permit for clearing or land use activities within a Habitat Conservation Area.

**Joint Aquatic Resource Permit Application (JARPA)** – (Clark County Community Development) A JARPA streamlines the process when several agencies need to issue permits for a single project.

Plumbing permit - (Clark County Community Development)

Required for all new or replacement plumbing fixtures and fittings. The permit provides for inspection by a licensed inspector when work is complete.

State Environmental Policy Act review (SEPA) - (Clark County Community Development)

Provides a way to identify the possible significant adverse environmental impacts that may be associated with an activity.

Water rights – (Department of Ecology)

Legal authorization to use a predefined quantity of public water for a designated, beneficial purpose.

**Wetland Permit** – (Clark County Community Development)

Required for grading, sub-division, or short plat projects within a wetland. All wetland permits require approval of an enhancement/mitigation plan.



#### Agency Contact Information

Clark Conservation District 11104 NE 149<sup>th</sup> Street C 400 Brush Prairie WA 98606 360-883-1987 extension 110 http://clark.scc.wa.gov/

Clark County Community Development 1300 Franklin Street
Vancouver, WA 98660
Mailing address: P.O. Box 9810
Vancouver, WA 98666-9810
360-397-2375 FAX: 360-397-2011
Battle Ground office
701 East Main
Battle Ground WA 98604
360-687-7126 extension 211
http://www.clark.wa.gov/commdev/index.html

Department of Ecology, Southwest Region 360-407-6300 FAX 360-407-6305 Water Resources Program DOE 360-407-6600 FAX 360-407-7162 http://www.ecy.wa.gov/

Washington State Department of Fish and Wildlife, Region 5 5404 NE Hazel Dell Ave. Vancouver, WA 98663-1299 306-696-6211 FAX 360-690-7238 http://wdfw.wa.gov/reg/region5.htm Washington State Department of Labor and Industries <a href="http://www.lni.wa.gov/">http://www.lni.wa.gov/</a>
312 SE Stonemill Drive Suite 120
Vancouver, 98684-3508
360-896-2300

Washington State Department of Natural Resources Headquarters 360-902-1100 Southwest Region 360-577-2025 http://www.dnr.wa.gov/

U.S. Army Corps of Engineers Seattle District, Regulatory Branch Post Office Box 3755 Seattle, WA 98124-2255 206-764-3495 FAX 206-764-6602 http://www.nws.usace.army.mil/

USDA Natural Resource Conservation Service 11104 NE 149<sup>th</sup> Street C 400 Brush Prairie WA 98606 360-883-1987 extension 3 http://www.wa.nrcs.usda.gov/

Washington State UniversityExtension Clark County 11104 NE 149th Street C 100
Brush Prairie WA 98606
360-397-6060
FAX 360-397-6122
http://clark.wsu.edu/

Written by Douglas M. Stienbarger and Penny Ramey. July 2004

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# Constructing Ponds and Water Features What Does It Take?

The information in this publication is intended for informational purposes and while all effort has been made to present accurate information, the reader should contact the appropriate entity for details and up-to-date information. In no circumstance should the reader use the information contained here as a substitute for the appropriate legal advice.

Constructing a pond can significantly affect your water resources and those of your neighbors as well as "downstream" resources. While attractive, ponds can attract water fowl, which can add fecal contaminants and bacteria to the water, impacting both surface and drinking water quality and human health. Non-native fish and vegetation can also "escape" the confinement of the pond and negatively affect native species. Poorly sited and improperly constructed ponds can alter hydrology, destroy habitat, and degrade water quality. Due to potential impacts, you should carefully assess what is necessary both technically and legally before constructing a pond. This factsheet will provide you an idea of things you should consider before constructing a pond and is not intended to be a technical guide to construction.

#### **Water Features**

In practice, water features usually consist of preformed or lined "ponds" filled with house (well or utility) water, recirculate the water with small pumps, and are located within the landscaped area of your yard. While these features can be complicated, they usually tend to hold 1000-1500 gallons of water or less. Water features also tend to be "self-contained" in that they do not drain to or connect with surface water or ground water. For these reasons, water features have little impact on water resources and are relatively easy to build. These "ponds" are most often considered landscaping by the county and fall under general requirements for swimming pools:

If additional wiring is necessary, a state electrical permit (pumps, lights, etc.) should be obtained from

the Department of Labor and Industries (360-896-2300, located at 312 SE Stonemill Drive Suite 120, Vancouver, 98684-3508). Permit fees for can be found at <a href="http://www.lni.wa.gov/tradeslicensing/electrical/files/feetrainnotes063004.pdf">http://www.lni.wa.gov/tradeslicensing/electrical/files/feetrainnotes063004.pdf</a>.

The water feature should be located one foot away from the home foundation for every two feet of pond depth.



WSU Extension ~~ Clark County Clean Water Program ~~ Clark Conservation District

Secure a grading permit if the total excavated and fill material surpass 50 cubic yards. If the soil removed from the hole is placed on the same property that it was excavated from, then it is counted as fill and part of the 50 cubic yards that triggers the grading permit. As an example, a 15' x 15' x 3' deep hole produces 25 cubic yards of excavated soil *and* 25 cubic yards of fill which equals 50 cubic yards. (15' times 15' times 3' equals 675 cubic feet, which equals 25 cubic yards when you divided 675 by 27 cubic feet per cubic yard.)

#### **Constructed Ponds**

Constructed ponds tend to be much larger with a higher potential impact on water resources and are therefore more regulated than water features. Ponds tend to be fed by water from stormwater runoff (from roofs, impervious surfaces, etc.), groundwater (springs, seepage), or streams. Ponds usually have some type of outlet structure. A pond may be formed totally by excavation or with a combination of excavation and embankment (or berm) construction. Excavated ponds pose the least safety hazard since a burst embankment can send large quantities of water downstream, not only carrying contaminants, but endangering both life and property.

#### Legal Considerations (Permitting, Insurance, Water Rights)

A landowner's best strategy is to begin with the Clark County Community Development Customer Service Permit Center at 1300 Franklin Street, Vancouver, 360-397-2375 extension 4489 (or the Battle Ground office at 701 East Main, at 360-687-7126 extension 211). Based on your specific project and location, they will advise you of the permits required for your project. Table 1 provides a quick overview of some possible permits necessary for constructing a pond.

**Permits.** Constructed ponds will almost always require permits. The type of permits required depends on several factors: location, size, method of construction (excavated, bermed), and purpose. Be aware that the permitting process can be time consuming and involves completing forms that provide necessary information to Clark County Community Development. The tables below provide an outline of some common permits that may be required. Permits also require fees for application review and construction inspection which will vary according to the permit required and the agency. Application fees are generally not refunded if the application is denied. Additional charges apply to projects not completed within six months of the permit issue date unless an extension is obtained.

You will first need to submit a completed *Developer's GIS Packet*, available from Clark County Assessment and GIS Department for \$30.00 (plus tax), along with your grading permit application. For a general overview, read the county's handout, *Grading of Land*, at <a href="http://www.clark.wa.gov/commdev/documents/engservices/handouts/101-grading.pdf">http://www.clark.wa.gov/commdev/documents/engservices/handouts/101-grading.pdf</a>.

Grading fees double if you are caught grading without a permit. When grading exceeds 500 cubic yards, a State Environmental Policy Act (SEPA) review is required. A simple application without a SEPA review takes an average of two weeks to complete. A SEPA review needs a minimum of 78 days for processing.

Very large constructed ponds exceeding 3.25 million gallons (or 10 acre-feet where an acre-foot is the volume of water covering one acre of land at one foot in depth) require a reservoir dam safety permit from the Department of Ecology. For more information about reservoir dam safety permits, contact the Department of Ecology, Water Resources Program, 360-407-6167.

The Washington State Department of Fish and Wildlife (WDFW) requires a permit for stocking a constructed pond with fish. WDFW wants to ensure that stocked fish do not escape into streams and other



Table 1: Permit Information \*\*

|                                                     |                                                            |                                      | Table                     | i. i eiiiiit                       | information **                                                                                                                                                                                                                                                    |                                          |
|-----------------------------------------------------|------------------------------------------------------------|--------------------------------------|---------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| Permit                                              | Threshold                                                  | Plan<br>Review<br>Fee                | Inspect<br>Fee            | Other Fees                         | Conditions / Definitions                                                                                                                                                                                                                                          | Agency                                   |
| Pre-Application<br>Conference                       |                                                            |                                      |                           | Varies                             | Costs for this pre-application conference will vary depending on the project complexity.                                                                                                                                                                          | Clark County Community                   |
| GIS Developers<br>Packet                            |                                                            |                                      |                           | \$30                               |                                                                                                                                                                                                                                                                   | Development                              |
| Grading                                             | 50 - 100 yds<br>101 – 10,000 yd<br>Over 10,000 yds         | \$186<br>\$511<br>\$1,394            | \$232<br>\$790<br>\$1,860 |                                    | Required to import or excavate 50 or more yards of earth material to or from a specific location.                                                                                                                                                                 | Clark County<br>Community<br>Development |
| SEPA                                                | Over 50 yds<br>Over 500 yds                                | \$464<br>\$1,515                     | + \$17/ac                 |                                    | When grading in wetland, shoreline, or floodplain. (Grading in priority habitats or                                                                                                                                                                               | Clark County<br>Community<br>Development |
| Joint Aquatic<br>Resource<br>Application<br>(JARPA) | Applicable fees fo                                         | or each pe                           | rmit requii               | red.                               | A JARPA streamlines the process when several agencies need to issue permits for a single project.                                                                                                                                                                 |                                          |
| Archaeological (first five acres)                   | Over 500 yds                                               | \$464                                |                           |                                    |                                                                                                                                                                                                                                                                   | Clark County<br>Community<br>Development |
| Engineered<br>Grading Plan                          | Over 5000 yds                                              |                                      |                           |                                    | An engineered grading plan is prepared, signed, and stamped by an engineer licensed in the State of Washington.                                                                                                                                                   | Clark County<br>Community<br>Development |
| HPA (Hydraulic<br>Project<br>Approval)              | In-stream or water diversion                               | No Fee                               |                           |                                    | Required for work that will use, divert, obstruct, or change the natural flow or bed of any waters of the state.                                                                                                                                                  | WA Department<br>of Fish and<br>Wildlife |
| Wetland Permit                                      |                                                            | \$464<br>(pre-<br>determin<br>ation) |                           | \$827 (<<br>1ac) \$1655<br>(>1 ac) | Ine wetland pre-determination is OPTIONAL for on-site review of site conditions, delineations, and or proposed plans PRIOR TO submittal of a development permit application. Required for grading; requires approval of an enhancement/mitigation plan if needed. | Clark County<br>Community<br>Development |
| Habitat Permit                                      | \$89 (pre-<br>determination)                               | \$567                                |                           |                                    | Permit for clearing or land use activities within a<br>Habitat Conservation Area.                                                                                                                                                                                 | Clark County<br>Community<br>Development |
| Dam Safety                                          | Impoundment<br>of more than<br>3.25 million<br>gallons     |                                      |                           | Variable                           | Required for constructing, modifying, or repairing any dam storing 10 or more acre-feet (3.25 million gallons) of water.                                                                                                                                          | WA Department<br>of Ecology              |
| Water Right                                         | Stream<br>diversion / well<br>use over 5000<br>gallons/day |                                      |                           | \$10 min.<br>(Variable)            | Authorizes use a predefined quantity of public water for a designated, beneficial purpose.                                                                                                                                                                        | WA Department of Ecology                 |
| Stocking Fish                                       | Stocking any<br>fish                                       |                                      |                           | \$24                               | Required to place certain fish species in constructed ponds.                                                                                                                                                                                                      | WA Department<br>of Fish and<br>Wildlife |

<sup>\*\*</sup> All fees and other information current as of August 2004 and subject to change.

<sup>+</sup> Yds = cubic yards



water bodies since non-native and hatchery fish can cause serious ecological imbalances through habitat and food competition, disease, and predation.. Screens and other exclusion measures may be required to prevent fish from escaping. Suitable fish include rainbow trout, largemouth bass, bluegill, sunfish, and channel catfish. WDFW maintains a list of certified disease-free fish growers. The permit application (available at <a href="http://www.wdfw.wa.gov/fish/fishtran.pdf">http://www.wdfw.wa.gov/fish/fishtran.pdf</a>) should be submitted to the WDFW office, 2108 Grand Boulevard in Vancouver. Stocking permits may take 30 days to process. If other permits are required it could take longer. For further information, see <a href="http://www.wdfw.wa.gov/fish/trnsport.htm">http://www.wdfw.wa.gov/fish/trnsport.htm</a> or call 306-696-6211.

*Insurance.* A constructed pond is considered an "attractive nuisance" and a landowner is liable for any injuries that may occur to trespassers. Check with your homeowners' insurance company for more information.

*Water Rights.* Stream water belongs to the public and altering flows requires a "water right." A water right grants individuals or groups the use of a certain amount of water, but not ownership. Legally, a water right "is a legal authorization to use a predefined quantity of public water for a designated, beneficial purpose." Water rights law involves a very complex set of rules throughout the western U.S. Irrigation comprises one use that requires such a water right. For more information, contact the Washington State Department of Ecology (DOE), Southwest Region 360- 407-6300 or view their web site on water rights at <a href="http://www.ecy.wa.gov/programs/wr/rights/water-right-home.html">http://www.ecy.wa.gov/programs/wr/rights/water-right-home.html</a>.

#### **Technical & Use Considerations**

#### Design

For basic information on designing smaller ponds and attracting wildlife, see the WDFW page at <a href="http://www.wdfw.wa.gov/wlm/urban/ponds-backyard.htm">http://www.wdfw.wa.gov/wlm/urban/ponds-backyard.htm</a>. An 85 page, 1997 booklet by the NRCS also contains information on pond design: <a href="http://209.234.81.2/images/pdf/PondsPlanDesignConstruct.pdf">http://209.234.81.2/images/pdf/PondsPlanDesignConstruct.pdf</a>.

#### Water Sources

**Rainwater runoff.** A well designed pond positioned at the bottom of a sufficiently large "watershed" or drainage area could be filled from the surface runoff that drains into the pond. Directing roof runoff from buildings can also help fill a pond. Directing runoff from driveways or animal areas into a pond risks concentrating pollutants (oil, grease, manure, etc.) that could harm plants and animals. This latter type of runoff could best be handled by grassy swales to trap sediments and pollutants.

*Existing subsurface drains*. Some properties formerly or currently used for agriculture might have existing subsurface drains that could be routed to a pond. Storing this water in a pond would be a more environmentally sound method of managing storm water than draining the water directly into streams.

#### Pond Use

A pond can serve several uses, often at the same time. The more uses you derive from a pond, the better return you will receive on your invested time and financial resources.

*Watering Livestock.* A pond can be used as an alternative to watering livestock directly from streams and natural ponds or wetlands, thereby improving water quality. While animals should not be given uncontrolled access to a pond, there are ways to control their access and still provide animal watering. The Clark Conservation District  $(360-883-1987 \times 110)$  can help you with this.



DOE recognizes water quality improvement when landowners remove animals from streams. For this reason, if you have historically used a stream to water livestock, you can divert small amounts of water to create off-stream storage, but only as much water as your animals would normally drink. Any diversion pipe inlets and outlets must be covered with 1/8 inch wire mesh screen to prevent fish passage and excess water should be outlet as close as possible to the intake. This exception only applies to small numbers of animals and not to concentrated uses, such as feed lots. While it is not required to notify DOE, it is in your best interest to send a letter of intent. Keeping a record of the historical use, number of animals, and the water source can demonstrate you did not expand your water use.

*Fire Protection.* A pond used for fire protection should provide 500 gallons of water per minute for at least 30 minutes (15,000 gallons) and will need year-round fire truck access. Your homeowner's insurance may provide a discount for this type of pond.

**Recreation.** Include pond safety into your plans to minimize the risk to people, but especially to children. Constructed ponds should be fenced and have shallow side slopes less that 1:4 (one foot drop for every four feet horizontal). Placing easily accessible floatation devices nearby also improves safety and reduces potentially serious accidents.

Wildlife. Constructed and landscaped properly, ponds can also attract a variety of wildlife, from deer to birds to frogs. Be forewarned that ducks and geese can quickly foul a pond with their droppings, creating a green and malodorous nuisance which can pollute groundwater and nearby natural surface waterbodies. The secret to attracting wildlife rests with the vegetation you plant. For ideas, contact the Clark Conservation District.

#### **Pond Location**

Locating a pond will depend on topography (slope), soils, and existing landscape and ecological features. It will be difficult to permit constructed ponds in critical aquifer recharge areas, priority habitat areas, wetland areas, floodplains, and shoreline ar-



eas. The Clark County soil survey lists soil types and their suitability for ponds (and many other activities) and can be seen on-line at <a href="http://www.or.nrcs.usda.gov/pnw\_soil/washington/wa011.html">http://www.or.nrcs.usda.gov/pnw\_soil/washington/wa011.html</a>.

It is dangerous and illegal dam a stream to construct a pond. Earthen dams are subject to failure from high flow events and improper construction. You are legally liable for damage caused by illegal construction.

You can access the Clark County Geographic Information System at: <a href="http://gis.clark.wa.gov/applications/gishome/index.cfm">http://gis.clark.wa.gov/applications/gishome/index.cfm</a> to look at identified critical areas and other information about your property by entering your address or parcel number.

If you plan a larger constructed pond, you will be well served to consult with an engineering firm familiar with pond design and construction.



#### **Pond Maintenance**

Proper maintenance and operation, such as regular inspection and repair of banks and spillways, will prolong the life of your constructed pond. Keeping contaminated water (excess fertilizer, animal manure, etc.) out of the pond will maintain cleaner pond water and keep these pollutants from entering natural waters via the pond outlet. In order to minimize mosquito breeding, you may want to consider stocking your pond with fish that effectively control mosquitoes.

**Table 2: Agencies Contact** 

| Agency                                                                                                 | Permits              | Contact Information                                                                           | Web Sites                                                                        |
|--------------------------------------------------------------------------------------------------------|----------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Technical Assistance Clark Conservation District                                                       |                      | 11104 NE 149 <sup>th</sup> Street C 400, Brush<br>Prairie WA 98606<br>360-883-1987 x110       | http://clark.scc.wa.gov/                                                         |
| Clark County Community Development Grading, plumbing, shoreline, habitat, archeological, SEPA, wetland |                      | 1300 Franklin Street, Vancouver, WA 98660 360-397-2375 x5019  701 East Main, Battle Ground WA | http://www.clark.wa.gov/<br>commdev/index.html                                   |
|                                                                                                        |                      | 98604 360-687-7126 x211                                                                       |                                                                                  |
| WA Department of<br>Ecology                                                                            | Water rights,        | 300 Desmond Drive, Post Office Box<br>47600, Olympia, WA 98504-7600<br>360-407-7037           | http://www.ecy.wa.gov/<br>programs/wr/rights/water-<br>right-home.html           |
| WA Department of Fish and Wildlife                                                                     | НРА                  | Region 5, 5404 NE Hazel Dell Ave.,<br>Vancouver, WA 98663-1299<br>306-696-6211                | http://wdfw.wa.gov/reg/<br>region5.htm                                           |
| WA Department of Labor and Industries                                                                  | Electrical           | 312 SE Stonemill Drive Suite 120,<br>Vancouver, 98684-3508<br>360-896-2300                    | http://www.lni.wa.gov/<br>TradesLicensing/Electrical/<br>FeePermInsp/default.asp |
| WA Department of<br>Natural Resources                                                                  | Aquatic resources    | Headquarters 360-902-1100<br>Southwest Region 360-577-2025                                    | http://www.dnr.wa.gov/                                                           |
| USDA Natural Resource<br>Conservation Service                                                          | Technical Assistance | 11104 NE 149 <sup>th</sup> Street C 400, Brush<br>Prairie WA 98606<br>360-883-1987 x3         | http://<br>www.wa.nrcs.usda.gov/                                                 |

Written by Douglas M. Stienbarger with research by Penny Ramey. September 2004

A special thanks goes to *Shari Jensen*, Clark County Community Development, for her review. Thanks to the following individuals who helped with the information contained in this factsheet: *Melissa Curtis, Kami Simpson, & Linda Moorhead,* Clark County Community Development *Désireé deMonyé*, Clark County Archaeological Review Coordinator *Doug Fenwick*, USDA RCS / *Stacey Kelsey*, Washington State DFW

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# Simple Steps To Protect Your Surface and Well Water

When we think of water pollution, many of us think in terms of industrial pollution pouring out of pipes. However, a large amount of contamination comes from a variety of sources and people's everday activities. This "non-point" contamination comes from many sources spread over a wide area. Pesticides and fertilizers from yards, gardens and farms, petroleum products from vehicles, and animal waste from pets and livestock can leach into the groundwater or runoff into streams when transported by rainwater. Taken alone, each source may not pose a significant threat to clean water, but when added up over a wider geographic area, the problem can become quite severe and complex. Often, surburban areas add more than rural farm communities due to careless lawn care, poor vehicle maintenance, and outdoor pets.

Rainwater travels through or over a substance, partially dissolving or detaching small particles that are then transported with the rainwater runoff. And where does that water go? Onto your property or your neighbors or into ponds, lakes, streams, and wetlands. Over time, this process can have some negative impacts both on your health and pocketbook as well as on the environment.

#### So, what are we talking about and what can you do?

- 1. Protect Your Well. It is important to protect your drinking water source. As a "rule of thumb", any activities that might contaminate your well should be at least 100 feet from your well. This includes nearby mixing and storage of pesticides and petroleum products, or livestock confinement areas and septic tanks. A greater distance is recommended if the well is in more permeable soils. Installing antiback-siphon devices on your well and outdoor faucets will further protect your well from potential contamination. If you abandon or temporarily stop using a well, cap it to prevent potential contamination of the groundwater source. If you think you might have a contaminated well or are just curious, you can have your well tested for nitrates, lead, arsenic, and bacterial
- **2. Maintain Septic Systems.** Properly maintaining your septic system can greatly reduce most potential contamination to your water. Generally, your septic tank should be pumped every three to five years depending on your

contamination.

|           | Pum  | Pump Your Septic Tank every: \ |        |        |       |       |  |  |  |
|-----------|------|--------------------------------|--------|--------|-------|-------|--|--|--|
| (         | 1 yr | 2 yrs                          | 3 yrs  | 4 yrs  | 5 yrs | 6 yrs |  |  |  |
| Tank Size |      |                                |        |        |       |       |  |  |  |
| (gallons) |      | Nur                            | mber ( | of Peo | ple   |       |  |  |  |
| 1000      | 12   | 6                              | 4      | 3      | 2     | 2     |  |  |  |
| 1250      | 16   | 8                              | 5      | 3      | 3     | 2     |  |  |  |
| 1500      | 19   | 9                              | 6      | 4      | 3     | 3 /   |  |  |  |
|           |      |                                |        |        |       |       |  |  |  |

septic system and the number of people in your household. Other measures help prolong septic system life and decrease the frequency of pumping: Avoid adding extra water; repair any leaks immediately; do not dispose of household hazardous wastes (petroleum products, pesticides, antifreeze, paint, bleach, etc.) into your septic system because they kill the bacteria that break down human waste. The County Health Department requires proof of inspection and pumping when a property is sold.

We often forget the drainfield, which is an integral part of a functioning septic system. Avoid compacting this area by keeping vehicles and large livestock off of the drainfield area: you might crush the pipes or plug drainholes. Avoid planting deep rooted plants over the drainfield since plant roots can also impair proper functioning.

- **3. Divert Rain Water.** Keep clean water clean and reduce mud by maintaining gutters and downspouts that divert rainwater away from livestock areas, fertilizer, etc. Concentated runoff picks up contaminates as it flows over the ground. Just remember that for every 10 foot by 10 foot (100 square feet) of roof surface, one inch of rain will produce 62 gallons of water.
- **4. Install grassed waterways and swales.** Creating shallow swales covered with vegetation slows runoff which prevents soil erosion and keeps silt and pesticides from reaching streams. These swales also help water infiltrate into the ground.
- **5. Practice low input gardening.** Reduce the use of pesticides and fertilizers by planting cover crops on larger areas before heavy fall and winter rainfalls. These crops utilize some of the nutrients, such as nitrogen. Incorporating these cover crops into the soil before spring planting releases the nutrients for the next crop. When in doubt, test your soil! Soil labs will provide a fertilizer recommendation that matches your soil fertility. This prevents excess application that could contaminate wells and water bodies. This will also save you money on fertilizers.
- **6. Use Integrated Pest Management (IPM) practices.** Certain practices reduce your reliance on potential contaminants:
  - Use pest resistant plant varieties in landscaping.
  - Use native plants.
  - Determine pest levels before using pesticides.
  - Use biological pest control.
  - ♦ Choose pesticides that are the least persistent and least toxic. Spot spray.
  - ♦ Handle pesticides safely and apply them accurately to reduce pesticide contamination. More is not better when using herbicides and pesticides and overapplication often reduces effectiveness.



**7. Cover manure piles.** Those with livestock should cover manure piles to prevent the leaching and runoff of concentrated nutrients, salts, and bacteria into wells and water bodies. This can be as simple as covering manure with a tarp or building a small shed. Composting wastes reduces the volume of the manure and stabilizes nutrients into a form that does not as easily leach and runoff.

#### Want more information?

◆ Call WSU Extension at (360) 397-6060 ext. 0 for fact sheets and pamphlets on ground water protection.

- ♦ WSU Extension, in partnership with the Clark County Clean Water Program and Clark Conservation District, offer classes and volunteer programs to train people to be better stewards of the land. Call (360) 397-6060, ext. 7720 for more information.
- ♦ The Natural Resource Conservation Service and the Clark Conservation District provide technical knowledge and cost sharing to implement some of these practices. For more information call (360) 883-1987.

Adapted by Doug Stienbarger, WSU Extension Clark County, and Cindy Stienbarger, Clark County Pulbic Works (November 2003) from:

Adams, Edward B. 1992 Farming Practices for Groundwater Protection, EB1716. Pullman: Washington State University.

Easy BMP, Roof Water Diversion. 1995. Everett: Snohomish Conservation District.

A Homeowners Guide to Septic Systems, EPA-832-B-02-005. 2002. Washington, DC: Environmental Protection Agency.

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Extension programs are available to all without discrimination. Report evidence of noncompliance to your local Extension office. If you require special accommodation, call WSU Extension Clark County at (360) 397-6060, ext. 0 at least two weeks prior to the event.

# Living On the Land

# Keeping Clean Water Clean & Reducing Mud Managing Roof Runoff

What does winter mean to you in Western Washington? You got it, Rain! And with the fall, winter, and spring rains comes the question of how you can best manage all of that water. Why? Well, on small acreages, a little water makes a lot of mud, and we get lots of rainwater. For those who raise livestock, this can bring wet stalls, damp feed, and soggy hay and/or bedding. Of course, wherever you let your livestock out, you can count on muddy turnout areas and pastures as hoofs churn away.

While you cannot completely eliminate mud, you can reduce the amount and the problems it causes. One of the easiest, least expensive, and most effective ways is to divert the clean water from roofs away from livestock (or vehicle use areas). Unless you have lots of gravel and paved driveways, your house and outbuildings probably contribute the most to rainwater runoff on your property. For every 10 foot by 10 foot (100 square feet) of roof surface, one inch of rain produces 62 gallons of water. That means that a 30 foot by 30 foot (900 square feet) barn roof produces 558 gallons of roof runoff for each inch of rain! And you wondered why there was so much mud? (Wondering how many inches of rainfall you receive? Take a look at the picture on page three.)

If this roof runoff flows through livestock areas, manure, equipment storage areas, or bare soil, it can transport sediment, oils, chemicals (herbicides and pesticides), pathogens (bacte-

ria), and excess nutrients (nitrogen and phosphorous) to streams and lakes. This can cause health problems for people and wildlife (fish and animals drinking from the stream).

The Best Management Practice (BMP) in this case simply means installing and/or maintaining properly functioning gutters, downspouts, and outlets.

#### What to Do

Installation. If you do not have gutters or the gutters need to be replaced, remove the old gutters and repair or replace damaged rafter ends and facia boards where they attach to gutters. If you contract this work out, the job will cost more, but will save you time.

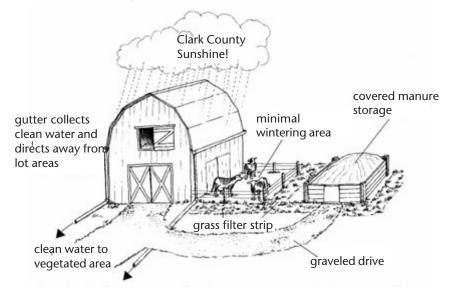
#### What Are BMPs?

Best Management Practices (BMPs) are practices that protect your resources and may also enhance the value of your property.



Washington State University Extension ~~ Clark County Clean Water Program Clark Conservation District

**Gutter slope.** As you know, water only runs downhill. The correct downhill slope for gutters is just over 1/8 inch drop for every 10 feet of gutter length. Mark your slope on the facia board using a chalk line, starting about ¾ inch below the roofing material. On some longer buildings, this may mean using several downspouts, both to handle the amount of water and to accommodate the slope on the facia board. A common gutter four inches wide and 2.5 inches deep requires one 2 by 2 inch downspout for each 2000 square feet of roof area. (A five inch wide by 3.5 inches deep gutter requires a 2 x 3 inch downspout every 4000 square feet of roof area.)



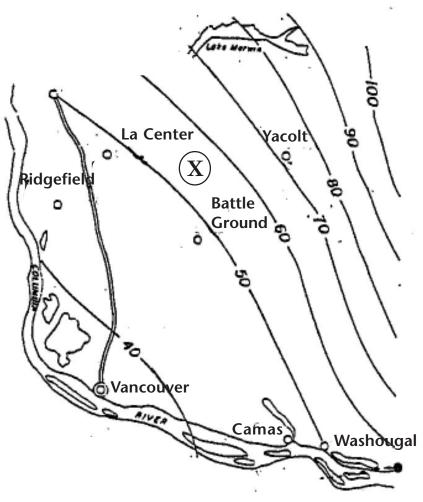
**Hanging Gutters.** Assemble gutter sections and downspouts using the correct connectors and hangers as specified by the manufacturer. Most home improvement warehouses carry these do-it-yourself gutters. Normally, you place a downspout for every 1000 square feet of roof. In areas with livestock access or frequent vehicle use, protect the lower five feet of downspouts by inserting them through a six inch diameter steel of PVC pipe. A little extra expense now saves you money in the long term.

**Outlets.** To carry the water from the downspouts, one four inch corrugated plastic pipe can handle the rainwater from a 5400 ft² roof area as long as the slope of the outlet pipe is at least .01 feet vertical drop for every foot of horizontal distance (one foot drop for every 100 feet). The outlet pipe should be covered with two feet of backfill to protect it from crushing in areas where vehicles drive over. You should outlet this roof runoff in areas not heavily used by livestock or vehicles. The outlet area should be well vegetated to prevent erosion. It is best if you can locate this where the water can infiltrate back into the ground. You should not outlet this on your property boundary or directly into streams and lakes since this only transfers your problem to someone else.



#### How Much Rain Do You Receive?

It's simple! Look at the table and estimate rainfall for where you live and figure out how many square foot of roof surface you have. Take these and plug them into the following formula: Area sq. ft. X inches rain  $X \ 0.62 = Gallons$  of runoff per year.



For example, a 60 foot by 35 foot roof equals 2100 sq. ft. (60 x 35). At "X" on the map, you get about 55 inches of rain, so:

 $2100 \times 55 \times 0.62 = 71,610 \text{ gallons per year from that roof.}$ 

Average Rainfall Amounts

Vancouver = 37.32"

La Center = 48.85"

Battle Ground = 47.22"

Yacolt = 75.76"

Washougal = 50"

Rigdefiled = 44"

Adapted by Douglas Stienbarger, WSU Extension Clark County, from Snohomish CD "Easy BMP" series. (2004)

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# Management Practices for Small Acreages Keeping Water Clean

In Clark County we receive a lot of liquid sunshine in the form of rain throughout the year and this can impact small acreage landowners and their land. How landowners manage stormwater affects not only the enjoyment of their property, but also the health of streams and waterways. Daily activities concentrated in small areas can potentially cause problems that negatively affect landowners' pocketbooks as well as the "health" of their land.

This factsheet provides a guide to some common management practices, usually referred to as BMPs (best management practices), landowners can use to reduce the impact of stormwater on their properties. This publication does not provide the detail or site specific information necessary to effectively implement some of the BMPs listed. This factsheet does provide resources and contacts that you can access to obtain further information.

#### **Keeping Clean Water Clean**

Managing water before it can cause the landowner a problem is the easiest means of controlling the effects of rainwater. Diverting rainwater to areas where it least impacts your activities comprise the least expensive and most effective BMPs. However, moving this to a neighbor's property does not solve the problem and will probably create additional problems. Additionally, helping water infiltrate into the soil benefits not only the landowner, but their community as well. Infiltration recharges groundwater and keeps our streams flowing, which benefits wildlife and community members (for recreation and sustaining wells used for drinking water).

The more impervious area landowners have on their land, the more rainwater runoff they will have to handle. Impervious areas include pavement, compacted areas (e.g., gravel driveways), and roofs. In some heavy rainfall events, there will be too much water for the soil to absorb, so some runoff is inevitable. Runoff can transport soil particles (sediment) to waterbodies with negative effects on fish habitat and stream health. Excess nutrients from fertilizers or manure attach to these soil particles and can also damage stream health and habitat.

How much water comes off impervious surfaces? As a rule of thumb, every 100 square feet (10 foot by 10 foot) of impervious surface produces 62 gallons of runoff for each inch of rainfall. Do the numbers and that is a lot of water!

**Gutters and Downspouts.** Installation and maintenance of gutters and downspouts on buildings constitutes the single most effective BMP for controlling the impacts of stormwater. Rainwater diverted away from buildings can reduce mud, soil compaction, and soil erosion as well as protecting the expensive investment you have in your structures. Diversion to vegetated areas or into dry wells also increase infiltra-



tion into the groundwater. If you have animals, reducing muddy conditions can also improve animal health. (See reference 5.)

**Drywells.** Downspouts can outlet into dry wells to help water infiltrate into the ground. A dry well is a pit dug and filled with gravel and lined with weed cloth or geotextile material that keeps the soil from filling in the void spaces between the gravel.

**French Drains**. French drains are shallow trenches with perforated corrugated plastic pipe surrounded by gravel and covered with soil. The pipe drains water from around building driplines (from the roof) and carries the water to an area where the water can infiltrate safely into the ground.

**Grassy Swales and Berms.** Swales are shallow, gently sloped trenches that intercept runoff and transport water away from areas of activity. Swales are kept vegetated with grass which slows down the runoff, facilitates infiltration of the runoff, and removes sediment. These are sometimes called infiltration trenches. These swales also remove excess nutrients since the grasses utilize these nutrients for growth.

Low berms (usually just a few inches in height) also direct runoff from structures or areas of activity. Berms are small mounds of vegetated soil. (See reference 5.)

#### **Keeping Soil in Place**

Eroding soil that enters streams can smother fish spawning beds and decrease stream health. When excess nutrients are transported with the soil particles, they can decrease oxygen levels in streams, killing fish and other stream organisms.

**Buffer Strips**. Buffer strips are vegetated strips of land situated downslope of potential problem areas (bare soils, intense runoff, livestock use areas, etc.). Grasses, shrubs, and trees comprise the vegetation in these strips. Buffer strips capture sediment and nutrients flowing through them. The vegetation slows runoff and causes soil particles to settle out. Nutrients are taken up by the plants. These strips are often placed along streams to reduce contaminated runoff from reaching the stream. (*See reference 1.*)

Using native plants decreases the maintenance requirements of buffer strips since they are suited to the local climate. Once established, they require little maintenance. (See references 2 and 5.)

#### **Managing Nutrients**

Major nutrients common to fertilizers and manure include nitrogen (N), potassium (K), and phosphorous (P). Other common nutrients include calcium, magnesium, and sodium among others. When they enter streams, nutrients can encourage algae growth which depletes oxygen other organisms and fish require.

**Proper Application of Nutrients.** In this practice, landowners apply only the amount of nutrients (from manure or synthetic fertilizer) the soil needs to grow the desired product: grass, crops, etc. This requires taking a soil sample and having a lab test it for nutrient levels. A soils lab will provide a recommendation for your desired use. A soil test is a requisite for good nutrient management. Applying only the nutrients the plants need will not only reduce potential runoff contamination, but also save the landowner money. Why pay for fertilizer you do not need? (See references 10 - 13.)



Manure Storage. Stored manure should be covered to prevent rainwater from leaching nutrients into runoff and groundwater. A cover also prevents erosion of the manure solids. Manure storage should be located at least 100 feet from wells and streams to reduce potential contamination. Covering manure also conserves nutrients in the compost you want to put onto your pasture or garden and thus saves you money on fertilizer. (See references 5 and 6.)

| Animal | Volume cu ft/day | Weight<br>lbs/day | Moisture<br>percent<br>88 |  |  |
|--------|------------------|-------------------|---------------------------|--|--|
| Beef   | 1.02             | 63                |                           |  |  |
| Ducks  | 0.73             | 46                | 75                        |  |  |
| Goats  | 0.63             | 40                | 75                        |  |  |
| Horse  | 0.81             | 50                | 78                        |  |  |
| Sheep  | 0.63             | 40                | 75                        |  |  |

**Composting**. Properly composting manure reduces a potential contaminant into a useful product. When applied to the soil, compost increases the ability of the soil to hold water while also improving soil structure (soil tilth) by replenishing organic matter in the soil. Compost also releases its nutrients slowly and decreases chances of contaminating water (wells, streams, etc.). Pastures, gardens, land-scaping, and orchards all benefit from compost application.



The composting process relies on a balance between air (oxygen), moisture, and heat. A proper balance encourages the proliferation of microorganisms that break down the manure. In our wet climate, controlling the moisture content helps regulate heat and air. It is essential to cover compost piles to maintain the optimum moisture content of 50% - 60% and achieve an internal temperature of  $130^{\circ}\text{F} - 140^{\circ}\text{F}$ . Another important factor in maximizing the compost process is the carbon to nitrogen ration (C:N) which should between 30:1 and 40:1. (See references 3 and 4)

For a thorough explanation of farm-scale composting, purchasing the *On-Farm Composting Handbook* is a good investment (see <a href="http://www.nraes.org/publications/nraes54.html">http://www.nraes.org/publications/nraes54.html</a>).

#### **Human Health**

On many acreages, landowners rely on wells for drinking water and on septic systems to process human waste. Wells are susceptible to contamination while poorly maintained or damaged septic systems can cause contamination of both groundwater and runoff into streams and rivers.

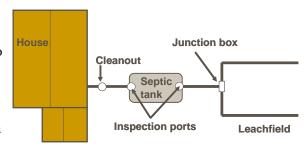
**Protecting Wellheads.** As a rule of thumb, keep potential contaminants at least 100 feet away from wellheads. This includes storage of manure, chemicals (fertilizers, pesticides, etc.) and motor oil among others. Animals should not be confined in close proximity to your well.

Wellheads should be properly sealed and soil slightly mounded to slope away from the wellhead to keep rainwater flowing away from the well.



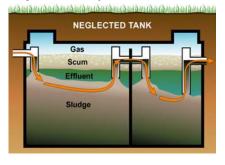
Maintaining Septic Systems. If you are unsure whether you are on septic, find out! Consisting of a relatively airtight tank and a leachfield (for infiltrating liquids into the soil), septic systems process human waste and other household water that goes down the drain.

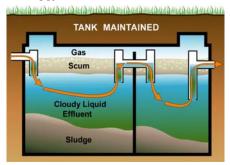
Similar to manure composting, septic systems essentially break down fecal material and fluids into a state that can then be discharged into the soil which further filters out



contaminants. Microorganisms also play a critical role in this process. Maintaining a good growth environment for these organisms requires that landowners not drain large amounts of certain items into their septic systems: detergents, sink and tub cleaners, cleaning compounds, bleach, disinfectants, caustic drain openers, polishes, acids, and toilet cleaners.

Septic systems need to be pumped by a licensed pumper on a regular basis. If solids build up in the septic tank, they can migrate into the leachfield and plug the pores between soil particles and significantly damage the ability of the soil to infiltrate liquids. Result: a soggy surface and time for a new leachfield!





To properly maintagin your septic system:

- · Pump the tank on a regular schedule;
- · Do not drive over the tank and leachfield;
- · Keep livestock off your leachfield;
- · Do not plant food gardens or trees on the leachfield.

Improperly maintained, septic systems will fail and you will spend between \$5,000 and \$20,000 to repair or replace that system. This certainly puts the \$300 - \$500 pumping expense every 3-5 years in perspective! (See references 7 and 8.)

| Tank Size<br>(gallons) | 1  | 2 | 3 | 4 | 5 | 6 |
|------------------------|----|---|---|---|---|---|
| 1000                   | 12 | 6 | 4 | 3 | 2 | 2 |
| 1250                   | 16 | 8 | 5 | 3 | 3 | 2 |
| 1500                   | 19 | 9 | 6 | 4 | 3 | 3 |

|           | People in House | 1  | 2 | 3 | 4 | 5 | 6 |
|-----------|-----------------|----|---|---|---|---|---|
| Tank Size | 1000            | 12 | 6 | 4 | 3 | 2 | 2 |
| (gal)     | 1250            | 16 | 8 | 5 | 3 | 3 | 2 |
|           | 1500            | 19 | 9 | 6 | 4 | 3 | 3 |

Pumping Schedule: Four person household with a 1250 gallon should pump their tank every three years



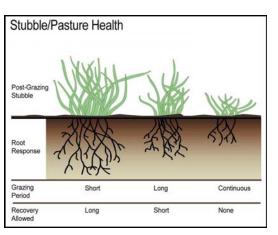
# Washington State University Extension ~~ Clark County Clean Water Program Clark Conservation District

### **Managing Animals**

Animals pose significant challenges for landowners in terms of keeping their land productive and their animals healthy. Clark County's high rainfall necessitates special care to avoid muddy messes and resulting erosion. Healthy pastures prevent soil erosion and reduce the transport of nutrients to streams or other waterbodies.

**Sacrifice Areas (Holding Areas).** In order to control potential pollution and where mud occurs, landowners can set aside a specified area where animals are confined during rainy months. Since this area will always be muddy or at least devoid of vegetation, it is called a sacrifice area (sacrificed for the good of the rest of the property). You can limit the mud in these areas by laying down hog fuel or other material (e.g., gravel or sand).

Confining animals to the sacrifice area allows the remaining pasture land to regrow and keeps animals from overgrazing and undermining the pasture's ability to regenerate for the next grazing season. Wet soils compact easier and restricting animal access during the winter keeps the soil from being compacted. Compacted soils also reduce the grass' ability to grow (compaction reduces infiltration into the soil and makes it more difficult for adequate root growth). (See references 5)

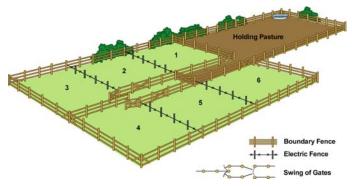


**Pasture Management.** In order to maximize the forage available for animals, landowners need to manage pastures for grass health. Allowing continual grazing weakens grasses and results in decreasing plant growth (and thus decreasing forage) as well as opening bare areas to weeds and erosion.

As a general guide, grasses should not be grazed below three inches in height. At three inches, animals should be removed from that part of the pasture. Once the grasses grow back to six to eight inches in height, animals can graze that area again.

#### Rotational Grazing (The Magic of Fencing).

Rotating animals around parts of your pasture maximizes the time period animals can graze by allowing parts of a pasture to regenerate while other parts are being grazed. Landowners divide pastures into sections with fencing. While the perimeter (boundary) fence is usually a permanent installation, interior electric fences allow changes with



minimal labor. Animals are moved from section to section as the grass height reaches three inches. Animals return to a section once the grass grows back to six inches or more. (See references 5 and 9.)



# Washington State University Extension ~~ Clark County Clean Water Program Clark Conservation District

Controlled Stream Access. Animals allowed uncontrolled stream access can damage streamside vegetation, destabilize stream banks, facilitate erosion, and directly deposit nutrients into the water. These all cause degraded habitat for fish and wildlife, may kill some aquatic species, and generally pollute. Completely excluding animals from waterbodies using either permanent or portable electric fencing provides the best protection. However, when animals rely on waterbodies for watering, restricting access also reduces potential water quality pollution. In this case, a crossing alleyway can be formed that allows access to water, but limits that access to one area. These alleys can also be structured to limit the times when animals can get to water. Another option would be to install a non-electric, mechanical pump



Nose pump allows off-stream watering

(called a "nose pump") that animals operate to bring water from a fenced waterbody. More information can be obtained through the Clark Conservation District.

#### **Contacts:**

Washington State University Clark County Extension 11104 NE 149th Street C 100 Brush Prairie WA 98606 360-397-6060 / FAX 360-397-6122 http://clark.wsu.edu/

Clark Conservation District 11104 NE 149th Street C 400 Brush Prairie WA 98606 360-883-1987 extension 110 http://clark.scc.wa.gov/

# **USDA Natural Resource Conservation Service**

11104 NE 149th Street C 400 Brush Prairie WA 98606 360-883-1987 extension 3 http://www.wa.nrcs.usda.gov/

#### Information Sources on the web:

Horses for Clean Water <a href="http://www.horsesforcleanwater.com/">http://www.horsesforcleanwater.com/</a>

NRCS Technical Information and Resources http://www.nrcs.usda.gov/technical/

Oregon State University Extension & Experiment Station Communications Publications <a href="http://eesc.orst.edu/agcomwebfile/EdMat/default.html">http://eesc.orst.edu/agcomwebfile/EdMat/default.html</a>

Oregon State University Extension Service, Oregon Small Farms <a href="http://smallfarms.orst.edu">http://smallfarms.orst.edu</a>

Oregon State University, The Oregon Well Water Program <a href="http://wellwater.orst.edu/">http://wellwater.orst.edu/</a>

Shady Springs Farm, Equine Winter Turn-Out Project <a href="http://www.shadyspringsfarm.com/">http://www.shadyspringsfarm.com/</a>

Washington State Department of Ecology Well Logs <a href="http://apps.ecy.wa.gov/welllog/">http://apps.ecy.wa.gov/welllog/</a>

WSU Extension Publications <a href="http://pubs.wsu.edu/cgi-bin/pubs/index.html">http://pubs.wsu.edu/cgi-bin/pubs/index.html</a>

 $WSU\ King\ County\ Extension\ Agriculture\ Publications\ \underline{http://www.metrokc.gov/dchs/csd/wsu-ce/agriculture/Publications.htm}$ 

WSU Natural Resource Extension <a href="http://homefarmasyst.wsu.edu/">http://homefarmasyst.wsu.edu/</a>

WSU Natural Resource Extension – Publications <a href="http://ext.nrs.wsu.edu/publications/index.htm">http://ext.nrs.wsu.edu/publications/index.htm</a>

WSU Small Farms Team <a href="http://smallfarms.wsu.edu/publications/index.html">http://smallfarms.wsu.edu/publications/index.html</a>



# Washington State University Extension ~~ Clark County Clean Water Program Clark Conservation District

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Written by Douglas M. Stienbarger with research by Penny Ramey. January 2005

*Living on the Land* is sponsored in partnership by WSU Extension Clark County, the Clark County Clean Water Program, and the Clark Conservation District

Extension programs are available to all without discrimination.

# **Appendix B: Program Promotion**

Equine Service Directory Advertisement

APRIL 12, 2004 COLUMBIAN ARTICLE

May 13, 2004 Oregonian Article

PUBLISHED PRESS RELEASES

THE REFLECTOR SEPTEMBER 1, 2004 – CALENDAR ITEM & HAPPENINGS PRESS RELEASE CAPITAL PRESS SEPTEMBER 3, 2004

SEPTEMBER 17, 2004 WSU TODAY ARTICLE

DIRECT MAILING - FALL 2004

**DIRECT MAILING - WINTER 2004** 

SMALL ACREAGE PROGRAM DISPLAY

# live on acreage?

Interested in improving the well-being of your animals? Dream of better productivity of your pasture? Want to reduce chore time? Want a better look for your property? Interested in protecting your drinking water and streams?

Living on the Land is designed especially for you!

# Living §n

the Land

A Program for Small Acreages



- Identify your goals, resources, opportunities, and limitations.
- Create a management plan that works for you and your animals.
- Enhance soil fertility, reduce erosion, improve drainage.
- Control surface water to protect your drinking water, reduce mud, turn manure into a resource.
- Weed control, managing grasses, renovating pastures.
- Animal care basics, practical farm layout, earth friendly tips on managing your animals.
- Potential restrictions on animals near streams or wetlands.

For information, call Penny Ramey at WSU Extension Clark County 360-397-6060 x7720



WASHINGTON STATE UNIVERSITY CLARK COUNTY EXTENSION



WSU Extension programs and employment are available to all without discrimination. Noncompliance may be reported through your local Extension office.

#### "We want to live on the land. We want to do it right."

David Young, moved from Portland apartment to La Center acreage



DAVE OLSON/The Columbian

Joleen England, 17, left, rides with her friend Rachel Hubler, 17, as England's dad, Ted England, watches. He bought 10 acres north of La Center to be able to keep horses and eventually harvest trees or grow vegetables.

# Did you know?

- Washington state law allows land used for farm, forest or open space to be taxed at current use rates, which amount to onefiftieth of residential assessments. If the land is converted to residential use, however, the owner must pay seven years' back taxes plus 10 percent per year interest.
- Clark County has lost farmland at the rate of 1,100 acres per year since 1982. The county now has about 50,000 acres of land zoned for agriculture, compared with 72,691 acres 22 years ago. But much rural residential land also is used for small farms.
- Anyone can sign up for a class about living off the land or on farm economics with Penny Ramey, Clark County coordinator, extension livestock adviser program, 11104 N.E.149th St., C100, Brush Prairie, WA 98606, phone 360-397-6060 ext. 7720, or e-mail ramey@coopext.cahe.wsu.edu.

### Allure of rural life entices city-dwellers to buy plots of land

By DEAN BAKER Columbian staff writer

Naturopathic physician David Young and his wife, Jeannie, cradled their baby chicks and then placed them under a light where they'd be warm in a back bedroom of their country home north of Fargher Lake.

"They're just here for a few days because it was 29 degrees outside,

and they looked like they were going into shock," said David Young, 50. He and Jeannie, 54, admit they knew nothing about chickens or farming 10 months ago when they moved from their 650-square-foot Portland apartment to five acres in the woods on Cedar Creek.

Ever since he was a teenager growing up in St. Paul, Minn., David Young said he has dreamed of a selfreliant country life. Now, he and Jeannie, a Sacramento native, are opening a new chapter in their lives

They plan to turn the rural residential property they bought for \$195,000, and possibly five adjoining

acres, into an herb and vegetable farm with chickens, a cow, a dog, a couple of sheep and horses. David plans to resume his naturopathic practice as soon as he obtains his Washington license and Jeannie will use the herbs they grow for naturopathic healing practices.

"We want to live on the land," said David Young. "We want to do it right." Clark County's countryside is fill-

ing up with suburbanites like the Youngs who are looking for a fresh

Washington State University Cooperative Extension-Clark County for the past two years has been reaching out to these new rural families with courses on farm economics and living off the land. Each session has filled up with about 60 students, with two or three dozen more often on waiting lists.

The Youngs were among 45 newfound lovers of the earth who graduated in March from the extension class on managing small acreages developed in 1999 by farm experts from eight western states, including Douglas Stienbarger, Clark County extension director.

Forty more students already are

FARMS, back page

# Farms:

#### From page A1

on a waiting list for the next class that starts Sept. 14 at the extension office at 11104 N.E. 149th St., Brush Prairie. Forty graduated last year. The class, free to students, is co-sponsored with Clark County and the Clark Conservation District, and has run on a two-year budget of about \$100,000.

"It grew out of a need throughout the West where there are urban areas, and the land gets filled up, and you have people moving out to the country without a background in farming," Stienbarger said. "They have problems working with the land, and that effects the resources. We're here to help them."

More than 120 country newcomers from Southwest Washington and Northwest Oregon also graduated last November from a separate daylong extension course in the economics of small farming offered by Stienbarger and agent Charles Brun in partnership with Clackamas Community College. They'll offer another class this fall.

The greenhorn farmers who attend these classes want to raise a few horses, berries, apples or pears, cattle, sheep, goats, llamas or alpacas, gin-



DAVE OLSON/The Columbian

David Young feeds a few chickens as his wife, Jeannie, watches on their farm north of Fargher Lake. The couple moved from Portland to Clark County to live closer to the land.

seng, vegetables, flowers, dogs, herbs or children. Many remain smitten with the idea of a country lifestyle, even though they end up discovering it doesn't provide the financial benefits they had anticipated

All learn that making a piece of ground pay for itself is chancy, extension agents said.

# Doesn't always work

As the Youngs plan their farming future, Tim Straub, a dozen miles away, is turning to cabinetmaking to supplement the income from his 6-year-old berry farm south of Ridgefield.

"Basically, I'm winding down," said Straub, 47, who brought his growing family here from California, bought five acres and leased 65 more in hopes of making \$10,000 in sales from each acre of raspberries. Instead, he made one-tenth of that.

The land just wouldn't produce 10 tons of raspberries an acre as some extension service experts had told him, he said. It produced one ton, below the 2.5-ton average a good farm gets in Southwest Washington.

For Straub, raising 45 acres of raspberries and 25 acres of

strawberries proved a losing proposition. A big problem, he said, was the minimum wage he had to pay his workers rose from \$4.90 an hour in 1998 to \$7.16 today. He's going to cut back to 17 acres of raspberries and 20 of strawberries and plans to make most of his income from woodworking.

But the Straubs will stay in their country home, which he said has been a rewarding way of life for him, his 44-year-old wife, Janet, and their eight children, ages 2 to 17.

"It's great for teaching values," said Straub, who left behind a good job managing building projects. He's making less, but he said his kids are learning vital life skills: cooperation, hard work, love of the land.

# **Horse country**

Ten miles northeast of the Straubs and 10 miles north of the Youngs, near La Center, retired long-haul truck driver Ted England has staked his claim for the past four years.

He's living on five acres of pasture he bought in 2000 for \$150,000, last year spending another \$175,000 on five adjoining acres of mixed fir, holly, alder and cottonwood. From the scrub woodland, he expects to take a crop of pulp for paper, then perhaps convert to berries or maybe to a direct market operation, possibly a roadside stand selling vegetables and fruit.

That's about the only viable way to make it on small acreage in Clark County," said

Stienbarger.

Extended family life can work on the land, where there is space for people to stretch their legs. England and his daughters - Joleen, 17, and Shannon, 20 - and the girls' mom, Ted's ex-wife, Jo England, keep four horses and three goats on the place.

Jo England, chief executive officer of the New Phoenix/Last Frontier Casinos in La Center, and her aging parents share the property, but live in a separate house. For her the arrangement works because the property is close enough to her job that she can easily commute.

Ted England, who moved to La Center from Spokane, favored the location because it enabled him to bring Joleen. who shows her horses throughout the West Coast, closer to her mom and sister.

Ted England has only the vaguest notion that he'll ever make the 10 acres pay, although he said he might try growing berries or vegetables for profit in a few years.

"You get your money out of country land by time and appreciation," he said. "If you do anything like berries, you've got to have deep pockets to

get it going."

Where once Clark County farmers made a living on their land, many now expect only a little supplementary income. They mainly come for the lifestyle.

The people out here are different," said Jeannie Young. "They're so friendly, and

down-to-earth."

Bill Doty, owner of the Fargher Lake Store, gave the Youngs their first chickens. The Youngs laughed when they saw one of Doty's daughters walking around holding a chicken like a puppy and putting earphones on the chicken so it could hear a rap song.

For the most part, Clark County's new "farmers" simply want to care for their property and the streams that run through it, to raise a few horses or a garden, control mud problems, manage a well or septic tank and grow a small crop for pleasure and extra income, extension workers say.

"What they really want to do is to take care of the land." said Penny Ramey, who manages the class about living off

the land.

**DEAN BAKER** writes about agriculture. Reach him at 360-759-8009 or e-mail dean.baker@columbian.com

# Lessons in life on the land

A 12-week WSU Extension course teaches old hands and city slickers alike about water, soil, trees and animals

By BILL STEWART THE OREGONIAN

VANCOUVER - It's the Clark County ream: Buy a home on acreage and en-y a quiet, idyllic life. Then comes the confusion.

Can hunters blast away so close by? in that neighbor fire up the heavy uipment at 5 a.m.?

in that neignoor line up the heavy uitpment at 5 a.m.? Even longtime rural residents aren't mune. How close to a stream can live-ck graze? Can a grove of trees can be & How do I manage property so an exhorse or two can be added? It's all part of the rural experience, and wit's all part of an unusual course: ing on the Land. The 12-week course eaching transplanted city slickers and igitime country denizens how to live and make the most of their acreage, m caring for animals, to improving L, to smart use of their most precious ource: water. 'It's all tied into water, because water unvolved in almost everything you do

"It's all tied into water, because water involved in almost everything you do the rural area," said Clndy Stienbarger, to works in the county's watershed rearces office. Developments can threat-water quality during construction, tile farming and raising animals are going threats to streams, drinking ils and fish recovery.

But not all rural residents realize that, the course was developed by Wash-ground state University's cooperative Existion services. The curriculum was not pressly designed for freshly transplant-turbanities — most participants have

pressy designed for freshly transplant-turbanites — most participants have en rural residents several years — but me are relative newbies. Monica Rech and her husband, tyne, had been on their six acres a year fore taking the class.

Please see RURAL, Page B2



Astrid Dankmeyer, 6, removes a duck from the family henhouse near Battle Ground. Two years ago she was a city kid, but the Dankmeyers moved from Portland's Mount Tabor area to five acres of farmland north of Battle Ground.

# Students share desire to make most of land

Continued from Page B1

"This is our first time living on big property," she said. "We took the class and learned about water, regulations, things like that. We made friends with people who are in the same situation. We love living in the country."

The Rechs, who moved to Brush Prairie from Aloha, Ore., dream of having a wholesale nursery for their retirement project in a few

J"From the class, we've had three experts look at our property and give us advice" on horticulture, weeds and animals, she said. "They have tremendous knowledge at the Extension service. We plan to take a master gardening class in composting in the fall."

Douglas Stienbarger, director of the WSU Extension service for Clark County and husband of Cindy, said the common thread among participants is a serious interest in getting more out of their land, and doing it smarter.

"This is a huge commitment, but almost everyone attended at least 11 of the 12 classes," he said. "That's amazing, considering how busy we are.'

He said the course is divided into modules:

- Taking inventory of the property; identifying owners' goals; and evaluating how federal, state and county regulations fit into that picture.
- ♦ Identifying soil types; managing the land to keep it productive; looking at various water-related issues; learning how to minimize erosion; and protecting drinking
- · Estimating how many animals a pasture can support; fighting nox-ious weeds that threaten livestock;



and renovating pastures with the latest techniques.

· Caring for animals; meeting legal restrictions on them; disposing of manure; and managing grazing.

Douglas Stienbarger said that after the county commissioners agreed to fund the class through the Clean Water Program, no one was certain that interest would be high enough to schedule a class. Using county property records, the university's Extension service sent a mailing to more than 4,500 homes on lots of an acre or more, and the "response has been amazing," he said.

He said residents have asked about creating ponds, filling wet areas and how to handle clay soil. They want to cut groves of trees or add more horses or llamas. And property owners learn about lia-bility if they hire workers.

"I think the one item that angers them most is when they learn that they can move only 50 cubic five dump-truck loads of dirt 'for the life of the property'

#### LIVING ON THE LAND

Signup is under way for a course on how to live on rural land, which Washington State University Vancouver Extension service began last year and resumes in September

When: Tuesdays, 6:30 to 9:30 p.m., starting Sept. 14. Optional field trips will be Saturday mornings.

Where: Center for Agriculture, Science and Environmental Education, 11104 N.E. 149th St., Brush Prairie.

Cost: Free. Underwritten by Clark County stormwater fee

Contact: Penny Ramey, program coordinator, 360-397-6060, ext. 7720,

unless they get a county grading permit," Stienbarger said.

His water specialist wife, Cindy, said the class helps students navigate county government.

"I am a county employee, and I remember how confusing it was to get a building permit," she said. Students learn about the process then are given the names of county employees to seek out.

County Commissioner Judie Stanton, a rural resident, said she has received calls from people who move onto large-acreage lots

"without any idea how to care for the property. I have gotten calls from property owners who are upset because they've let the grass and brush grow, and then they get a visit from the fire marshal who says to cut the grass or pay the county to cut it. They have no idea what their responsibilities are." Douglas Stienbarger said regu-

lations indeed are numerous, but county officials normally are not out patrolling for violations.

"Most contacts like that are prompted by complaints from neighbors," he said.

and water. JOEL DAVIS THE OREGONIAN Betty Sue Morris, chairwoman of the county commissioners, said too many rural newcomers "have unrealistic expectations. They have a mental picture of peace and tranquility, and it just doesn't work like that. Much of the county is open to hunting, and we get up

Astrid Dankmeyer, 6, bottle-feeds a

young goat, while her

Washington

Vancouver extension

residents

care of

about life in rural areas, including the

animals, soils

class teaches

State University

mother, Ingrid Dankmeyer, pulls the nanny away. A

That can be news to many, but not to others. Penny Ramey, coordinator for the Extension service's small-acreage program, said some class participants are relative newcomers, "but we've had farmers who have been on their property 15 years when come to see if there are better ways to do things. These are people with a depth of knowledge about farming and rural life."

early in the rural areas."

Yet the newcomer won't be left out. As Douglas Stienbarger said, the class "is not highly technical. We hope to catch people before they make serious mistakes.'

Bill Stewart: 360-896-5722 or 503-294-5900; billstewart@news.oregonian.com

# **Calendar of Events**

# Education

WRITE YOUR LIFE STORY class begins. Wed., Sept. 8, 1-3 p.m., at Woodland Presbyterian Church. Continues through Oct. 27. Register with Lower Columbia College, Carmen Webb, 225-9392.

LIVING ON THE LAND-Stewardship for Small Acreages, a class series, will be offered Tuesdays, Sept. 14-Nov. 30, 6:30-9:30 p.m., by Washington State University cooperative extension. Basic, holistic understanding of soil, water, plant and animal interactions. Improve soil, reduce mud and weeds. Preserve water resources. Limited to 40 people. 397-6060, ext.

VIEW RIDGE MIDDLE SCHOOL open

# Small Acreage

Sept. 3, 2004

CAPITAL PRESS

#### **WORKSHOPS ON THE CALENDAR**

#### Living on the Land series

BRUSH PRAIRIE, Wash.—Are you curious how to make the most of your property and still preserve our water resources? Do you want to learn to improve soil and reduce mud and weeds?

A Living on the Land — Stewardship for Small Acreages course offered by the Clark County Clean Water Program, Clark Conservation District, and WSU Extension Small Acreage Program will begin Sept. 14, and continue on Tuesdays through Nov. 30. The course provides a basic, holistic understanding of soil, water, plant, and animal interactions.

"Water is involved in almost everything you do in the rural area," said Doug Stienbarger, director of WSU Extension Clark County. This class helps participants learn effective ways of protecting our water resources."

The classes will be taught from 6:30 p.m. to 9:30 p.m.

Class size is limited to 40 participants. Call (360) 397-6060 ext. 0 to register, get directions, or for more information about the WSU Extension-Clark County Small Acreage Program.

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# Happenings

#### Class slated on acreage management

How to make the most of property and still preserve water resources will be the focus of a series of classes set for Tuesdays, Sept. 14-Nov. 30, 6:30-9:30 p.m., offered by the Washington State University Cooperative Extension program.

The class will include discussions on improving soil and reducing mud and weeds. The course will provide a

houstic understanding of soil, water, plant and animal interactions.

"Water is involved in almost everything we do in the rural area," said Doug Stienbarger, director of the Extension Program in Clark County.
"This class helps participants learn effective ways of protecting our water resources."

The free class is limited to 40 people. Information, registration, 397-6060, ext. 0.

#### **WSU AT LARGE**

# Clark County: Where the city meets the farm

BY ASHLEY JEFFREY WSU TODAY INTERN

The fast-paced city grind is being left behind by many Clark County residents for a life of smallacreage farming.

Thanks to the award-winning "Living on the Land" program at Washington State University Clark County Extension, many excity slickers from the Portland, Ore./Vancouver, Wash., area are

learning to make the most of their new prop-

Douglas Stienbarger, extension director and program co-creator, said the curriculum was developed because of the rapid urbanization and land fragmentation that is occurring in the area.

Stienbarger said his students have varied reasons for moving out to a rural community and taking the class. "Some students have always wanted to have a horse, others want to try their hand at small-acreage farming, while a few just enjoy country living," he said.

"Many people who are



Students look on during a fencing class that is part of the "Living on the Land" program at WSU Clark County Extension. (Photo courtesy of WSU Clark County)

moving onto rural land have never had to manage acreage before," Stienbarger said. "Therefore, they are not aware of what their land requires."

The class teaches smallacreage landowners how to maintain and utilize their wells, animals, pastures and more.

"Many do not even realize they are living on a septic system and do not understand the implications," Stienbarger said. "We teach them how to properly maintain their septic

The program has been held twice since its inception at WSU Clark County two years

ago. About 40 students attended each class and there were waiting lists of several others. Classes are held one evening a week for 12 weeks. They are free to the public.

Other WSU Clark County Extension programs include:

- A watershed stewardship program
  - 4-H
- Food safety and nutrition, which includes Food Sense, a program for low income consumers
  - Master Gardeners

For more information on WSU Clark County Extension, call (360) 397-6060, ext. 0, or visit http://clark. wsu.edu.

Dear Friends and Neighbors,

Thank you for your patience in waiting for the second "Living on the Land - Stewardship for Small Acreages" workshop series. Registration for those on the waiting list is now open for the January session. Please fill out and return the enclosed survey as soon as possible, No later than December 12<sup>th</sup>, in order to be considered for enrollment. Registration is limited to the first 40 to return completed surveys.

This survey will provide our instructors with information to individualize the program to your interests. Our team will create a packet especially for you from the information that you provide.

You attendance at all sessions is important as each workshop builds in the previous class to increase your understanding of soil, water, plant and animal interactions.

#### What Do You Gain From Attending?

- Preserve or improve the value of your land and home.
- Identify your goals, resources and opportunities.
- Receive information on developing a realistic management plan.
- Enhance soil fertility, reduce erosion, improve drainage, and reduce mud.
- Keep your drinking water and streams clean.
- Develop ideas and strategies to sustain or improve your acreage by becoming a better resource manager.

"Living on the Land - Stewardship for Small Acreages"

Tuesday September 16, through December 2, 2003 6:30 to 9:30 PM Center for Agriculture Science and Environmental Education (CASEE) 11104 NE 149<sup>th</sup> Street Brush Prairie WA 98606

Questions? Call me at 397.6060 ext 7720. I look forward to meeting you on January 13th.

Penny Ramey Small Acreage Program

Sponsored by the Clark County Clean Water Program, the Clark Conservation District and WSU Extension.







Dear Friends and Neighbors,

Greetings! We just opened registration for the September session of "Living on the Land - Stewardship for Small Acreages" workshop series for those of you on our waiting list. Please fill out and return the enclosed survey no later than August 31<sup>st.</sup>..(As soon as possible) in order to be considered for enrollment. The survey provides instructors with information to adapt the program to your interests to ensure you get the information you need and want.

# Space is limited so please don't delay. We can only register the first 40 people who return completed surveys.

What Do You Gain From Attending?

- You receive an information packet on addressing common small acreage concerns.
- Learn how to preserve or improve the value of your land and home.
- Guidance in identify your goals, resources and opportunities.
- Tips on how to reduce mud by improving drainage, reduce erosion, and enhance soil fertility
- Understand what you can do to keep your drinking water and streams clean.
- Develop ideas and strategies to sustain or improve your acreage by becoming a better resource manager and save money at the same time.

#### What's Your Commitment?

While we know that life happens, we expect you to commit to attending all of the classes and to let us know if something comes up and you must miss a class. Many sessions build on the previous class to provide a basic, holistic understanding of soil, water, plant, and animal interactions. We also hope you'll agree to answer some questions for us in a follow-up survey in 2005.

#### "Living on the Land - Stewardship for Small Acreages"

Tuesday, September 14 - November 30, 2004 - 6:30 to 9:30 PM Center for Agriculture Science and Environmental Education (CASEE) 11104 NE 149<sup>th</sup> Street Brush Prairie WA 98606

Questions? Call me at 397-6060 ext 7720. I look forward to meeting you on September 14th.

Penny Ramey Small Acreage Program

Sponsored by the Clark County Clean Water Program, the Clark Conservation District and WSU Extension.







# ater Recipes



# Manure Management

Contaminated runoff from uncovered manure piles can make it's way to streams and drinking

- ☐ Store manure away from surface water and
- Cover manure piles or compost.

# Mud Control

Animals left on pastures year round, degrade pastures, open soil to weeds, and compact the soil which causes standing water and mud.

- ☐ Gutters and downspouts keep clean water away from animal areas.
- ☐ Sacrifice areas concentrate impacts to one area, reducing soil compaction, mud, and weeds in other areas.



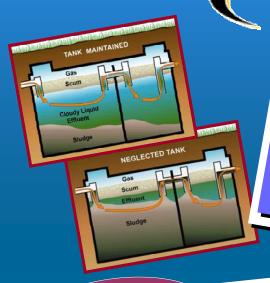


# Fencing

Grazing in or near streams destroys vegetation which provides important wildlife habitat and keeps water cool for fish. Grazing stream banks also causes soil and manure to enter the stream. ☐ Fence animals away from streams.

- Plant native vegetation in riparian areas. Consider off-stream watering for animals.

# 1800 C/801 Keeping Clean



# Septic Systems

 $oldsymbol{A}$  properly functioning drainfield will successfully treat household waste and adequately decontaminate it.

- Do not compact or damage your drainfield: keep cars, trees, animals, and runoff away from your ☐ Use less water.
- Do not put toxic materials, plastic, glass, or
- Inspect regularly & pump (if necessary) every

# Saving Money!

Good management saves you money.

- A new septic system can cost \$10,000.
- Accurate fertilizer use can reduce the amount you purchase.
  - ☐ Well managed land creates a healthy environment, providing good quality of life for people and saving vet bills for animals.
  - ☐ Cleaning contaminated wells can be difficult and costly



# Stormwater Facts

- One inch of rain on a 10 foot by 10 foot roof (or other impervious surface) produces 62 gallons of water!
- ☐ Areas within Clark County receive 40 to 100 inches of rainfall each year.
- Rain drops hit the ground at 20 mph and splash soil up to six feet away.



# **Appendix C: Living on the Land Evaluation Summaries**

LOL CLASS EVALUATION SUMMARY
WINTER 2004

LOL PROGRAM EVALUATION SUMMARY
WINTER 2004

LOL CLASS EVALUATION SUMMARY FALL 2004

LOL PROGRAM EVALUATION SUMMARY FALL 2004

# Fall 2004 Evaluations

|                          | 9/14/04                                       |     |       |    |     |      |         |
|--------------------------|-----------------------------------------------|-----|-------|----|-----|------|---------|
| Inventory I              |                                               | low |       |    |     | high | Average |
|                          | Was this lesson:                              | 1   | 2     | 3  | 4   | 5    |         |
| Doug Stienbarger WSU EXT | Current, up to date?                          |     |       | 3  | 16  | 14   | 4.3     |
| Rich Bachert NRCS        | Understandable?                               |     |       | 4  | 13  | 17   | 4.4     |
|                          | Presented in an interesting way?              |     |       | 6  | 12  | 15   | 4.3     |
|                          | Did the program answer any questions you had? |     | 3     | 5  | 15  | 8    | 3.9     |
|                          | Did the workshop increase your knowledge?     |     | 4     | 11 | 11  | 7    | 3.6     |
|                          | Will you use the information learned?         |     | 1     | 7  | 12  | 13   | 4.1     |
|                          | Was this program worth your time?             |     |       | 4  | 14  | 15   | 4.3     |
| 47                       | Participants                                  | -   | -     |    |     | -    | 4.1     |
| 33                       | Evaluations Completed                         | 3   | hours | 47 |     |      | •       |
| 141                      | contact hours                                 |     |       | 33 | 70% | •    |         |

|                          | 9/21/04                                       |     |       |    |     |      |         |
|--------------------------|-----------------------------------------------|-----|-------|----|-----|------|---------|
| Inventory II             |                                               | low |       |    |     | high | Average |
|                          | Was this lesson:                              | 1   | 2     | 3  | 4   | 5    |         |
| Doug Stienbarger WSU EXT | Current, up to date?                          |     |       | 3  | 5   | 15   | 4.5     |
| Sheila Pendleton-Orme -  | Understandable?                               |     |       | 3  | 6   | 12   | 4.4     |
| CC Code Enforcement      | Presented in an interesting way?              |     | 1     | 2  | 6   | 11   | 4.4     |
|                          | Did the program answer any questions you had? | 1   | 3     | 3  | 6   | 10   | 3.9     |
|                          | Did the workshop increase your knowledge?     |     | 3     | 6  | 8   | 6    | 3.7     |
|                          | Will you use the information learned?         |     | 2     | 5  | 5   | 11   | 4.1     |
|                          | Was this program worth your time?             |     | 1     | 5  | 5   | 12   | 4.2     |
| 40                       | Participants                                  |     |       | -  |     |      | 4.2     |
| 23                       | Evaluations Completed                         | 3   | hours | 40 |     |      |         |
| 120                      | contact hours                                 |     |       | 23 | 58% | •    |         |
|                          |                                               |     |       |    |     |      |         |

|             | 9/28/04                                       |     |    |     |     |      |         |
|-------------|-----------------------------------------------|-----|----|-----|-----|------|---------|
| Water       |                                               | low |    |     |     | high | Average |
|             | Was this lesson:                              | 1   | 2  | 3   | 4   | 5    |         |
| Toni Neslen | Current, up to date?                          |     |    |     | 3   | 13   | 4.8     |
| Hydrologist | Understandable?                               |     |    | 1   | 3   | 12   | 4.7     |
|             | Presented in an interesting way?              |     |    |     | 3   | 14   | 4.8     |
|             | Did the program answer any questions you had? |     |    | 4   | 4   | 8    | 4.3     |
|             | Did the workshop increase your knowledge?     |     |    | 8   | 3   | 5    | 3.8     |
|             | Will you use the information learned?         |     |    | 4   | 8   | 4    | 4.0     |
|             | Was this program worth your time?             |     |    | 1   | 3   | 12   | 4.7     |
|             | 37 Participants                               |     |    |     |     |      | 4.4     |
|             | 17 Evaluations Completed                      | 1.5 | ho | urs |     |      |         |
| 5           | 55.5 contact hours                            |     |    | 37  |     |      |         |
|             |                                               |     |    | 17  | 46% | •    |         |

|                        | 9/28/04                                       |     |    |          |     |      |         |
|------------------------|-----------------------------------------------|-----|----|----------|-----|------|---------|
| Horticulture           |                                               | low |    |          |     | high | Average |
|                        | Was this lesson:                              | 1   | 2  | 3        | 4   | 5    |         |
| Charles Brun           | Current, up to date? (not on eval form)       |     |    |          |     |      | #DIV/0! |
| WSU Extension Educator | Understandable? (not on eval form)            |     |    |          |     |      | #DIV/0! |
|                        | Presented in an interesting way?              |     |    | 4        | 6   | 17   | 4.5     |
|                        | Did the program answer any questions you had? |     |    | 4        | 14  | 7    | 4.1     |
|                        | Did the workshop increase your knowledge?     | 1   |    | 3        | 7   | 16   | 4.4     |
|                        | Will you use the information learned?         | 1   | 2  | 3        | 9   | 12   | 4.1     |
|                        | Was this program worth your time?             |     | 1  | 2        | 5   | 17   | 4.5     |
| 37                     | Participants                                  |     |    |          |     |      | 4.3     |
| 27                     | Evaluations Completed                         | 1.5 | ho | urs      |     |      |         |
| 55.5                   | contact hours                                 |     |    | 37<br>27 | 73% | -    |         |

|             |    | 10/5/04                                       |     |       |    |     |      |         |
|-------------|----|-----------------------------------------------|-----|-------|----|-----|------|---------|
| Soils       |    |                                               | low |       |    |     | high | Average |
|             |    | Was this lesson:                              | 1   | 2     | 3  | 4   | 5    |         |
| Steve Keirn |    | Current, up to date?                          |     |       |    | 4   | 14   | 4.8     |
| Clark CD    |    | Understandable?                               |     |       | 6  | 7   | 5    | 3.9     |
|             |    | Presented in an interesting way?              |     | 1     | 3  | 5   | 9    | 4.2     |
|             |    | Did the program answer any questions you had? |     | 1     | 5  | 7   | 8    | 4.0     |
|             |    | Did the workshop increase your knowledge?     |     | 1     | 5  | 8   | 6    | 4.0     |
|             |    | Will you use the information learned?         |     |       | 6  | 6   | 8    | 4.1     |
|             |    | Was this program worth your time?             |     | 1     | 4  | 4   | 11   | 4.3     |
|             | 33 | Participants                                  |     |       |    |     |      | 4.2     |
|             | 21 | Evaluations Completed                         | 3   | hours | 33 |     |      |         |
|             |    | contact hours                                 |     |       | 21 | 64% |      |         |
|             |    |                                               |     |       |    |     |      |         |

\_ \_

|                 | 10/12/04                                      |     |       |    |     |      |         |
|-----------------|-----------------------------------------------|-----|-------|----|-----|------|---------|
| Grass           |                                               | low |       |    |     | high | Average |
|                 | Was this lesson:                              | 1   | 2     | 3  | 4   | 5    |         |
| Ron Hendrickson | Current, up to date?                          |     |       | 1  | 1   | 10   | 4.8     |
| Weed Management | Understandable?                               |     |       | 1  | 2   | 9    | 4.7     |
|                 | Presented in an interesting way?              |     |       | 1  | 2   | 9    | 4.7     |
|                 | Did the program answer any questions you had? | 1   | 2     |    | 1   | 8    | 4.1     |
|                 | Did the workshop increase your knowledge?     | 1   | 1     | 1  | 1   | 8    | 4.2     |
|                 | Will you use the information learned?         | 1   |       | 2  |     | 9    | 4.3     |
|                 | Was this program worth your time?             |     | 1     | 1  | 1   | 9    | 4.5     |
|                 | 30 Participants                               |     |       |    |     |      | 4.5     |
|                 | 12 Evaluations Completed                      | 1.5 | hours | 30 |     |      |         |
|                 | 45 contact hours                              |     |       | 12 | 40% |      |         |
|                 |                                               |     |       |    |     |      |         |

|                    | 10/12/04                                      |     |       |    |     |      |         |
|--------------------|-----------------------------------------------|-----|-------|----|-----|------|---------|
| Business Plan      |                                               | low |       |    |     | high | Average |
|                    | Was this lesson:                              | 1   | 2     | 3  | 4   | 5    |         |
| Bill Harpole       | Current, up to date?                          |     | 1     |    | 10  | 10   | 4.4     |
| SCORE              | Understandable?                               |     | 1     |    | 7   | 13   | 4.5     |
| Small Business     | Presented in an interesting way?              |     | 2     | 6  | 4   | 9    | 4.0     |
| Development Center | Did the program answer any questions you had? |     | 1     | 3  | 7   | 10   | 4.2     |
|                    | Did the workshop increase your knowledge?     | 2   | 1     | 4  | 5   | 9    | 3.9     |
|                    | Will you use the information learned?         | 4   | 2     | 3  | 4   | 8    | 3.5     |
|                    | Was this program worth your time?             | 1   | 2     | 3  | 1   | 14   | 4.2     |
| :                  | 30 Participants                               |     |       |    |     |      | 4.1     |
|                    | 21 Evaluations Completed                      | 1.5 | hours | 30 |     |      |         |
|                    | 45 contact hours                              |     |       | 21 | 70% |      |         |
|                    |                                               |     |       |    |     |      |         |

|                         | 10/19/04                                      |     |       |    |     |      |         |
|-------------------------|-----------------------------------------------|-----|-------|----|-----|------|---------|
| Grass                   |                                               | low |       |    |     | high | Average |
|                         | Was this lesson:                              | 1   | 2     | 3  | 4   | 5    |         |
| Marty Chaney            | Current, up to date?                          |     |       | 1  | 2   | 13   | 4.8     |
| NRCS Pasture Specialist | Understandable?                               |     |       | 1  | 3   | 13   | 4.7     |
|                         | Presented in an interesting way?              |     | 1     | 3  | 1   | 11   | 4.4     |
|                         | Did the program answer any questions you had? |     |       | 2  | 8   | 7    | 4.3     |
|                         | Did the workshop increase your knowledge?     |     |       | 3  | 2   | 12   | 4.5     |
|                         | Will you use the information learned?         |     | 1     |    | 4   | 12   | 4.6     |
|                         | Was this program worth your time?             |     |       | 2  | 2   | 13   | 4.6     |
| 38                      | Participants                                  |     |       | 38 |     |      | 4.6     |
| 17                      | V Evaluations Completed                       | 3   | hours | 17 | 45% |      |         |
| 114                     | contact hours                                 |     |       |    |     |      |         |
|                         |                                               |     |       |    |     |      |         |

|                               | 10/26/04                                      |     |       |    |     |      |         |
|-------------------------------|-----------------------------------------------|-----|-------|----|-----|------|---------|
| Soil                          |                                               | low |       |    |     | high | Average |
|                               | Was this lesson:                              | 1   | 2     | 3  | 4   | 5    |         |
| Craig Cogger                  | Current, up to date?                          |     |       |    | 2   | 19   | 4.9     |
| Soil Scientist, WSU Western V | Understandable?                               |     |       | 3  | 2   | 16   | 4.6     |
|                               | Presented in an interesting way?              |     |       | 1  | 1   | 18   | 4.9     |
|                               | Did the program answer any questions you had? |     | 1     |    | 5   | 14   | 4.6     |
|                               | Did the workshop increase your knowledge?     |     |       |    | 2   | 18   | 4.9     |
|                               | Will you use the information learned?         |     |       | 1  | 2   | 18   | 4.8     |
|                               | Was this program worth your time?             |     | 1     |    | 1   | 19   | 4.8     |
| 32                            | Participants                                  |     |       | 32 |     |      | 4.8     |
| 21                            | Evaluations Completed                         | 3   | hours | 21 | 66% |      |         |
| 96                            | contact hours                                 |     |       |    |     |      |         |
|                               |                                               |     |       |    |     |      |         |

|                       | 11/2/04                                       |     |       |    |     |      |         |
|-----------------------|-----------------------------------------------|-----|-------|----|-----|------|---------|
| Animals               |                                               | low |       |    |     | high | Average |
|                       | Was this lesson:                              | 1   | 2     | 3  | 4   | 5    |         |
| Penny Ramey           | Current, up to date?                          |     |       | 1  | 5   | 10   | 4.6     |
| Small Acreage Program | Understandable?                               |     |       | 2  | 3   | 11   | 4.6     |
|                       | Presented in an interesting way?              |     |       | 3  | 3   | 10   | 4.4     |
|                       | Did the program answer any questions you had? |     |       | 2  | 10  | 4    | 4.1     |
|                       | Did the workshop increase your knowledge?     |     | 4     | 1  | 3   | 7    | 3.9     |
|                       | Will you use the information learned?         | 1   | 3     | 1  | 3   | 8    | 3.9     |
|                       | Was this program worth your time?             |     | 1     | 3  | 4   | 8    | 4.2     |
| :                     | 25 Participants                               |     |       | 25 |     |      | 4.2     |
|                       | 16 Evaluations Completed                      | 3   | hours | 16 | 64% |      |         |
|                       | 75 contact hours                              |     |       |    |     |      |         |
|                       |                                               |     |       |    |     |      |         |

|                        | 11/2/04                                       |     |       |    |     |      |         |
|------------------------|-----------------------------------------------|-----|-------|----|-----|------|---------|
| Wildlife/Native Plants |                                               | low |       |    |     | high | Average |
|                        | Was this lesson:                              | 1   | 2     | 3  | 4   | 5    |         |
| Dean Longrie           | Current, up to date?                          |     |       |    | 4   | 10   | 4.7     |
| CD Supervisor          | Understandable?                               |     |       |    | 3   | 11   | 4.8     |
|                        | Presented in an interesting way?              |     |       |    | 4   | 10   | 4.7     |
|                        | Did the program answer any questions you had? |     |       | 3  | 4   | 4    | 4.1     |
|                        | Did the workshop increase your knowledge?     |     |       | 3  | 3   | 7    | 4.3     |
|                        | Will you use the information learned?         |     | 1     | 2  | 3   | 7    | 4.2     |
|                        | Was this program worth your time?             |     |       | 1  | 4   | 8    | 4.5     |
| 25                     | Participants                                  |     |       |    |     |      | 4.5     |
| 14                     | Evaluations Completed                         | 3   | hours | 25 |     |      |         |
| 75                     | contact hours                                 |     |       | 14 | 56% | _    |         |
|                        |                                               |     |       |    |     | -    |         |

|                 | 11/9/04                                       |     |       |    |     |      |         |
|-----------------|-----------------------------------------------|-----|-------|----|-----|------|---------|
| Water           |                                               | low |       |    |     | high | Average |
|                 | Was this lesson:                              | 1   | 2     | 3  | 4   | 5    |         |
| Reuel Emory     | Current, up to date?                          |     | 1     | 1  | 4   | 12   | 4.5     |
| CC Health Dept. | Understandable?                               | 2   |       | 1  | 5   | 11   | 4.2     |
| Joe Ellingson   | Presented in an interesting way?              | 1   | 1     | 2  | 6   | 9    | 4.1     |
| CC Health Dept. | Did the program answer any questions you had? | 1   |       | 3  | 4   | 11   | 4.3     |
|                 | Did the workshop increase your knowledge?     | 1   |       | 3  | 4   | 11   | 4.3     |
|                 | Will you use the information learned?         | 1   |       | 1  | 5   | 12   | 4.4     |
|                 | Was this program worth your time?             | 1   |       | 1  | 4   | 13   | 4.5     |
|                 | 24 Participants                               |     |       |    |     |      | 4.3     |
|                 | 19 Evaluations Completed                      | 3   | hours | 24 |     |      |         |
|                 | 72 contact hours                              |     |       | 19 | 79% | •    |         |
|                 |                                               |     |       |    |     | •    |         |

|                               | 11/16/04                                      |     |       |    |     |      |         |
|-------------------------------|-----------------------------------------------|-----|-------|----|-----|------|---------|
| Animals                       |                                               | low |       |    | ı   | nigh | Average |
|                               | Was this lesson:                              | 1   | 2     | 3  | 4   | 5    |         |
| Andy Bary                     | Current, up to date?                          |     |       | 1  | 2   | 16   | 4.8     |
| Soil Scientist, WSU Western \ | Understandable?                               |     |       | 1  | 5   | 12   | 4.6     |
|                               | Presented in an interesting way?              |     |       | 1  | 3   | 13   | 4.7     |
|                               | Did the program answer any questions you had? |     | 1     |    | 3   | 15   | 4.7     |
|                               | Did the workshop increase your knowledge?     |     |       | 1  | 3   | 15   | 4.7     |
|                               | Will you use the information learned?         |     | 1     |    | 5   | 13   | 4.6     |
|                               | Was this program worth your time?             |     | 1     |    | 3   | 15   | 4.7     |
| 24                            | Participants                                  |     |       |    |     |      | 4.7     |
| 19                            | Evaluations Completed                         | 3   | hours | 24 |     |      |         |
| 72                            | contact hours                                 |     |       | 19 | 79% |      |         |

| PROGRAM EVALUATION                          | Poor           |        |          |   | Excellent       | Average |
|---------------------------------------------|----------------|--------|----------|---|-----------------|---------|
|                                             | 1              | 2      | 3        | 4 | 5               |         |
| Overall score?                              |                |        | 1        | 4 | 13              | 4.7     |
|                                             | Not at<br>All  |        |          |   | Very Much<br>So |         |
| Answer most of your questions?              |                |        | 1        | 8 | 9               | 4.4     |
| Did you learn useful information?           |                |        | 1        | 2 | 15              | 4.8     |
|                                             | Very<br>Little |        | Some     |   | Quite A Lot     |         |
| How much will you use information to change |                |        |          |   |                 |         |
| practices?                                  |                |        | 2        | 4 | 12              | 4.6     |
|                                             |                |        |          |   |                 | 4.6     |
|                                             | Too long       | Ab     | out righ | t | Too short       |         |
| The program series was:                     | 1              | 4      | 11       | 1 | 1               | 3.2     |
| 26 Participants                             |                |        |          |   |                 |         |
| 18 Evaluations                              | 69% Com        | pleted |          |   |                 |         |
| 78 contact hours                            |                |        |          |   |                 |         |

### Winter 2004 Evaluations

| Inventory I - 1/13/2004                       |     |       |   |    |      |         |
|-----------------------------------------------|-----|-------|---|----|------|---------|
| Doug Stienbarger WSU EXT                      |     |       |   |    |      |         |
| Rich Bachert NRCS                             | low |       |   |    | high | Average |
| Was this lesson:                              | 1   | 2     | 3 | 4  | 5    |         |
| Current, up to date?                          |     |       | 3 | 11 | 17   | 4.5     |
| Understandable?                               |     | 1     | 3 | 15 | 12   | 4.2     |
| Presented in an interesting way?              |     |       | 4 | 12 | 15   | 4.4     |
| Did the program answer any questions you had? |     | 2     | 6 | 12 | 11   | 4.0     |
| Did the workshop increase your knowledge?     | 1   | 3     | 8 | 12 | 7    | 3.7     |
| Will you use the information learned?         |     | 1     | 6 | 5  | 19   | 4.4     |
| Was this program worth your time?             |     | 1     | 2 | 9  | 19   | 4.5     |
| 43 Participants                               |     |       |   |    |      | 4.2     |
| 31 Evaluations Completed                      | 3   | hours | 3 |    |      |         |
| 129 contact hours                             |     |       |   |    |      |         |

| Inventory II - 1/20/2004                      |     |       |   |    |      |         |
|-----------------------------------------------|-----|-------|---|----|------|---------|
| Doug Stienbarger WSU EXT                      |     |       |   |    |      |         |
| Sheila Pendleton-Orme - CC Code Enforcement   | low |       |   |    | high | Average |
| Was this lesson:                              | 1   | 2     | 3 | 4  | 5    |         |
| Current, up to date?                          |     |       |   | 9  | 17   | 4.7     |
| Understandable?                               |     |       |   | 11 | 15   | 4.6     |
| Presented in an interesting way?              |     |       | 3 | 10 | 13   | 4.4     |
| Did the program answer any questions you had? |     |       | 3 | 8  | 15   | 4.5     |
| Did the workshop increase your knowledge?     |     | 1     | 2 | 9  | 14   | 4.4     |
| Will you use the information learned?         |     |       | 2 | 3  | 21   | 4.7     |
| Was this program worth your time?             |     |       | 1 | 3  | 22   | 4.8     |
| 45 Participants                               |     |       |   |    |      | 4.6     |
| 26 Evaluations Completed                      | 3   | hours | 3 |    |      |         |
| 35 contact hours                              |     |       |   |    |      |         |

| Soils I - 1/27/2004                           |     |    |     |   |      |         |
|-----------------------------------------------|-----|----|-----|---|------|---------|
| Steve Keirn Clark CD                          |     |    |     |   |      |         |
| Doug Fenwick NRCS                             | low |    |     |   | high | Average |
| Was this lesson:                              | 1   | 2  | 3   | 4 | 5    |         |
| Current, up to date?                          | 1   |    | 9   | 6 | 10   | 3.9     |
| Understandable?                               | 2   | 4  | 10  | 5 | 5    | 3.3     |
| Presented in an interesting way?              | 3   | 1  | 2   | 9 | 11   | 3.9     |
| Did the program answer any questions you had? | 2   | 1  | 7   | 8 | 8    | 3.7     |
| Did the workshop increase your knowledge?     | 3   | 3  | 7   | 4 | 9    | 3.5     |
| Will you use the information learned?         | 2   | 2  | 6   | 5 | 11   | 3.8     |
| Was this program worth your time?             | 3   | 1  | 6   | 6 | 10   | 3.7     |
| 45 Participants                               |     |    |     |   |      | 3.7     |
| 26 Evaluations Completed                      | 3   | ho | urs |   |      |         |
| 135 contact hours                             |     |    |     |   |      |         |

#### Water - 2/3/2004 Gary Bock WSU Ext Watershed Stewards Cary Armstrong CC Public Works high Average low Was this lesson: 1 2 3 5 Current, up to date? 1 4 25 4.8 Understandable? 3 1 26 4.8 Presented in an interesting way? 1 4 25 4.8 Did the program answer any questions you had? 1 4 11 24 4.4 Did the workshop increase your knowledge? 2 7 20 4.5 1 Will you use the information learned? 1 5 22 1 4.6 Was this program worth your time? 2 4 4.7 23 46 Participants 4.7

30 Evaluations Completed

138 contact hours

| Animals | - 2/ | 10/ | 2004 |
|---------|------|-----|------|
| WOLLE   |      |     |      |

Penny Ramey, WSU Ext

|                                               | low |   |   |   | high | Average |
|-----------------------------------------------|-----|---|---|---|------|---------|
| Was this lesson:                              | 1   | 2 | 3 | 4 | 5    |         |
| Current, up to date?                          |     |   | 1 | 4 | 19   | 4.8     |
| Understandable?                               |     |   |   | 3 | 21   | 4.9     |
| Presented in an interesting way?              |     |   |   | 3 | 21   | 4.9     |
| Did the program answer any questions you had? |     |   | 2 | 5 | 17   | 4.6     |
| Did the workshop increase your knowledge?     |     |   | 2 | 7 | 15   | 4.5     |
| Will you use the information learned?         | 2   | 1 | 2 | 4 | 15   | 4.2     |
| Was this program worth your time?             |     |   | 3 | 3 | 18   | 4.6     |
| Participants                                  |     |   |   |   |      | 4.6     |

24 Evaluations Completed

3 hours

3 hours

123 contact hours

#### Soils II - 2/17/2004

Charles Brun, WSU Ext.

|                                               | low |   |   |    | high | Average |
|-----------------------------------------------|-----|---|---|----|------|---------|
| Was this lesson:                              | 1   | 2 | 3 | 4  | 5    |         |
| Current, up to date?                          |     |   | 2 | 8  | 15   | 4.5     |
| Understandable?                               |     | 1 | 2 | 10 | 12   | 4.3     |
| Presented in an interesting way?              |     | 1 | 4 | 8  | 14   | 4.3     |
| Did the program answer any questions you had? |     | 2 | 4 | 11 | 10   | 4.1     |
| Did the workshop increase your knowledge?     |     | 1 | 4 | 11 | 11   | 4.2     |
| Will you use the information learned?         |     | 2 | 5 | 5  | 15   | 4.2     |
| Was this program worth your time?             |     | 1 | 4 | 6  | 16   | 4.4     |
| Participants                                  |     |   |   |    |      | 4.3     |

27 Evaluations Completed

111 contact hours

3 hours

| Animals II / Water Testing - 2/24/2004        |     |       |   |   |      |         |
|-----------------------------------------------|-----|-------|---|---|------|---------|
| Gary Fredricks, WSU Ext                       |     |       |   |   |      |         |
| Tom Newman, Addy Labs                         | low |       |   |   | high | Average |
| Was this lesson:                              | 1   | 2     | 3 | 4 | 5    |         |
| Current, up to date?                          |     |       |   | 3 | 20   | 4.9     |
| Understandable?                               |     |       |   | 3 | 20   | 4.9     |
| Presented in an interesting way?              |     |       |   | 3 | 20   | 4.9     |
| Did the program answer any questions you had? |     |       | 1 | 3 | 19   | 4.8     |
| Did the workshop increase your knowledge?     |     |       |   | 4 | 19   | 4.8     |
| Will you use the information learned?         | 3   |       | 1 | 1 | 18   | 4.3     |
| Was this program worth your time?             |     |       | 1 | 2 | 20   | 4.8     |
| 36 Participants                               |     |       |   |   |      | 4.8     |
| 23 Evaluations Completed                      | 3   | hours | 3 |   |      |         |
| 108 contact hours                             |     |       |   |   |      |         |

| Composting / Wildlife - 3/2/2004              |     |   |   |   |      |         |
|-----------------------------------------------|-----|---|---|---|------|---------|
| Rachel Maggi, NRCS                            |     |   |   |   |      |         |
| Kelly Slocum, BonTerra                        | low |   |   |   | high | Average |
| Was this lesson:                              | 1   | 2 | 3 | 4 | 5    |         |
| Current, up to date?                          |     |   |   | 1 | 18   | 4.9     |
| Understandable?                               |     |   |   | 1 | 18   | 4.9     |
| Presented in an interesting way?              |     |   |   |   | 19   | 5.0     |
| Did the program answer any questions you had? |     |   | 1 | 1 | 17   | 4.8     |
| Did the workshop increase your knowledge?     |     |   |   | 1 | 18   | 4.9     |
| Will you use the information learned?         |     |   |   |   | 19   | 5.0     |
| Was this program worth your time?             |     |   |   |   | 19   | 5.0     |
| 35 Participants                               |     |   |   |   |      | 5.0     |
| 19 Evaluations Completed                      | 3   |   |   |   |      |         |
| 105 contact hours                             |     |   |   |   |      |         |

| Septics & Wells - 3/9/2004                    |     |       |   |   |      |                |
|-----------------------------------------------|-----|-------|---|---|------|----------------|
| Reuel Emory, CC Health Dept.                  |     |       |   |   |      |                |
| Joe Ellingson, CC Health Dept.                | low |       |   |   | high | <b>Average</b> |
| Was this lesson:                              | 1   | 2     | 3 | 4 | 5    |                |
| Current, up to date?                          |     |       | 1 | 4 | 24   | 4.8            |
| Understandable?                               |     |       | 1 | 4 | 24   | 4.8            |
| Presented in an interesting way?              |     |       | 2 | 5 | 22   | 4.7            |
| Did the program answer any questions you had? |     |       | 4 | 8 | 17   | 4.4            |
| Did the workshop increase your knowledge?     |     |       | 5 | 8 | 16   | 4.4            |
| Will you use the information learned?         |     |       | 2 | 7 | 20   | 4.6            |
| Was this program worth your time?             |     |       | 1 | 4 | 24   | 4.8            |
| 41 Participants                               |     |       |   |   |      | 4.6            |
| 29 Evaluations Completed                      | 3   | hours | 3 |   |      |                |
| 23 contact hours                              |     |       |   |   |      |                |

#### Weeds - 3/16/2004

Ron Hendrickson, Clark Co. Weed Management

|                                               | low |   |   |   | high | Average |
|-----------------------------------------------|-----|---|---|---|------|---------|
| Was this lesson:                              | 1   | 2 | 3 | 4 | 5    |         |
| Current, up to date?                          |     |   |   | 1 | 17   | 4.9     |
| Understandable?                               |     |   |   | 1 | 17   | 4.9     |
| Presented in an interesting way?              |     |   | 1 | 3 | 14   | 4.7     |
| Did the program answer any questions you had? |     |   | 1 | 1 | 16   | 4.8     |
| Did the workshop increase your knowledge?     |     |   | 1 | 1 | 16   | 4.8     |
| Will you use the information learned?         |     |   |   | 2 | 16   | 4.9     |
| Was this program worth your time?             |     |   |   | 1 | 17   | 4.9     |
| Participants                                  |     |   |   |   |      | 4.9     |

35 Participants

18 Evaluations Completed

105 contact hours

3 hours

#### Pasture & Grass - 3/23/2004

Marty Chaney, NRCS Pasture Specialis

|                                               | low |   |   |   | high | Average |
|-----------------------------------------------|-----|---|---|---|------|---------|
| Was this lesson:                              | 1   | 2 | 3 | 4 | 5    |         |
| Current, up to date?                          |     |   |   | 4 | 14   | 4.8     |
| Understandable?                               |     | 1 | 1 | 3 | 13   | 4.6     |
| Presented in an interesting way?              |     | 1 | 3 | 5 | 9    | 4.2     |
| Did the program answer any questions you had? |     |   | 2 | 5 | 11   | 4.5     |
| Did the workshop increase your knowledge?     |     |   | 2 | 4 | 12   | 4.6     |
| Will you use the information learned?         |     |   | 2 | 5 | 11   | 4.5     |
| Was this program worth your time?             |     | 1 | 1 | 5 | 11   | 4.4     |
| Participants                                  |     |   |   |   |      | 4.5     |

31 Participants

18 Evaluations Completed

93 contact hours

3 hours

#### Riparian Areas & BMPS - 3/30/2004

Toni Nesland, Columbia SWCD

|                                               | low |   |   |   | high | Average |
|-----------------------------------------------|-----|---|---|---|------|---------|
| Was this lesson:                              | 1   | 2 | 3 | 4 | 5    |         |
| Current, up to date?                          |     |   | 1 | 4 | 17   | 4.7     |
| Understandable?                               |     |   | 1 | 4 | 17   | 4.7     |
| Presented in an interesting way?              |     |   | 1 | 2 | 19   | 4.8     |
| Did the program answer any questions you had? | 3   |   | 3 | 6 | 10   | 3.9     |
| Did the workshop increase your knowledge?     | 3   |   | 5 | 3 | 11   | 3.9     |
| Will you use the information learned?         | 2   | 2 | 6 | 4 | 8    | 3.6     |
| Was this program worth your time?             | 2   |   | 2 | 7 | 11   | 4.1     |
| Participants                                  |     |   |   |   |      | 4.3     |

36 Participants

22 Evaluations Completed

108 contact hours

3 hours

# LOL PROGRAM EVALUATION SUMMARY WINTER 2004

| 3/30/2004                      | Poor          |   |          |     | Excellent       | Average |
|--------------------------------|---------------|---|----------|-----|-----------------|---------|
|                                | 1             | 2 | 3        | 4   | 5               |         |
| Overall score?                 |               |   | 2        | 8   | 21              | 4.6     |
|                                | Not at<br>All |   |          |     | Very Much<br>So |         |
| Answer most of your questions? |               | 1 | 2        | 10  | 18              | 4.5     |
| Did you learn useful           |               |   |          |     |                 |         |
| information?                   |               |   | 2        | 8   | 21              | 4.6     |
|                                | Very          |   |          |     |                 |         |
|                                | Little        |   | Some     |     | Quite A Lot     |         |
| How much will you use          |               |   |          |     |                 |         |
| information to change          |               |   |          |     |                 |         |
| practices?                     |               | 1 | 3        | 10  | 17              | 4.4     |
|                                |               |   |          |     |                 | 4.6     |
|                                | Too long      | Α | bout rig | ht  | Too short       |         |
| The program series was:        |               | 6 | 18.5     | 3.5 | 3               | 3.1     |
|                                |               |   |          | ı   | 1               |         |
| Participants                   |               |   |          |     |                 |         |
| Evaluations Completed          |               |   |          |     |                 |         |
| contact hours                  |               |   |          |     |                 |         |

# **Appendix D: Living on the Land Certificate of Completion**

# Living on the Land: Stewardship for Small Acreages Program

Washington State University Extension, the Clark County Clean Water Program and the Clark Conservation District Certify that

Successfully completed 36 hours of instruction in the *Living on the Land:*Stewardship for Small Acreages class series.

Inventorying Resources I & II; Soil Properties; Keeping Soil Productive; Watersheds; Water Quality; Protecting Drinking Water; How Grass Grows; Pasture Management; Weed Management; Animal Ownership; Avoiding Negative Animal Impacts; Grazing Management

| Awarded the                           | day of 2004         |
|---------------------------------------|---------------------|
| Douglas Stienbarger                   | Penny Ramey         |
| Director, WSU Extension, Clark County | Program Coordinator |







World Class. Face to Face.

# **Appendix E: BMP Workshops**

Wells & Septic Systems 2004 Schedule

WELLS & SEPTIC SYSTEMS WORKSHOP AGENDA

WELLS & SEPTIC SYSTEMS WORKSHOP PAID ADVERTISEMENT

THE REFLECTOR MAY 5, 2004

Wells & Septic Systems Workshop Evaluations

WEEDS & FENCING WORKSHOP EVALUATIONS

WEEDS & FENCING WORKSHOP PUBLISHED PRESS RELEASES

CAPITAL PRESS, JUNE 18, 2004

THE COLUMBIAN, JUNE 23, 2004

THE REFLECTOR, JUNE 23, 2004

#### Wells & Septic Systems 2004 Schedule

| Date       | Time         | Location                                                                    |
|------------|--------------|-----------------------------------------------------------------------------|
| January 21 | 3:00 to 5:30 | Public Safety Complex, 505 NW 179th Street                                  |
|            | 6:30 to 9:00 |                                                                             |
| March 9    | 3:00 to 5:30 | CASEE, 11104 NE 149 Street B 202, Brush Prairie                             |
|            | 6:30 to 9:00 |                                                                             |
| May 12     | 6:30 to 9:00 | Hockinson Fire District 3, 17718 NE 159 <sup>th</sup> Street, Brush Prairie |

#### WORKSHOP AGENDA: MAINTENANCE OF WELLS AND SEPTIC SYSTEMS

| Topic                                                     | Speaker                                     |
|-----------------------------------------------------------|---------------------------------------------|
| Introduction                                              | Penny Ramey, WSU Small Acreage              |
|                                                           | Program; Becky Meats, Clark CD              |
| Maintenance of Wells                                      | Joe Ellingson – Environmental Health, Clark |
| Origin of drinking water; What is a well?; How does it    | County Health Department                    |
| work?; Protecting water supplies; How to tell if water is |                                             |
| safe; Sampling wells                                      |                                             |
| Break                                                     |                                             |
| Septic Maintenance & Inspection                           | Reuel Emery – Environmental Health, Clark   |
| Water Pollution; Septic System Failure; System            | County Health Department                    |
| Components; Maintenance Steps; Typical Repair Needs;      |                                             |
| Alternate Systems; Safety                                 |                                             |
| Questions and Answers / Evaluations                       |                                             |

### WELLS & SEPTIC SYSTEMS WORKSHOP ADVERTISEMENT



# Wells & Septic Systems Workshop Evaluations

| 1/21/2004 3:00pm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                  |                   |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                     |                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------|
| Reuel Emory, Clark County Health Dept.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | low                                              |                   |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | high                                                | Average                                                                                     |
| Was this lesson:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1 1                                              | 2                 | 3                   | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 5                                                   | Average                                                                                     |
| Content as announced?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                  |                   | 1                   | 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 9                                                   | 4.5                                                                                         |
| Understandable?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                  |                   |                     | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 13                                                  | 4.8                                                                                         |
| Presented in an interesting way?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                  | 1                 | 1                   | 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 9                                                   | 4.4                                                                                         |
| Did the program answer any questions you had                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 12                                               |                   | 2                   | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 10                                                  | 4.5                                                                                         |
| Will you use the information learned?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1                                                |                   |                     | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 14                                                  | 4.8                                                                                         |
| Was this program worth your time?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                  |                   |                     | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 12                                                  | 4.7                                                                                         |
| was this program worth your time:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                  |                   |                     | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 12                                                  | 4.7                                                                                         |
| 21 Participants                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ı                                                |                   |                     | Overall                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Average                                             | 4.6                                                                                         |
| •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.5                                              | haura             |                     | Overall                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Average                                             | 4.0                                                                                         |
| 17 Evaluations Completed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2.5                                              | 1                 |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                     | lou.                                                                                        |
| 52.5 contact hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Columbian                                        |                   | Letter              | e-maii                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Newsletter                                          |                                                                                             |
| Where did you find out about this workshop?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8                                                | 1                 | 5                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                     | 3                                                                                           |
| 1/21/2004 6:30pm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                  |                   |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                     |                                                                                             |
| Reuel Emory, Clark County Health Dept.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | low                                              |                   |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | high                                                | Average                                                                                     |
| Was this lesson:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1                                                | 2                 | 3                   | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 5                                                   | I                                                                                           |
| Content as announced?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | '                                                |                   | 3                   | 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 8                                                   | 15                                                                                          |
| Understandable?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <del>                                     </del> |                   |                     | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 10                                                  | 4.5<br>4.7                                                                                  |
| Presented in an interesting way?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <del>                                     </del> |                   | 1                   | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 11                                                  | 4.7                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 12                                               |                   | 4                   | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 8                                                   | 4.7                                                                                         |
| Did the program answer any questions you had Will you use the information learned?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1 !                                              |                   | 1                   | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 11                                                  | 4.3                                                                                         |
| Was this program worth your time?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                  |                   | 1                   | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 11                                                  | 4.7                                                                                         |
| was this program worth your time?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                  |                   |                     | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 11                                                  | 4.7                                                                                         |
| 10 Double in conta                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                  |                   |                     | Overall                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | A.,                                                 | 4.0                                                                                         |
| 18 Participants                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.5                                              |                   |                     | Overall                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Average                                             | 4.6                                                                                         |
| 15 Evaluations Completed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2.5                                              | hours             |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                     |                                                                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                  |                   |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                     |                                                                                             |
| 45 contact hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Columbian                                        |                   | Letter              | e-mail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Newsletter                                          | Other                                                                                       |
| 45 contact hours Where did you find out about this workshop?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Columbian<br>13                                  | Reflector<br>3    | Letter<br>1         | e-mail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Newsletter                                          | Other                                                                                       |
| Where did you find out about this workshop?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                  |                   |                     | e-mail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Newsletter                                          | Other                                                                                       |
| Where did you find out about this workshop?  3/9/2004 3:00pm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                  |                   |                     | e-mail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Newsletter                                          | Other                                                                                       |
| Where did you find out about this workshop?  3/9/2004 3:00pm  Reuel Emory, Clark County Health Dept.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 13                                               |                   |                     | e-mail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                     |                                                                                             |
| Where did you find out about this workshop?  3/9/2004 3:00pm  Reuel Emory, Clark County Health Dept. Joe Ellingson, Clark County Health Dept.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 13                                               | 3                 | 1                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | high                                                |                                                                                             |
| Where did you find out about this workshop?  3/9/2004 3:00pm  Reuel Emory, Clark County Health Dept. Joe Ellingson, Clark County Health Dept. Was this lesson:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 13                                               |                   |                     | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | high 5                                              | Average                                                                                     |
| Where did you find out about this workshop?  3/9/2004 3:00pm  Reuel Emory, Clark County Health Dept.  Joe Ellingson, Clark County Health Dept.  Was this lesson:  Content as announced?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 13                                               | 3                 | 1                   | 4 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>high</b> 5 5                                     | Average                                                                                     |
| Where did you find out about this workshop?  3/9/2004 3:00pm  Reuel Emory, Clark County Health Dept.  Joe Ellingson, Clark County Health Dept.  Was this lesson:  Content as announced?  Understandable?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 13                                               | 3                 | 1                   | 4 2 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>high</b> 5 5 5                                   | Average 4.7 4.7                                                                             |
| Where did you find out about this workshop?  3/9/2004 3:00pm  Reuel Emory, Clark County Health Dept. Joe Ellingson, Clark County Health Dept. Was this lesson: Content as announced? Understandable? Presented in an interesting way?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 13<br>low                                        | 3                 | 1                   | 4<br>2<br>2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>high</b> 5 5 5                                   | Average 4.7 4.7 4.9                                                                         |
| Where did you find out about this workshop?  3/9/2004 3:00pm  Reuel Emory, Clark County Health Dept.  Joe Ellingson, Clark County Health Dept.  Was this lesson:  Content as announced?  Understandable?  Presented in an interesting way?  Did the program answer any questions you had                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 13<br>low                                        | 3                 | 1                   | 4<br>2<br>2<br>1<br>2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | high 5 5 6 6 5                                      | 4.7<br>4.7<br>4.9<br>4.7                                                                    |
| Where did you find out about this workshop?  3/9/2004 3:00pm  Reuel Emory, Clark County Health Dept.  Joe Ellingson, Clark County Health Dept.  Was this lesson:  Content as announced?  Understandable?  Presented in an interesting way?  Did the program answer any questions you had Will you use the information learned?                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 13<br>low                                        | 3                 | 1                   | 4<br>2<br>2<br>1<br>2<br>2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | high 5 5 6 5 5 5                                    | 4.7<br>4.7<br>4.9<br>4.7                                                                    |
| Where did you find out about this workshop?  3/9/2004 3:00pm  Reuel Emory, Clark County Health Dept.  Joe Ellingson, Clark County Health Dept.  Was this lesson:  Content as announced?  Understandable?  Presented in an interesting way?  Did the program answer any questions you had                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 13<br>low                                        | 3                 | 1                   | 4<br>2<br>2<br>1<br>2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | high 5 5 6 6 5                                      | 4.7<br>4.7<br>4.9<br>4.7                                                                    |
| Where did you find out about this workshop?  3/9/2004 3:00pm  Reuel Emory, Clark County Health Dept. Joe Ellingson, Clark County Health Dept. Was this lesson: Content as announced? Understandable? Presented in an interesting way? Did the program answer any questions you had Will you use the information learned? Was this program worth your time?                                                                                                                                                                                                                                                                                                                                                                                                                      | 13<br>low                                        | 3                 | 1                   | 4<br>2<br>2<br>1<br>2<br>1<br>2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | high 5 5 5 6 5 5 6                                  | 4.7<br>4.7<br>4.9<br>4.7<br>4.9                                                             |
| Where did you find out about this workshop?  3/9/2004 3:00pm  Reuel Emory, Clark County Health Dept. Joe Ellingson, Clark County Health Dept. Was this lesson: Content as announced? Understandable? Presented in an interesting way? Did the program answer any questions you had Will you use the information learned? Was this program worth your time?                                                                                                                                                                                                                                                                                                                                                                                                                      | 13  low  1                                       | 2                 | 1                   | 4<br>2<br>2<br>1<br>2<br>1<br>2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | high 5 5 6 5 5 5                                    | 4.7<br>4.7<br>4.9<br>4.7                                                                    |
| Where did you find out about this workshop?  3/9/2004 3:00pm  Reuel Emory, Clark County Health Dept. Joe Ellingson, Clark County Health Dept. Was this lesson: Content as announced? Understandable? Presented in an interesting way? Did the program answer any questions you had Will you use the information learned? Was this program worth your time?  11 Participants 7 Evaluations Completed                                                                                                                                                                                                                                                                                                                                                                             | 13<br>low<br>1                                   | 2 hours           | 3                   | 4 2 2 1 1 2 2 1 1 Overall                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | high 5 5 5 6 5 5 6                                  | 4.7<br>4.7<br>4.9<br>4.7<br>4.7<br>4.9                                                      |
| Where did you find out about this workshop?  3/9/2004 3:00pm  Reuel Emory, Clark County Health Dept. Joe Ellingson, Clark County Health Dept. Was this lesson: Content as announced? Understandable? Presented in an interesting way? Did the program answer any questions you had Will you use the information learned? Was this program worth your time?  11 Participants 7 Evaluations Completed 27.5 contact hours                                                                                                                                                                                                                                                                                                                                                          | low 1 1 ? Columbian                              | 2 hours           | 3<br>Letter         | 4 2 2 1 1 2 2 1 1 Overall                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | high 5 5 5 6 5 5 6                                  | 4.7<br>4.7<br>4.9<br>4.7<br>4.7<br>4.9                                                      |
| Where did you find out about this workshop?  3/9/2004 3:00pm  Reuel Emory, Clark County Health Dept. Joe Ellingson, Clark County Health Dept. Was this lesson: Content as announced? Understandable? Presented in an interesting way? Did the program answer any questions you had Will you use the information learned? Was this program worth your time?  11 Participants 7 Evaluations Completed                                                                                                                                                                                                                                                                                                                                                                             | 13<br>low<br>1                                   | 2 hours           | 3                   | 4 2 2 1 1 2 2 1 1 Overall                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | high 5 5 5 6 5 5 6                                  | 4.7<br>4.7<br>4.9<br>4.7<br>4.7<br>4.9                                                      |
| Where did you find out about this workshop?  3/9/2004 3:00pm  Reuel Emory, Clark County Health Dept. Joe Ellingson, Clark County Health Dept. Was this lesson: Content as announced? Understandable? Presented in an interesting way? Did the program answer any questions you had will you use the information learned? Was this program worth your time?  11 Participants 7 Evaluations Completed 27.5 contact hours Where did you find out about this workshop?                                                                                                                                                                                                                                                                                                              | low 1 1 ? Columbian                              | 2 hours           | 3<br>Letter         | 4 2 2 1 1 2 2 1 1 Overall                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | high 5 5 5 6 5 5 6                                  | 4.7<br>4.7<br>4.9<br>4.7<br>4.7<br>4.9                                                      |
| Where did you find out about this workshop?  3/9/2004 3:00pm  Reuel Emory, Clark County Health Dept. Joe Ellingson, Clark County Health Dept. Was this lesson: Content as announced? Understandable? Presented in an interesting way? Did the program answer any questions you had Will you use the information learned? Was this program worth your time?  11 Participants 7 Evaluations Completed 27.5 contact hours Where did you find out about this workshop?  3/9/2004 6:30pm                                                                                                                                                                                                                                                                                             | low 1 1 ? Columbian                              | 2 hours           | 3<br>Letter         | 4 2 2 1 1 2 2 1 1 Overall                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | high 5 5 5 6 5 5 6                                  | 4.7<br>4.7<br>4.9<br>4.7<br>4.7<br>4.9                                                      |
| Where did you find out about this workshop?  3/9/2004 3:00pm  Reuel Emory, Clark County Health Dept. Joe Ellingson, Clark County Health Dept. Was this lesson: Content as announced? Understandable? Presented in an interesting way? Did the program answer any questions you had Will you use the information learned? Was this program worth your time?  11 Participants 7 Evaluations Completed 27.5 contact hours Where did you find out about this workshop?  3/9/2004 6:30pm Reuel Emory, Clark County Health Dept.                                                                                                                                                                                                                                                      | low 1 2.5 Columbian 2                            | 2 hours           | 3<br>Letter         | 4 2 2 1 1 2 2 1 1 Overall                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | high                                                | 4.7<br>4.7<br>4.9<br>4.7<br>4.9<br>4.9<br>4.8<br>Other                                      |
| Where did you find out about this workshop?  3/9/2004 3:00pm  Reuel Emory, Clark County Health Dept. Joe Ellingson, Clark County Health Dept. Was this lesson: Content as announced? Understandable? Presented in an interesting way? Did the program answer any questions you had Will you use the information learned? Was this program worth your time?  11 Participants 7 Evaluations Completed 27.5 contact hours Where did you find out about this workshop?  3/9/2004 6:30pm  Reuel Emory, Clark County Health Dept. Joe Ellingson, Clark County Health Dept.                                                                                                                                                                                                            | low  1  2.5  Columbian 2                         | 2 hours Reflector | 1 3 Letter 3        | 4 2 2 1 1 2 2 1 1 Overall e-mail 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | high 5 5 6 6 5 6 Average                            | 4.7<br>4.7<br>4.9<br>4.7<br>4.7<br>4.9                                                      |
| Where did you find out about this workshop?  3/9/2004 3:00pm Reuel Emory, Clark County Health Dept. Joe Ellingson, Clark County Health Dept. Was this lesson: Content as announced? Understandable? Presented in an interesting way? Did the program answer any questions you had Will you use the information learned? Was this program worth your time?  11 Participants 7 Evaluations Completed 27.5 contact hours Where did you find out about this workshop?  3/9/2004 6:30pm Reuel Emory, Clark County Health Dept. Joe Ellingson, Clark County Health Dept. Was this lesson:                                                                                                                                                                                             | low 1 2.5 Columbian 2                            | 2 hours           | 1 3 Letter 3        | 4 2 2 1 1 2 2 1 1 Overall e-mail 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | high                                                | 4.7<br>4.7<br>4.9<br>4.7<br>4.7<br>4.9<br>4.8<br>Other<br>1                                 |
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| Where did you find out about this workshop?  3/9/2004 3:00pm Reuel Emory, Clark County Health Dept. Joe Ellingson, Clark County Health Dept. Was this lesson: Content as announced? Understandable? Presented in an interesting way? Did the program answer any questions you had Will you use the information learned? Was this program worth your time?  11 Participants 7 Evaluations Completed 27.5 contact hours Where did you find out about this workshop?  3/9/2004 6:30pm Reuel Emory, Clark County Health Dept. Joe Ellingson, Clark County Health Dept. Was this lesson: Content as announced? Understandable? Presented in an interesting way? Did the program answer any questions you had Will you use the information learned?                                   | low 1 2.5 Columbian 2                            | 2 hours Reflector | 1 3 3 1 1 1 5 4 2 2 | 4   2   2   1   2   2   1   1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | high 5 5 6 6 8 Average Newsletter 5 24 24 22 17 20  | 4.7<br>4.7<br>4.9<br>4.7<br>4.9<br>4.8<br>Other<br>1<br>Average<br>4.8<br>4.8<br>4.6<br>4.4 |
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#### FENCING AND WEED MANAGEMENT WORKSHOP EVALUATION

| Was this workshop: (scale 1-5 with 5 being most useful) | Average |
|---------------------------------------------------------|---------|
| Current, up to date?                                    | 5       |
| Understandable?                                         | 5       |
| Did you learn how to do new things?                     | 5       |
| Presented in an interesting way?                        | 5       |
| Did the program answer any questions you had?           | 5       |
| Will you use the information learned?                   | 5       |
| Was this program worth your time?                       | 5       |
| Total Participants                                      | 16      |
| Evaluations completed                                   | 9       |
| % completed evaluations                                 | 56.3%   |

### WEEDS & FENCING WORKSHOP PUBLISHED PRESS RELEASES

#### THE REFLECTOR

Page A14 - The Reflector - June 23, 2004

# **Calendar of Events**

FENCING FIELD DAY, a free, hands-on workshop on building electric fences, is set for Sat., June 26, 9 a.m.-2 p.m., conducted by the Cooperative Extension Service, others. Fence placement, corner posts, braces. Limited to 15 people: To register, 397-6060, ext. 0.



# Small Acreage

June 18, 2004 **21** 

THE COLUMBIAN JUNE 23. WEDNESDAY, JUNE 23, 2004

# Electric fence to be subject of workshop

BRUSH PRAIRIE, Wash. – Installing electric fencing is the subject of a free hands-on fencing workshop from 9 a.m. to 2 p.m. Saturday, June 26. Fence placement, corner posts and braces will be discussed.

Mike Maggitti of Gallagher Power Fence Inc. will guide the workshop, sponsored by the Clark County Clean Water Program, Clark Conservation District, and WSU Extension Small Acreage Program.

"Fencing is not only important in managing your animals and pastures, but it is also the most effective way of protecting our water resources from those same animals," said Doug Stienbarger, director of WSU Extension Clark County. "Participants in this workshop actually build a section of New Zealand fence so the lesson stays with them longer."

Class size is limited to 15 participants. Call (360) 397-6060 ext. 0 to register or get directions. Bring a sack lunch, and dress for the weather and activities (boots, gloves, etc.).

Persons requiring special accommodations while participating in this program should call WSU Extension Clark County at the above number at least two weeks prior to the event.

# **Around the County**

BRUSH PRAIRIE

# Free electric fencing workshop Saturday

The first 15 people to sign up will learn to build an electric fence in a free workshop Saturday from 9 a.m. to 2 p.m.

Mike Maggitti of Gallagher Power Fence Inc. will lead the workshop, which is sponsored by the Clark County Clean Water Program, Clark Conservation District and Washington State University Extension Small Acreage Program.

Fencing is important in managing animals and pastures and for protecting water resources, Doug Stienbarger, WSU extension director, said in a press release.

Participants will build a section of fence so the lesson stays with them longer, Stienbarger said.

They'll also have the opportunity to ask experts questions on weed control, pasture and manure composting.

For more information and to register call 360-397-6060 Ext. 0.

Fence builders should bring a sack lunch and dress with boots and gloves as well as for the weather and activities, organizers said.

# **Appendix F: Farm Tours**

Svendsen Farm – Published Press Releases for April 3, 2004 Tour

THE OREGONIAN, MARCH 19, 2004
THE REFLECTOR, MARCH 24, 2004 – CALENDAR ITEM & PRESS RELEASE
CAPITAL PRESS, MARCH 26, 2004

QUARRY RIDGE STABLE - PUBLISHED PRESS RELEASES FOR MAY 1, 2004 TOUR

THE COLUMBIAN, APRIL 21, 2004 THE REFLECTOR, April 28, 2004

Z & M RANCH - PUBLISHED PRESS RELEASES FOR SEPTEMBER 18, 2004 TOUR

CAPITAL PRESS, SEPTEMBER 3, 2004
THE COLUMBIAN, SEPTEMBER 13, 2004
THE REFLECTOR, SEPTEMBER 1, 2004
CLARK COUNTY EXECUTIVE HORSE COUNCIL NEWSLETTER ARTICLE, OCTOBER ISSUE

Z & M RANCH - PUBLISHED PRESS RELEASES FOR NOVEMBER 20, 2004 TOUR

THE OREGONIAN, NOVEMBER 18, 2004 THE REFLECTOR, NOVEMBER 17, 2004

2004 Model Farm Tours Evaluation Summary

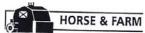
# Calendar of Events

#### Small farm tour offered

A free, owner-hosted tour of a small acreage horse farm will take place Sat., April 3, 10 a.m.-noon, sponsored by the Washington State University Small Acreage Program, Clark County Clean Water Program, and Clark Conservation District.

"This farm shows the real life issues a landowner must address while trying to reduce mud on a property with a lot of water," said Doug Stienbarger of the Cooperative Extension Program. "Visitors will learn simple and practical tips for making a small acreage farm more efficient and useable for the owners, their animals and the environment."

Register for the tour by calling 397-6060, ext. 0.



SMALL ACREAGE FARM TOUR Sat., April 3, 10 a.m.-noon, hosted by WSU Extension Clark County, County Clean Water Program and Clark Conservation District Free. Tips to make small acreage farm efficient and usable. Register, get directions, information, 397-6060, ext. 0

THE OREGONIAN ◆ FRIDAY, MARCH 19, 2004

# COUNTY CURRENTS

# Small acreage program tour scheduled April 3

BRUSH PRAIRIE — People interested in learning about small acreage property management can participate in an owner-hosted tour of a horse farm from 10 a.m. to noon April 3. The tour, sponsored by the Small Acreage Program of the Washington State University Clark County Cooperative Extension, is free and open to the public.

"Visitors will learn simple and practical tips for making a small acreage farm more efficient and useable for the owners, their animals and the environment," said Penny Ramey, program coordinator.

Registration is required. For details, call the extension office, 360-397-6060, ext. 0.

# Small Acreage

March 26, 2004 21

# WSU Extension to sponsor free, owner-hosted farm tour

BRUSH PRAIRIE, Wash. – A free, owner-hosted tour of a small acreage horse farm will be presented from 10 a.m. until noon April 3 by the Clark County Clean Water Program, Clark Conservation District and WSU Extension Small Acreage Program.

"This farm shows the real-life issues a landowner must address when trying to reduce mud on a property with a lot of water," said Doug Stienbarger, director of WSU Extension Clark County.

"The Small Acreage program teaches small-acreage landowners management practices that will improve their property and protect the environment."

Penny Ramey, program coordinator, said, "Visitors will learn simple and practical tips for making a small-acreage farm more efficient and useable for the owners, their animals and the environment."

Class size is limited. Call (360) 397-6060 ext. 0 to register for the tour, to get directions or for more information about the WSU Extension Clark County Small-Acreage Program.

WSU Extension programs are available to all without discrimination.

Persons requiring special accommodations while participating in this program should call WSU Extension Clark County at (360) 397-6060 ext. 0. The Reflector April 28,

# Small farm tour offered

A free tour of a small acreage horse farm and stable will be conducted Sat., May 1, 9-11 a.m., sponsored by the Clark County Clean Water Program, Clark Conservation District, and WSU Cooperative Extension Small Acreage Program.

"Visitors will learn practical and simple tips that will help them turn their farm into a more useable place for their animals and the environment," said Penny Ramey, coordinator of the Extension program.

The tour will focus on reducing mud, handling manure, and other livestock issues.

Registration, information, directions, 397-6060, ext. 0.

WEDNESDAY, APRIL 21, 2004

THE COLUMBIAN C3

# **Around the County**

**BRUSH PRAIRIE** 

# **Tour of horse farm** set for May 1

A free, two-hour farm tour on May 1 will include tips for rural homeowners on keeping horses and managing a stable.

The tour of a small Clark County horse farm will be from 9 a.m. to 11 a.m. Class size is limited, said organizer Penny Ramey of Washington State University Clark County Extension Service.

Preregistration is required by calling 360-397-6060 Ext. 0. Directions and further information will be given at that number, she said.

Sponsored by the Clark County Clean Water Program, Clark Conservation District and the small acreage program of WSU extension, the tour "shows what an individual landowner can do to protect stream health and enhance and preserve wildlife and fish habitat while actually improving the farming operation," said extension director Doug Stienbarger.

Z & M RANCH - PUBLISHED PRESS RELEASE FOR SEPTEMBER 18, 2004 TOUR

# Small Acreage

CAPITAL PRESS

Sept. 3, 2004

21

# **WORKSHOPS ON THE CALENDAR**

#### Horse farm tour

BRUSH PRAIRIE, Wash. – A free tour of a small acreage horse breeding and training facility will be held from 9 a.m. until 11 a.m.

Saturday, Sept. 18, sponsored by the Clark County Clean Water Program, Clark Conservation District, and Washington State University Extension Small Acreage Program.



"This farm shows what an individual landowner can do to protect water quality while actually improving the farming operation," said Doug Stienbarger, director of WSU Extension Clark County. "The landowner also does a great job reducing mud and handling manure, issues many livestock owners face."

Penny Ramey, program coordinator said that visitors will learn practical and simple tips that will help them turn their farm into a more useable place for their animals and the environment.

Class size is limited.

Call (360) 397-6060 ext. 0 to register for the tour, to get directions, or for more information about the WSU Extension-Clark County Small Acreage Program.

Page B6 - The Reflector - Sept. 1, 2004

# Free horse farm tour slated

A free tour of a small acreage horse breeding and training facility will take place Sat., Sept. 18, 9-11 a.m., sponsored by the Clark County Clean Water Program, Clark Conservation District and the Washington State University Cooperative Extension

barger, director of the Extension Service. The landowner also down a great job reducing mud and handling manure, issues any avestock owners face."

Tour organizers said participants will learn practical tips that will help them turn their

MONDAY, SEPTEMBER 13, 2004

**LOCAL & NORTHWEST** 

THE COLUMBIAN C5

# **Around the County**

**BRUSH PRAIRIE** 

# Free horse farm tour scheduled Saturday

The public is invited to a free tour of a small Clark County horse-breeding and training facility on Saturday from 10 a.m. to noon.

"The landowner does a great job reducing mud and handling manure — issues many livestock owners face," said Penny Ramey, small-acreage program coordinator for Washington State University Extension Clark County.

The tour will be built around the idea of managing small pieces of property for horses, minimizing mud and manure problems and preventing stream contamination.

This event is the third in a series of local farm tours sponsored by the Clark County Clean Water Program, Clark Conservation District, and the small acreage program. A tour of a fourth farm property will be offered later this fall.

Tour size is limited and preregistration is required by calling 360-397-6060, Ext. 0. More information is available at the same number.



PO Box 65008 Vancouver, WA 98665-001 **OCT 2004** 

# Newsletter

In Support of Clark County's Total Horse Industry

#### What's Happening



WSU Extension Agency sponsored a farm tour at the home of Stu and Shirley Markle. Eighteen hardy souls attended the presentation despite the cool and sometimes rainy weather. Topics included water, mud and manure control. Fencing, stall footing and bedding and corral footing were also discussed. Watch for other presentations by the Extension Agency that might be of value to you.

Nov. 17, 2004 - The Reflector - Page A13

# Happenings

D2 ■ 3M N THE OREGONIAN • THURSDAY, NOVEMBER 18, 200

# Clark County

# COUNTY CURBENTS

# Tour program focus is managing small acreage

BRUSH PRAIRIE — Landowners and others interested in improving small-acreage management may tour a horse breeding and training facility from 10 a.m. to noon Saturday. The tour is sponsored by the Washington State University Extension Small Acreage Program.

Participants will be shown how to improve the efficiency, health and beauty of their property. "This farm shows practical examples of what individual landowners can do to improve their small acreage while also protecting water quality," said Doug Stienbarger, county Extension director.

Organizers expect to have more tours in the spring.

Clark County Clean Water Program and Clark Conservation
District are cosponsoring the tour. The event is free, but tour size is limited. Sign-up, details and location: 360-397-6060, ext. 0.

The efficiency, health and beauty of small acreage farming can be seen first hand during a free tour Sat., Nov. 20, 10 a.m.-noon.

The tour of a six-acre horse breeding and training facility is sponsored by Clark County Clean Water Program, Clark Conservation District, and Washington State University extension.

"This farm shows practical examples of what individual landowners can do to improve their small acreage while also pretecting water quality," said Doug Stienbarger, director of the Extension Service. "The landowner has reduced mud and manure problems, issues many livestock owners face."

The event is the final tour of the 2004 series in the Clean Water Program. More tours will take place in 2005, said Stienbarger.

Class size is limited. Registration and directions are available by calling 397-6060, ext. 0, or Penny Ramey, 397-6060, ext. 7720.

# **Appendix G: Evaluation Form**

LIVING ON THE LAND CLASS EVALUATION FORM

LIVING ON THE LAND PROGRAM EVALUATION FORM

LIVING ON THE LAND SURVEY FORM

LIVING ON THE LAND POST PROGRAM IMPACT EVALUATION FORM

Wells & Septic Workshop Evaluation Form

WEED & FENCING WORKSHOP EVALUATION FORM

MODEL FARM TOUR EVALUATION FORM

#### LIVING ON THE LAND PROGRAM EVALUATION FORM

# Living on the Land – Stewardship for Small Acreages Program Evaluation Please rate the entire twelve week program.

- Inventorying Resources Douglas Stienbarger, Rich Bachert, Sheila Pendleton-Orme
- Your Living Soil Steve Keirn, Craig Cogger
- The Business of Horticulture Charles Brun and Small Business Planning Ron Harpole
- All Life Depends on Water Toni Neslen, Reuel Emory, Joe Ellingson, Gary Bock
- Love Your Grass Ron Hendrickson, Marty Chaney
- Caring for your Animals Penny Ramey, Dean Longrie, Andy Bary, Gary Fredricks

| Please circle your answer.                                                 |          |     |           |       |        |
|----------------------------------------------------------------------------|----------|-----|-----------|-------|--------|
| Exce                                                                       | llent    |     |           | I     | Poor   |
| What overall score would you give this program?                            | 5        | 4   | 3         | 2     | 1      |
| Very                                                                       | Much So  |     |           | Not . | At All |
| Did the program series answer most of your questions?                      | 5        | 4   | 3         | 2     | 1      |
| Did you learn useful information?                                          | 5        | 4   | 3         | 2     | 1      |
| Quite                                                                      | e a Lot  |     | Some      | Very  | Little |
| How much will you use this information to change what you do on your land? | 5        | 4   | 3         | 2     | 1      |
|                                                                            | Coo long | Abo | out Right | Тоо   | Short  |
| The program series was:                                                    | 5        | 4   | 3         | 2     | 1      |

Please explain why you rated any category below average:

What would you like to see added to the program? Deleted?

Would you recommend this program to neighbors or friends?

How have you changed the way you manage your property based on what you learned in this class?

What management practices will you change or implement within a year?

Did this program help you better understand the goals for your property and how you can meet those goals?

What are the first five words that occur to you to describe this program?

Other Comments:

Thank you for all your good work, your excellent questions, and your sense of humor!

### LIVING ON THE LAND SURVEY FORM

# **Living on the Land – Stewardship for Small Acreages**

September 14 through November 30, 2004

This brief survey helps us address your individual needs as small acreage owners and tailor/adapt the program to your interests. All information collected on this form is used only for this course to help you look at your management techniques.

| D.I. &                                                                                                                                                                                                                                                                                                                                                                                                  |                                         |              |            |             |       |                 |           |              |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|--------------|------------|-------------|-------|-----------------|-----------|--------------|--|--|
| Name: *                                                                                                                                                                                                                                                                                                                                                                                                 |                                         |              |            |             |       |                 |           |              |  |  |
| Address: *                                                                                                                                                                                                                                                                                                                                                                                              |                                         |              |            |             |       |                 |           |              |  |  |
| D1 N1 1 4                                                                                                                                                                                                                                                                                                                                                                                               |                                         |              |            |             |       |                 |           |              |  |  |
| Phone Number:*                                                                                                                                                                                                                                                                                                                                                                                          |                                         |              |            |             |       |                 |           |              |  |  |
| Email Address: *                                                                                                                                                                                                                                                                                                                                                                                        |                                         |              |            |             |       |                 |           |              |  |  |
| *This information is only used by our office for contact purposes and to inform you of other relevant events.                                                                                                                                                                                                                                                                                           |                                         |              |            |             |       |                 |           |              |  |  |
| How many acres do you own?How long have you owned this land?                                                                                                                                                                                                                                                                                                                                            |                                         |              |            |             |       |                 |           |              |  |  |
| Your parcel number(s) and/or legal description from your property tax statement. The parcel number is also your account number and is usually a six digit number followed by three zeros. Include physical address of property if different from mailing address. (This will be used to generate maps of your property showing features such as soil, topography, etc. for your use during the course.) |                                         |              |            |             |       |                 | ddress of |              |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                         |                                         |              |            |             |       |                 |           |              |  |  |
| What do you use your acreage for? (Check all that apply and list size if appropriate.)                                                                                                                                                                                                                                                                                                                  |                                         |              |            |             |       |                 |           |              |  |  |
| Vegetable garden                                                                                                                                                                                                                                                                                                                                                                                        |                                         |              |            |             |       | Pasture         |           |              |  |  |
| Orchard                                                                                                                                                                                                                                                                                                                                                                                                 |                                         |              |            |             |       | Hay             |           |              |  |  |
| Floral/landscape                                                                                                                                                                                                                                                                                                                                                                                        |                                         |              |            |             |       | Lawn            |           |              |  |  |
| Forest                                                                                                                                                                                                                                                                                                                                                                                                  |                                         |              |            |             |       | Other (please   | list)     |              |  |  |
| Wildlife habitat                                                                                                                                                                                                                                                                                                                                                                                        |                                         |              |            |             |       | Other (please   |           |              |  |  |
| Do you own livesto                                                                                                                                                                                                                                                                                                                                                                                      | ck?                                     | □ Y          | ES NO      | O I         | f so, | what type of li | ·         | )            |  |  |
| Type                                                                                                                                                                                                                                                                                                                                                                                                    |                                         | Total n      | umber      |             |       | Туре            |           | Total number |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                         |                                         |              |            |             |       |                 |           |              |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                         |                                         |              |            |             |       |                 |           |              |  |  |
| Do you imicate so at                                                                                                                                                                                                                                                                                                                                                                                    | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |              |            |             | 10    |                 |           |              |  |  |
| Do you irrigate past                                                                                                                                                                                                                                                                                                                                                                                    |                                         |              | ☐ YES      |             |       |                 |           |              |  |  |
| Do you have mud p                                                                                                                                                                                                                                                                                                                                                                                       |                                         |              | ☐ YES      |             |       |                 |           |              |  |  |
| Do you have unusu                                                                                                                                                                                                                                                                                                                                                                                       |                                         |              | ☐ YES      | $\square$ N |       |                 |           |              |  |  |
| Do you have a well                                                                                                                                                                                                                                                                                                                                                                                      |                                         | perty?       | ☐ YES      | $\square$ N |       |                 |           |              |  |  |
| Do you have a sept                                                                                                                                                                                                                                                                                                                                                                                      | ic system?                              |              | ☐ YES      | $\square$ N | 10    | UNCERTAIN       |           |              |  |  |
| Do any rivers, stream                                                                                                                                                                                                                                                                                                                                                                                   | ms, creeks, o                           | r irrigation | ditches r  | run t       | throu | ıgh your        | $\Box Y$  | ES □NO       |  |  |
| property?                                                                                                                                                                                                                                                                                                                                                                                               |                                         |              |            |             |       |                 |           |              |  |  |
| Are there roadside of                                                                                                                                                                                                                                                                                                                                                                                   | litches throu                           | gh or adja   | cent to yo | our r       | orop  | erty?           |           |              |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                         |                                         |              |            |             |       |                 |           |              |  |  |

What are your top three reasons for attending this workshop series? (use other side if necessary)

# WELLS & SEPTIC WORKSHOP EVALUATION FORM

| Well & Septic Workshop Evaluation                                                           | /Asses | smen   | t for  | m     |            |
|---------------------------------------------------------------------------------------------|--------|--------|--------|-------|------------|
| In order to help us evaluate the strengths and wea                                          |        | of th  | nis pr | ograi | m, please  |
| Was this program: (Circle your answer)                                                      | very m | uch sc | )      |       | not at all |
| Current and up to date?                                                                     | 5      | 4      | 3      | 2     | 1          |
| Understandable?                                                                             | 5      | 4      | 3      | 2     | 1          |
| Presented in an interesting way?                                                            | 5      | 4      | 3      | 2     | 1          |
| Comments:                                                                                   |        |        |        |       |            |
| Did the program answer any questions you had?                                               | 5      | 4      | 3      | 2     | 1          |
| Comments:                                                                                   |        |        |        |       |            |
| Did it help you learn how to do new things or how to do others better than you knew before? | 5      | 4      | 3      | 2     | 1          |
| Comments:                                                                                   |        |        |        |       |            |
| Do you intend to use any of the information from this lesson?                               | 5      | 4      | 3      | 2     | 1          |
| Comments:                                                                                   |        |        |        |       |            |
| Overall, was this program worth your time to attend?                                        | 5      | 4      | 3      | 2     | 1          |
| Comments:                                                                                   |        |        |        |       |            |

| What did you like b | est about the program?                         |                            |
|---------------------|------------------------------------------------|----------------------------|
| In order to improve | this program, what <u>changes</u> would you su | ggest? What would you add? |
| Do you have a well  | Are you currently using it for your house      | hold water source?         |
| What one practice f | rom this lesson will you implement within a    | a year?                    |
| Where did you find  | out about this workshop?                       |                            |
| The Columbian       | The Reflector CC Health Department             | Letter E-mail              |
| Other – Please list |                                                |                            |

#### WEED & FENCING WORKSHOP EVALUATION FORM

Fencing - June 26, 2004

9:00 am Weed Management - Ron Hendrickson 10:00 am Fencing theory and practice – Mike Maggitti

# In order to help us evaluate the strengths and weaknesses of this program, please answer the following questions

| Was this workshop: (Circle your answer)                                        | very mu | ery much so |   |   | not at all |  |
|--------------------------------------------------------------------------------|---------|-------------|---|---|------------|--|
| Current and up to date?                                                        | 5       | 4           | 3 | 2 | 1          |  |
| Understandable?                                                                | 5       | 4           | 3 | 2 | 1          |  |
| Presented in an interesting way?                                               | 5       | 4           | 3 | 2 | 1          |  |
| Comments:                                                                      |         |             |   |   |            |  |
| Did you learn how to do new things at this workshop or how to do other better? | ers 5   | 4           | 3 | 2 | 1          |  |
| Comments:                                                                      |         |             |   |   |            |  |
| Did this workshop answer any questions you had?                                | 5       | 4           | 3 | 2 | 1          |  |
| Comments:                                                                      |         |             |   |   |            |  |
| Do you intend to use any of the information from this workshop?                | 5       | 4           | 3 | 2 | 1          |  |
| Comments:                                                                      |         |             |   |   |            |  |
| Overall, was this workshop worth your time to attend?                          | 5       | 4           | 3 | 2 | 1          |  |
| Comments:                                                                      |         |             |   |   |            |  |

What was the most informative part of this workshop?

On which part(s) do we need to spend more or less time?

What one practice from this workshop will you implement within a year?

# MODEL FARM TOUR EVALUATION FORM

| Farm Tour 2004                                                                                 |           |   |   |   |            |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------|-----------|---|---|---|------------|--|--|--|--|--|--|
| In order to help us evaluate the strengths and weaknesses of this program,                     |           |   |   |   |            |  |  |  |  |  |  |
| please answer the following questions                                                          |           |   |   |   |            |  |  |  |  |  |  |
| (Circle your answer)                                                                           | very much |   |   |   | not at all |  |  |  |  |  |  |
| Was this tour presented in an interesting way?                                                 | 5         | 4 | 3 | 2 | 1          |  |  |  |  |  |  |
| Comments:                                                                                      |           |   |   |   |            |  |  |  |  |  |  |
| Did the tour answer any questions you had?                                                     | 5         | 4 | 3 | 2 | 1          |  |  |  |  |  |  |
| Comments:                                                                                      |           |   |   |   |            |  |  |  |  |  |  |
| Did the tour help you learn how to do new things or how to do oth better than you knew before? | ners 5    | 4 | 3 | 2 | 1          |  |  |  |  |  |  |
| Comments:                                                                                      |           |   |   |   |            |  |  |  |  |  |  |
| Do you intend to use any of the information from this tour?                                    | 5         | 4 | 3 | 2 | 1          |  |  |  |  |  |  |
| Comments:                                                                                      |           |   |   |   |            |  |  |  |  |  |  |
| Overall, was this tour worth your time to attend?                                              | 5         | 4 | 3 | 2 | 1          |  |  |  |  |  |  |
| Comments:                                                                                      |           |   |   |   |            |  |  |  |  |  |  |

What was the most informative part of this tour?

On which part(s) do we need to spend more or less time?

What one practice from this tour will you implement within a year?

Use the back of this form to request additional information.



### Living on the Land (LOL) – Fall 2003 & Winter 2004 Participant Survey

We are glad you were able to participate in the Living on the Land class. WSU Clark County Extension depends on people like you to provide feedback on our programs. All responses will be kept anonymous. Upon request, we will send you the results when completed. We greatly appreciate your help. Thank you!

| Firs                                                      | t name                                                                               |              | _ast            | name                 |                           |                                 |                        |                   |                           |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------|--------------|-----------------|----------------------|---------------------------|---------------------------------|------------------------|-------------------|---------------------------|
| 1. Which Living on the Land class did you tak             |                                                                                      | id you take  | ke? (check one) |                      | Fall 03                   |                                 | Winter 04              |                   |                           |
|                                                           | ase indicate the extent to whomses.)                                                 | ich you aş   | gree            | e or disagr          | ee with eac               | ch statemen                     | t below. (             | Please circ       | le your                   |
|                                                           |                                                                                      |              |                 | Strongly<br>Disagree | Some-<br>what<br>Disagree | Neither<br>Agree or<br>Disagree | Some-<br>what<br>Agree | Strongly<br>Agree | Don't<br>Know /<br>Unsure |
| 2.                                                        | The LOL course provided the information I needed                                     |              |                 | 1                    | 2                         | 3                               | 4                      | 5                 | DK                        |
| 3.                                                        | I would recommend this cours                                                         | se to others |                 | 1                    | 2                         | 3                               | 4                      | 5                 | DK                        |
| 4.                                                        | Based on what I learned in the course, I now manage my pro differently               | perty        |                 | 1                    | 2                         | 3                               | 4                      | 5                 | DK                        |
| 5.                                                        | This course is a good use for p<br>clean water fee I pay with my<br>taxes every year | property     |                 | 1                    | 2                         | 3                               | 4                      | 5                 | DK                        |
| 6.                                                        | The changes I made have imp property                                                 | •            |                 | 1                    | 2                         | 3                               | 4                      | 5                 | DK                        |
| As a                                                      | result of the LOL classes, ha                                                        | ave you do   | ne              | any of the           | e following               | (please circ                    | le respon              | se):              |                           |
|                                                           |                                                                                      | Yes          | N               |                      | es Not                    |                                 |                        |                   |                           |
| 7. 1                                                      | Tested your soil?                                                                    | 1            | 2               |                      | NA                        |                                 |                        |                   |                           |
| 8. I                                                      | nspected your septic tank?                                                           | 1            | 2               | 2 1                  | NA                        |                                 |                        |                   |                           |
| 9. 1                                                      | Tested your well water?                                                              | 1            | 2               | 2                    | NA                        |                                 |                        |                   |                           |
| 10.                                                       | Have you shared what you lears:  11. Who did you share th                            |              |                 | -                    | •                         | ⁄es                             | _ No                   |                   | _                         |
| 12. About how many people did you share information with? |                                                                                      |              |                 |                      |                           |                                 |                        |                   |                           |

Turn Over for Questions on Page 2



Please rate your knowledge of the following topic areas for both before and after you participated in the LOL course. (Please circle your responses.) Unsure Does Poor Fair Good Excellent / Don't Not Know Apply 2 3 Before.... 1 4 DK NA 13. Managing weeds: After ..... 1 2 3 DK 4 NA 1 2 3 Before.... 4 DK NA Keeping my pasture/hay field 14. healthy: After ..... 1 2 3 4 DK NA 2 Before.... 1 3 4 DK NA Managing rainwater (stormwater 15. runoff) so that it stays clean: After ..... 1 2 3 DK NA Before.... 1 2 3 4 DK NA Soil and how it relates to 16. managing my land: After ..... 1 2 3 4 DK NA Before.... 1 3 DK NA 17. Setting realistic goals for my land: After ..... DK NA Before.... 2 3 4 DK NA 18. Managing animal manure: After ..... DK NA Before.... DK NA 19. Managing / controlling mud: After ..... DK NA Before.... DK NA How my management practices 20. impact clean water: After ..... 2 3 DK 1 NA 21. Please list practices or management changes you have made as a result of taking this class. (Examples might include composting manure, covering manure piles, installing gutters and downspouts, pasture mgmt., etc.) 22. The most positive impact of these changes was 23. Your gender (check one) Male Female 24. What is your age? 25. Highest educational level you have attained? High School or less Bachelor's degree Graduate degree Some college 26. How many years have you lived on acreage (current and former property)?

Please return this questionnaire BY NOVEMBER 16th in the stamped, self-addressed envelope provided with this questionnaire. We will follow-up with a telephone call.

If you have questions about this survey, call Doug Stienbarger at 360-397-6060 x7716 (stiendm@wsu.edu).