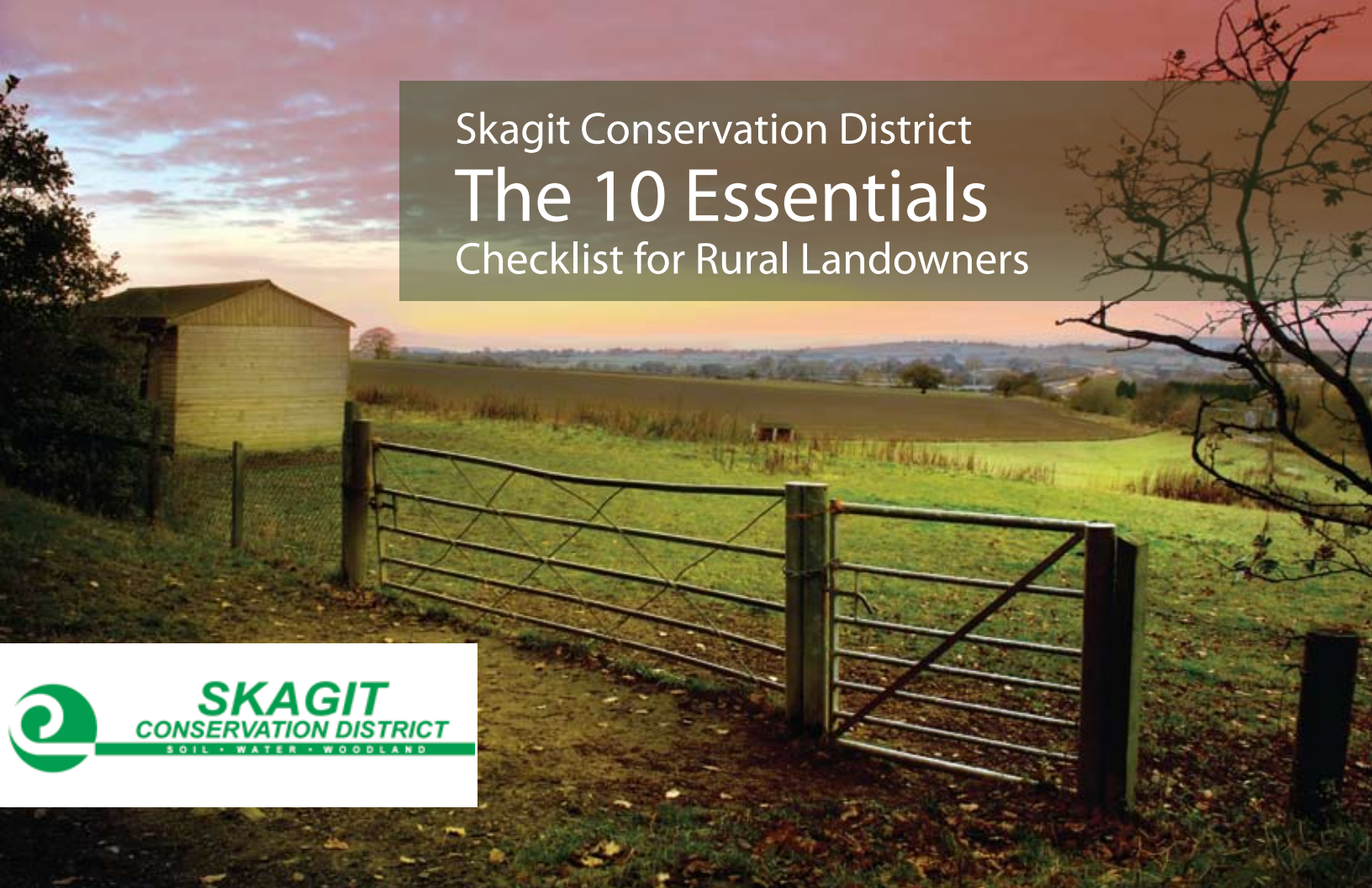


Skagit Conservation District

The 10 Essentials

Checklist for Rural Landowners

SKAGIT
CONSERVATION DISTRICT
SOIL • WATER • WOODLAND

Introduction

Essential 1: Know Your Property

The first of the 10 Essentials is to simply have a basic knowledge of your property. The more you know, the more effectively you can manage your land.

Essential 2: Water Conservation & Well Protection

As the population continues to grow in the Northwest, so do the demands on our water supply. Water conservation and well protection are more important than ever to ensure that we have plenty of clean, safe drinking water for people and wildlife.

Essential 3: Septic Care & Maintenance

Taking care of your septic system can save you big money in the long run. It's also important for water quality—a failed septic system can cause waste to leak into our groundwater, streams, rivers and lakes. How septic savvy are you?

Essential 4: Weeds & Pesticide Use

An ounce of prevention is worth a pound of cure when it comes to weeds and pests. Taking steps to avoid the need for pesticides can save you time, money and trouble. It can also keep dangerous pesticides out of our water.

Essential 5: Hazardous Substance Safety

Potentially hazardous products such as paints, solvents, oils, fertilizers and pesticides require special care when it comes to storage and disposal.

Essential 6: Manure Management

If you've got livestock, you've got manure. A good manure management plan can mean the difference between a mountain and a molehill—it can also mean the difference between clean and polluted water.

Essential 7: Livestock Pastures & Confinement

Pastures full of mud can lead to higher vet bills and increased water contamination from soil and manure. A pasture full of healthy grass is good for livestock and prevents pollution by holding soil in place and absorbing nutrients from manure.

Essential 8: Woodlot Management

A well managed woodlot can contribute to your income, reduce water pollution, provide habitat for wildlife and help reduce the impacts of periodic flooding. How is the health of your woodlot?

Essential 9: Fish & Wildlife Habitat

Some kinds of wildlife are probably more welcome on your property than others. For example, swallows provide natural, effective mosquito control while mice can cause hundreds of dollars worth of damage. What are you doing to encourage the wildlife you want and discourage the wildlife you don't?

Essential 10: Cropland

Certain irrigation and erosion control techniques can prevent soil, fertilizers and pesticides from entering our water. Even better, the same techniques that prevent pollution can also keep valuable topsoil where you want it…on your land.

Table of Contents

Essential 1: Know Your Property

The first of the 10 Essentials is to simply have a basic knowledge of your property and where your property is located. The more you know, the more effectively you can manage your land. See how much you already know by filling in the answers below.

I live in the _____ watershed in **incorporated/unincorporated** (circle one) Skagit County.

❑ I know my property's zoning, acreage and square footage.

Current Zoning: _____ Total Acreage: _____

Total square footage (one acre = 43,560 square feet): _____

Parcel Numbers: _____

The area I live in receives approximately _____ inches of rain each year.

The predominant soil type on my property is _____

I am able to estimate the percentage of impervious surface on my property. (Impervious surface includes roof, driveway, patios, outbuildings, etc.) Approximate percentage of impervious surface _____ %

Resources

What watershed do you live in? Visit the USGS Water Science Center

wa.water.usgs.gov/realtime/rt_latest_map.html

For property and zoning information

www.skagitcounty.net (click on the iMap image. You may also click on the Assessor tab to look up your parcel numbers)

For rainfall averages

www.countrystudies.us/united-states/weather/washington/

Want to know your property's soil type? Call the Natural Resource Conservation Service at 360-428-7758 ext. 5 or visit

websoilsurvey.nrcs.usda.gov/app/

or

soils.usda.gov/

For tips on ways to reduce impervious surface on your property, visit

nemo.uconn.edu/tools/stormwater

or

www.recycleworks.org/greenbuilding/sus_imperviousurfaces.htm

Essential 2: Water Conservation & Well Protection

As the population continues to grow in the Northwest, so do the demands on our water supply. Water conservation and well protection are more important than ever to ensure that we have plenty of clean, safe drinking water for people and wildlife.

I conserve water by doing the following (check those that apply):

- ❑ I use water-saving fixtures such as low-flow toilets and faucet aerators.
- ❑ I only water/irrigate during the evening or early morning hours.
- ❑ I use mulch in my garden and landscape to conserve moisture in the soil and reduce the need for watering.
- ❑ I use rain barrels, cisterns or other techniques to collect rainwater.
- ❑ I only water my lawn as needed. (Grass only needs an inch of water per week, *at most*.)
- ❑ Any unused or abandoned wells on my property have been properly plugged or sealed to prevent groundwater contamination.

Resources

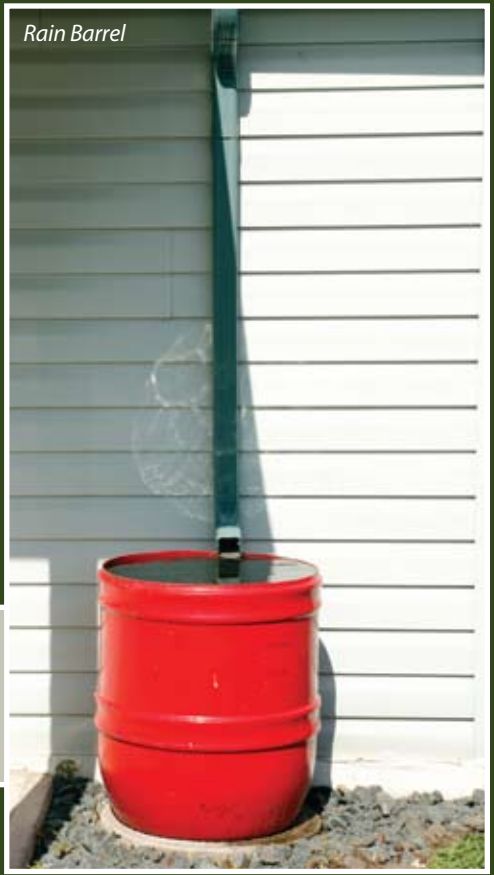
For more information on safe drinking water contact:

Skagit County Public Health (Phone: 360-336-9380)
www.skagitcounty.net/health

Washington State Department of Health
www.doh.wa.gov/ehp/dw/

For more information on rain barrels and cisterns, visit
www.skagitpud.org

For more information on water conservation, visit
www.bewatersmart.net


Rain Barrel

DID YOU KNOW ?

Skagit Valley receives less average rainfall than Atlanta, Baltimore, Houston, Memphis, Miami, New York & Philadelphia.

Essential 3: Septic Care & Maintenance

Taking care of your septic system can save you big money in the long run. It's also important for water quality—a failed septic system can cause waste to leak into our groundwater, streams, rivers and lakes. How septic savvy are you?

- ❑ I have my septic system inspected at least every three years and pumped as needed.

Date of most recent inspection: _____

- ❑ I avoid system overload by spreading water-intensive chores (such as laundry) throughout the day and week.
- ❑ I never put garbage down the drain or in toilets.
- ❑ I avoid products that kill the beneficial bacteria in the system, such as lye-based drain cleaners and household cleaning products with a danger or toxic warning label.
- ❑ Livestock, vehicles and heavy equipment are excluded from my drain field and tank area.

Resources

For information on septic maintenance:

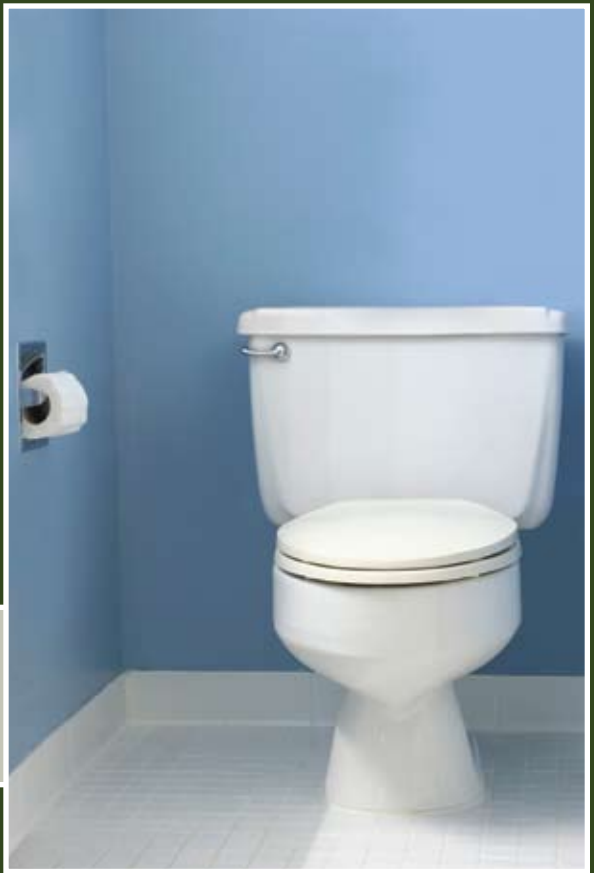
Skagit County Health Department (Phone: 360-336-9380)
www.skagitcounty.net/septic

Septic Sense, Scents, Cents
A guide to septic tank care and maintenance.
http://*wsg.washington.edu/mas/pdfs/SepticSense.pdf*

Environmental Protection Agency
A Homeowner's Guide to Septic Systems
http://epa.gov/owm/septic/pubs/homeowner_guide_long.pdf

DID YOU KNOW?

Using a garbage disposal frequently can dramatically increase the accumulation of sludge in your septic tank, causing you to have it pumped more often.



Essential 4: Weeds & Pesticide Use

An ounce of prevention is worth a pound of cure when it comes to weeds and pests. Taking steps to avoid the need for pesticides can save you time, money and trouble. It can also keep dangerous pesticides out of our water.

❑ I frequently survey my property for weeds and pests to enable early detection.

Weeds and pests that have been identified on my property and targeted for control:

_____

I mow my pastures/fields at least once during the growing season before weeds have a chance to go to seed.

❑ Yes ❑ No ❑ Does Not Apply

❑ I consider biological controls (such as fly predators and nematodes), cultural controls (changes in watering, fertilizing techniques, etc.) and mechanical controls (e.g., hand weeding, pruning out infested branches, dethatching turf) before using pesticides and herbicides.

❑ When using pesticides and herbicides, I choose the least toxic product and apply it at the most effective time in the life cycle of the target weed or pest.

Resources

For information on weeds and pest control:

WSU Publications

(search here for weed and pest bulletins): *pubs.wsu.edu*

WSU Skagit County Extension Agriculture Program

call 360-428-4270

Pacific Northwest Weed Management Handbook

www.pnwpest.org/pnw/weeds

Skagit County Noxious Weed Control Board

www.skagitcounty.net/noxiousweeds

Skagit Conservation District

www.skagitcd.org

Salmon Safe

www.salmonsafe.org

Biological control: A Guide to Natural Enemies in North America,

published by Cornell University:
www.nysaes.cornell.edu/ent/biocontrol/

Washington Toxics Coalition publishes fact sheets on safe ways to deal with a variety of pests:
www.watoxics.org/homes-and-gardens/lawn-and-garden
(scroll down to find fact sheets on common outdoor pests)

Essential 5: Hazardous Substance Safety

Potentially hazardous products such as paints, solvents, oils, fertilizers and pesticides require special care when it comes to storage and disposal. How are you doing when it comes to hazaradous substance safety?

❑ I dispose of hazardous substances such as antifreeze, oil, paints and solvents at approved locations. I never pour hazardous substances down a sink or storm drain, in a ditch or on the ground.

I avoid storing or using pesticides and other chemicals near wells, streams, ditches and other waterways.

❑ Yes ❑ No ❑ Does Not Apply

Pesticides and other chemicals are stored in an area that is:

❑ Covered ❑ Paved ❑ Locked ❑ Surrounded by a berm

❑ I keep supplies on hand to clean up spills, such as spill pads, hydrated lime or kitty litter.

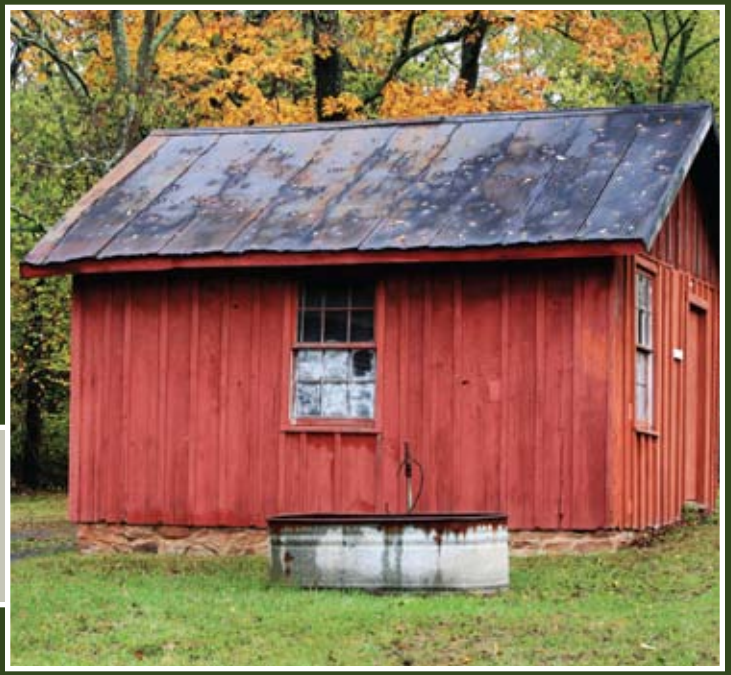
Resources

For information on the disposal of household hazardous waste, visit this Skagit County website

www.skagitcounty.net/recycle

For information on safe cleaning products, lawn and garden chemicals, indoor pest control chemicals, and home repair and building materials, visit the Washington Toxics Coalition website

www.watoxics.org/homes-and-gardens



DID YOU KNOW ?

One quart of oil can contaminate two million gallons of drinking water!

Essential 6: Manure Management

If you've got livestock, you've got manure. A good manure management plan can mean the difference between a mountain and a molehill—it can also mean the difference between clean and polluted water. How is your manure management plan working for you?

I have a successful system for managing manure. To avoid the buildup of excess manure, I regularly:

- ❑ Compost (composting can reduce the size of a manure pile by half!)
- ❑ Spread compost on pastures and crops
- ❑ Give away/sell manure or compost
- ❑ Haul away excess
- ❑ Other

Manure is stored at least 100 feet away from my well, streams, ditches and other waterways. There is also a buffer strip of healthy vegetation downslope of my manure storage area.

❑ Yes ❑ No ❑ Does Not Apply

❑ I only spread manure/compost during the growing season (April-October).

❑ My manure storage area is covered with a tarp, roof or other cover.

❑ Manure is picked up from stalls and confinement areas on a regular, frequent basis.

Resources

For more information on manure management, visit:

Skagit Conservation District
www.skagitcd.org

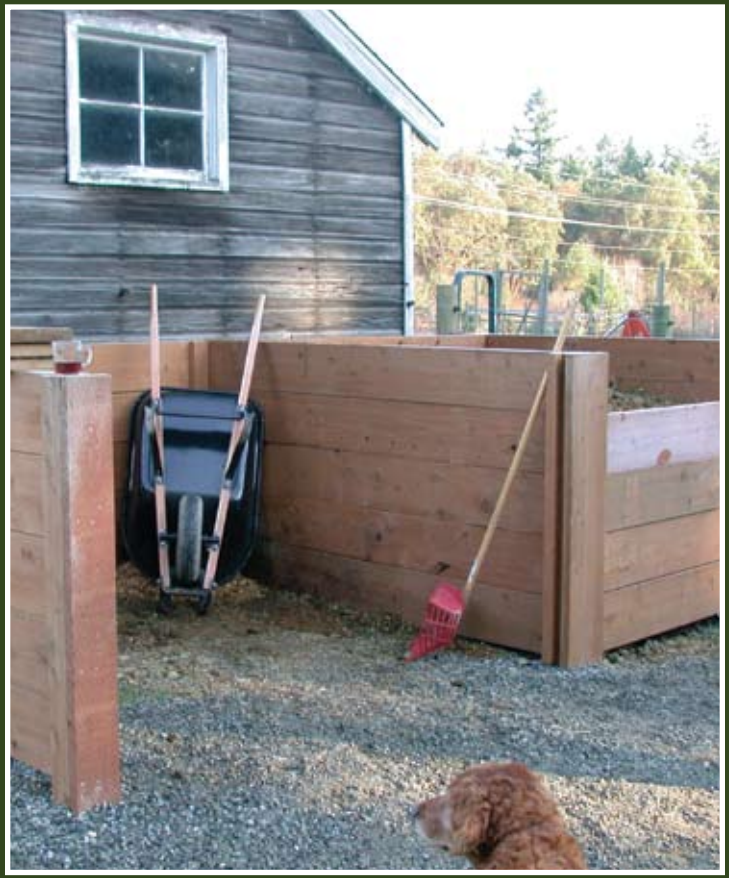
Natural Resources Conservation Service
www.nrcs.usda.gov

WSU Extension
gardening.wsu.edu/stewardship/compost/compost.htm

Cornell University
www.manuremanagement.cornell.edu

Horses for Clean Water
www.horsesforcleanwater.com

To learn more about buffer strips, visit
www.nrcs.usda.gov/feature/buffers/



Essential 7: Livestock Pastures & Confinement

If you own livestock, good pasture management is one of the key essentials. Pastures full of mud lead to higher vet bills and increased water contamination from soil and manure. A healthy pasture with healthy grass will hold soil in place and absorb nutrients from manure.

During the winter I remove my livestock from pastures and put them in a dry, well-drained paddock.

❑ Yes ❑ No ❑ Does Not Apply

During the growing season (April-October) livestock are allowed to graze in areas where the grass is at least six to eight inches tall. Livestock are removed from pastures when grass has been grazed down to about three inches.

❑ Yes ❑ No ❑ Does Not Apply

My livestock shelters have gutters and downspouts that direct roof runoff away from animal confinement areas and manure storage areas.

❑ Yes ❑ No ❑ Does Not Apply

Streams and ditches on my property are fenced to prevent livestock access.

❑ Yes ❑ No ❑ Does Not Apply

❑ I routinely have my soil tested to determine the level of available nutrients in the soil. I use this information to guide the application of compost, fertilizer and lime to pastures.

Resources

Check out these websites for information on issues such as soil testing, winter paddocks, buffer strips, rotational grazing, stream fencing, gutters and more.

Skagit Conservation District

www.skagitcd.org

WSU Organic Farming Systems

www.puyallup.wsu.edu/soilmgmt/soils.htm

Natural Resources Conservation Service

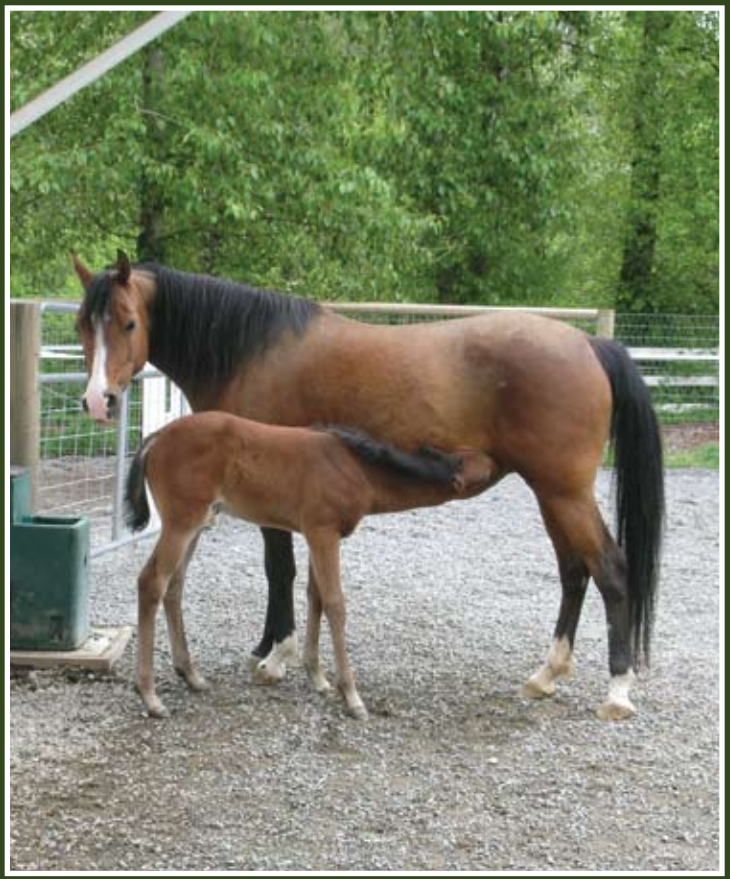
www.nrcs.usda.gov

WSU Skagit County Extension

www.skagit.wsu.edu

Horses for Clean Water

www.horsesforcleanwater.com



Essential 8: Woodlot Management

A well managed woodlot can contribute to your income, reduce water pollution, provide habitat for wildlife and help reduce the impacts of periodic flooding. How is the health of your woodlot?

When planting new trees, I select species adapted to my site, plant at the appropriate time of year (January-March) and remove competing vegetation within a one-foot radius around the trunk.

❑ Yes ❑ No ❑ Does Not Apply

Dominant tree species in my woodlot: _____

❑ I protect trees from browsing, rubbing, trampling and soil compaction by livestock.

❑ The trees in my woodlot are spaced far enough apart to allow some sunlight to reach the plants growing on the ground.

❑ I retain some dead and fallen trees as wildlife habitat (as long as they do not pose a hazard to people, livestock or structures).

Resources

For information, visit:

Skagit Conservation District Forestry Program

www.skagitcd.org or call 360-428-4313

WSU Extension

snohomish.wsu.edu/forestry or call 206-205-3132

Washington State Department of Natural Resources, *Resources for Small Forest Landowners*

www.dnr.wa.gov/Publications/fp_sflo_resourcesforsflo.pdf

Natural Resources Conservation Service – EQIP Program

http://www.wa.nrcs.usda.gov/programs/eqip/forestry/

or call 360-428-7758 ext. 132

Firewise Communities/USA

www.firewise.org

DID YOU KNOW ?

About 400 species of wildlife depend on Washington forests for their survival.

Essential 9: Fish & Wildlife Habitat

Some kinds of wildlife are probably more welcome on your property than others. For example, swallows provide natural, effective mosquito control while mice can cause hundreds of dollars worth of damage. What are you doing to encourage the wildlife you want and discourage the wildlife you don't?

Streambanks, wetlands and other waterways on my property are lined with a protective buffer strip of trees, shrubs, grasses and ground cover. (Recommended buffer width is typically 50-100 feet.)

❑ Yes ❑ No ❑ Does Not Apply

Types of vegetation in buffer strip: _____

I provide habitat for wildlife with the following:

❑ Nest boxes designed for native birds

❑ Diverse mix of grasses, shrubs and trees, including natives

❑ Non-living trees such as standing snags and downed logs

❑ Mason bee houses and bat houses

To prevent nuisance wildlife (such as rodents, opossums, coyotes and raccoons), I put dog and cat food away at night and keep trash bins secured.

❑ Yes ❑ No ❑ Does Not Apply

To reduce breeding grounds for mosquitoes:

❑ I have removed old tires and other items that could collect water.

❑ I clean my rain gutters out regularly and make sure they drain properly.

❑ I empty and refill pet dishes and birdbaths once a week.

Resources

Backyard Conservation Stewardship Program
www.skagitcd.org (click on Backyard Conservation Link)

Riparian forest buffers for fish and wildlife
www.skagitcd.org (click on CREP link)

National Wildlife Federation: Garden for Wildlife
www.nwf.org/gardenforwildlife

Washington Dept of Fish & Wildlife
Backyard Wildlife Program: *wdfw.wa.gov/wlm/backyard/*
Living with Wildlife: *wdfw.wa.gov/wlm/living/*

Audubon: An Invitation to a Healthy Yard
www.audubonathome.org/yard/

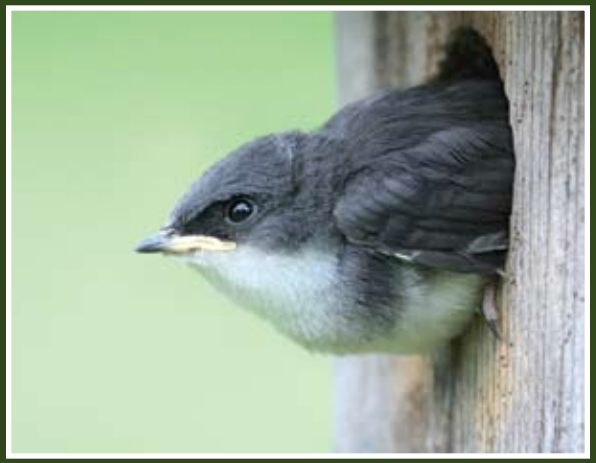
WSU Extension- Native plants
gardening.wsu.edu/nwnative/

Washington Native Plant Society
www.wnps.org/

Skagit County Lake Management Districts
www.skagitcounty.net /publicworks/ (click on Water Resource Management)

Reducing mosquito habitat
www.skagitcounty.net/health/

Pollinator Conservation
www.xerces.org/



Essential 10: Cropland

Certain irrigation and erosion control techniques can prevent soil, fertilizers and pesticides from entering our water. Even better, the same techniques that prevent pollution can also keep valuable topsoil where you want it…on your land.

I use farming practices that minimize soil erosion and increase water infiltration, such as:

- ❑ Cover crops, mulching and grassed access roads.
- ❑ Vegetated field borders, filter strips and planted buffers.
- ❑ Contour farming, terracing, windbreaks and conservation tillage.
- ❑ Crop rotation that includes perennial or high residue crops.

❑ I minimize irrigation demands by selecting crops suited to our local climate.

❑ I follow an irrigation program that monitors water use and soil moisture. I adjust water applications to meet crop moisture needs and avoid water loss due to surface runoff or deep percolation.

❑ I routinely test plant tissue and soil to determine plant needs and the level of available nutrients in the soil. I use this information to guide the application of compost, fertilizer and lime to crops.

Resources

Visit these websites for information on erosion control, irrigation, plant tissue testing and a variety of other issues:

WSU Skagit County Extension Agriculture

Skagit.wsu/agriculture/

or call 360-428-4270

WSU Small Farm Connection

smallfarms.wsu.edu/crops/

Natural Resources Conservation Service

www.nrcs.usda.gov/

Pacific Northwest Regional Water Program

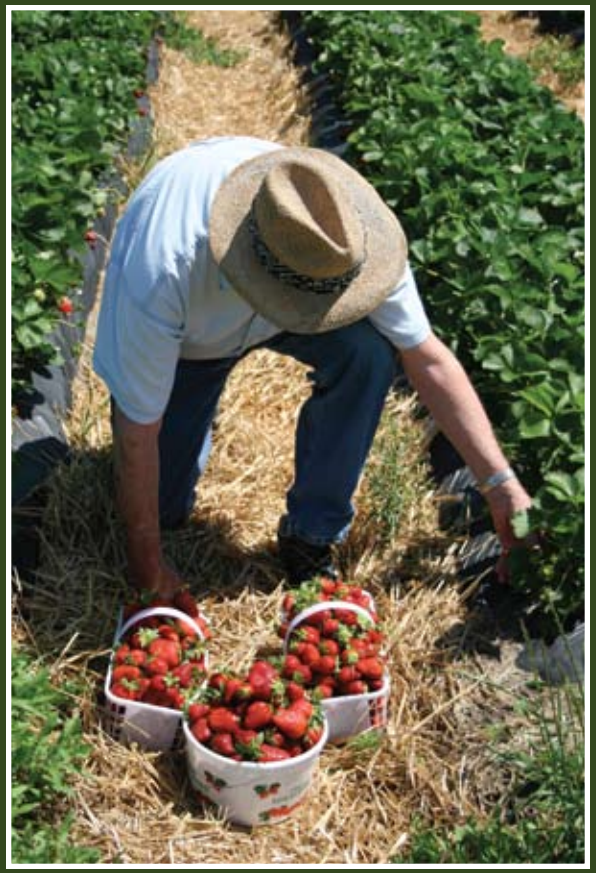
www.pnwwaterweb.com/

Northwest Integrated Pest Management

www.nwipm.info/industlinks.asp

Salmon Safe

www.salmonsafe.org



Notes and Records

Use this space to make notes, keep records or write your to-do lists. For example, record results of soil or well tests, dates of septic inspections or weed and pest control actions. You may also want to use this space to sketch a map of your property, noting key features like your septic drainfield, plant and tree varieties or soil types. This information will be helpful for your own memory and may someday be useful for any future owners of the property.

Notes and Records

Thanks for doing your part to protect our natural resources!

For more information, contact the Skagit Conservation District at (360) 428-4313
or visit our website at *www.skagitcd.org*

Funding for this project has been provided by the
WA Department of Ecology and the WA Conservation Commission

Landowner Name: _____

Property Address: _____

_____

A special thanks to King Conservation District for the concept and use of this publication.
Adaptations by Cindy Pierce, Skagit CD and Andrew Phay, Whatcom CD.