

SNOHOMISH CONSERVATION DISTRICT

The Nexus



Is a Snow/Wind Break in Your Future?

by Tammy Edmonds, Farm Planner

With the chilly gusts of fall soon descending upon us, you may want to consider an addition to your property. I'm not talking about a building or an animal, but about trees for a windbreak or snow break.

Recently, I helped a landowner design a wind/snow break for her property. This was to deal with an especially robust wind that whips through the Stillaguamish River Valley and arrives unadulterated at her front door every winter.

When we do have a winter with snow, this same wind brings thick drifts that made it difficult for the landowner to maneuver, even in her driveway, without asking the neighbor with a tractor to please dig her out. This year she decided to change that. You can too, especially if you consider a few simple guidelines.

When planting a windbreak, some things to take into consideration are how many rows of trees you have room for, your soil type, existing water holding capacity of the soil, and the slope of your property. Certain measurements need to be kept in mind as well. Wind breaks need to be at least 75 to 100 feet from the object you are trying to protect. If you plant a windbreak too close to the object, such as a road or a house, you'll get drifting snow either on the road or on your back porch.

trying to protect. The most effective area of protection is two to five times the height of the tallest trees.

While fewer rows will mean less protection, if your space is limited, you can use a twin row planting design. Rows in this design are spaced about six to eight feet apart, while trees or shrubs are spaced four to eight



A mature windbreak can save energy dollars, keep snow away from buildings and driveways, and help protect livestock from energy-zapping wind.

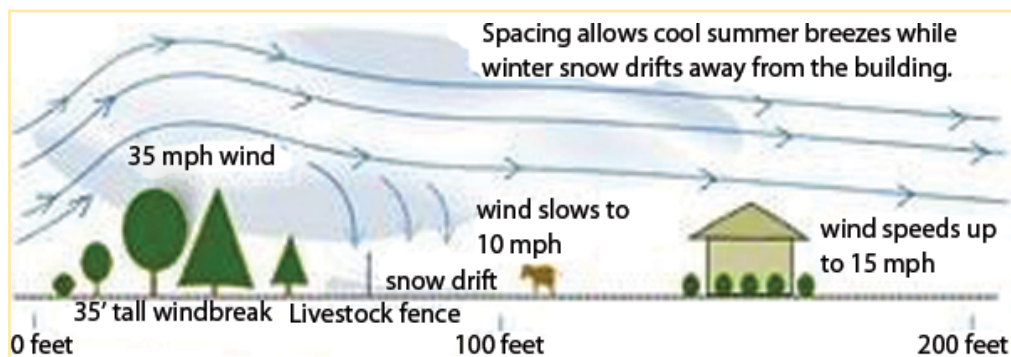
feet apart, depending on the species of tree or shrub you use. It is important in the twin row design to use the same variety of tree or shrub for both rows to maximize your protection.

The plants in any windbreak row should be staggered with the adjacent rows and placed perpendicular to the

oncoming wind. It is just as important to not plant trees and shrubs too close to one another in a row. Each tree species has a proper spacing distance for optimum protection. For example, if you plant conifers too close to each other, they will eventually lose their bottom branches, making them ineffective as a windbreak.

Also, it's best never to place windbreaks under utility lines, or to use tree species whose mature height will interfere with those lines. When creating an opening in a windbreak, make sure it is at an angle to the wind, to retain as much protection as possible. Use fences to keep livestock away from windbreaks.

A well-designed windbreak can result in a direct energy savings of 10 to 40 percent by reducing the loss of heat from homes and barns. More savings comes from providing shelter for animals and protecting crops from wind/storm damage. Wind and snow breaks also provide wildlife habitat, aesthetic value, and filter dust and pollutants from the air.



A 35-foot tall windbreak will slow a 35mph wind down to 10mph at 100 feet away, and to 15 mph at 200 feet away.

The break must also extend 75 to 100 feet sideways beyond the end of the object you are trying to protect. This is to prevent wind and snow from coming around the edges of the break, and battering or drifting too close to your object from the sides. The rows of a windbreak should be at least 16 feet apart. The windward side of a wind/snow break should start with shorter plants like shrubs, and the rows of trees should progress upward from there.

The cooperater who I designed the wind break for used a five-row design. A similar design (shown above) uses a row of shrubs, then a row of medium deciduous trees. Behind that is a row of tall deciduous trees, tall conifers, and finally a row of medium height conifers. With this design, you are basically helping the wind stair-step over the object you are

Fall 2010

Serving Snohomish County and Camano Island

Heading Back to the Future with Hard Cider

Learn how to produce a quality hand-crafted hard cider and take advantage of a growing demand for America's oldest beverage. Join WSU Extension and Gary Moulton from the Mt. Vernon Research Station on Saturday, October 9, 2010 from 10:00 AM to 2:00 PM for "Hard Cider Making & Orchardling" at Ed's Apples, 13420 339th Ave SE, Sultan, just off SR 2.

Just as the micro-brew revolution stirred intense interest in handcrafted beers, artisan cider makers are inspiring a newfound appreciation for high quality, handcrafted hard cider. Washington is particularly well suited for an expanding hard cider industry, with an abundance of apples and many consumers looking for more ways to support locally based agriculture.

Cost for the workshop is \$65 per person (\$55 per person before Oct. 1) and includes a catered box lunch.

To register, visit Brown Paper Tickets at www.brownpapertickets.com/event/131581. For registration information, contact Karie Christensen at 425-357-6039 or email her at: klchristen@cahnrs.wsu.edu.

Inside

- ❖ Clean Water District
- ❖ Winter Horse Care
- ❖ Rain Gardens & You
- ❖ New Forester on Staff
- ❖ Tree Sale Relocating
- ❖ Citizens Sought
- ❖ Events and More



The Stilly Still Needs Your Help

by Sean Edwards, Snohomish County Senior Planner

The Problem - Contaminated Water

In 1987, the Washington Department of Health closed 18,000 acres of tidelands in South Skagit Bay and Port Susan to commercial shellfish harvest due to fecal bacteria pollution from the Stillaguamish River. The Washington Department of Ecology has also identified many stream and river reaches in the Stillaguamish Watershed that exceed the bacterial pollution standards for recreational water uses. The primary sources of this pollution include human, livestock, pet, and wildlife waste.

The Solution - Working Together

In 1993, the Snohomish County Council created the Stillaguamish River Clean Water District (CWD) and established an advisory board representing local landowners, tribes, agencies, and businesses. Landowners within the CWD pay fees that fund programs to provide water quality and water quantity management services in the Stillaguamish River basin. Snohomish County Public Works, Surface Water Management prepares the annual CWD work program and budget, and offers technical and financial assistance to CWD residents for water quality and drainage improvement projects. The CWD Advisory Board provides recommendations to organizations working on water quality, water quantity, and aquatic habitat issues.

The Results - Good News!



Softshell clam.

On-the ground projects have significantly improved water quality, allowing commercial shellfish harvest to be re-opened in parts of Port Susan and South Skagit Bay. Wastewater treatment plant upgrades, dairy waste management, and septic system maintenance are making a difference. In 2009, the South Skagit Bay commercial shellfish harvest area was expanded to 2,200 acres. And in February 2010, 1,800 acres of the Port Susan commercial shellfish harvest area was re-opened.

The challenge now is to protect these water quality improvements for shellfish harvest and continue to clean up the rivers, streams, lakes, and marine shorelines that are impaired for recreational use. You can help preserve the beauty, recreational use, and potential for shellfish harvest in the greater Arlington-Stanwood-Camano area by joining the effort to clean up rivers, streams, and marine shorelines.



The Stillaguamish River empties into Port Susan Bay south of Stanwood.

These simple actions can really make a difference:

- If you own a septic system, inspect your system for proper operation and maintenance every year and pump it out every 3 to 5 years.
- If you own livestock, keep them and their manure out of local streams, wetlands, lakes, and marine shorelines.
- If you own pets, scoop their poop, bag it, and throw it in your trash.
- If you want to get involved, participate in CWD Advisory Board meetings and other community-based activities in the CWD.



Services Available to CWD Residents

The Clean Water District discretionary fund is available to assist private landowners, community groups, and/or local agencies in undertaking small scale, on-the-ground projects to improve water quality for shellfish protection on private or public property anywhere in the CWD. Contact us to see if your property qualifies for funding to implement water quality projects.

To learn more about the Clean Water District, the discretionary fund, and other services available to CWD residents from Snohomish County Surface Water Management, contact Senior Planner Sean Edwards at 425-388-3024 and/or check out the CWD web site at <http://cwd.surfacewater.info>.

For services provided by Snohomish Conservation District, please contact Leif Fixen at 425-335-5634, ext 110 or leif@snohomishcd.org. The District website also has a wealth of information at: www.snohomishcd.org.

Find out if you live in the Stillaguamish Clean Water District here:
http://snohomishcd.org/your-watershed/CWD_WebMap2009.pdf

Horses 'Nicker and Dime' Us

by Alan Shank, Certified Farm Planner

My wife Mary and I choose to care for our horses at home because, . . . well because we simply enjoy being close to them. We find the greeting of a nicker each morning well worth the bother and expense of feeding, cleaning and maintaining a horse farm.



Start With Good Quality, Dry Hay

A barn full of fresh hay fragrance creates a warm comfy feeling. We carefully store our hay on pallets, safe from the elements, so we can respond to each winter morning nicker with a feed that says, "I care about you".

Buying hay is an obvious fall task. There are other things horse lovers do to keep those nickers coming, like keeping our charges out of mud, as well as protecting our pastures so that come spring, there'll be grass to keep our horses chortling a happy tune.

Footing Important Too

You may have something over your horses like a lean-to or barn, and you may have material to put in your horses like hay and supplements. What about what's under your horses – as in good footing? You might say footing is the "groundwork" of winter horse care.



A paddock that has been graded to drain, laid over with road fabric and six inches of 5/8 minus gravel, and protected from outside sources of water by location, drainage and roof gutters makes for a strong defense against mud and the equine ailments that go with it.

Mud is the bane of the Northwest horse owner. Cold mud is not only uncomfortable, it weakens a horse's immune system, making our buddies susceptible to illness. It also makes horses afraid of falling, thus preventing health-preserving movement that keeps their gut functioning well. Plus, if they are eating

from muddy ground, it can be an invitation to develop colic.

To maximize value from your many 'dimes' spent on gravel footing, it's best to keep those nickers close to home in your paddock, and save vulnerable pasture grass from trampling and overgrazing. That way, there'll be grass -- instead of mud and nuisance weeds -- to greet your horses next spring.



Alan and his horse Dandy explore the coast together in an enhanced photo taken by Alan's wife Mary.

And Then There's Cleaning

And finally, picking (cleaning) your horse paddocks daily and storing manure (and wasted feed if there is any) in nearby compost bins does two important things: it keeps water-absorbing manure from making a mess, and it turns that manure into a pathogen-free, weed seed-free and parasite-free soil amendment to feed your pastures the next growing season.

Late August through early October is an excellent time to spread one-fourth inch of finished compost on your horse pasture. That way the fall grass benefits from natural homemade fertilizer, and your bins will have more space to receive the winter's "pickings."

Lastly, Don't Be Afraid to Ask for Help

Give your Conservation District farm planner a call to help you with fall farm improvements such as soil testing, liming and grass seeding. I'll bet you dimes to dollars that by doing the groundwork, you'll enjoy having your horses close to you even more and the mutual nickering will continue all winter long, rain or shine.

What's The Big Deal About Rain Gardens?

by Stacy Smith, Low Impact Development (LID) Specialist

Rain gardens are popping up all over the Pacific Northwest and showing up in the news media as well. Some communities are even providing incentives to install them! So, what's all the fuss about? The big deal is that rain gardens provide many benefits that you've probably never thought about, since they mimic natural processes. For example, rainfall landing on our roofs, driveways and lawns often picks up all sorts of contaminants and excess nutrients, which are then carried downstream to our rivers, lakes and the Puget Sound.

How Does Polluted Rainwater Get Clean?

Rain gardens slow down and filter that water, removing the pollutants, and allowing time for rainwater to soak into the ground to recharge rivers, lakes and well-water supplies. These special gardens also provide habitat for local wildlife, and are a lovely addition to existing landscapes.

What Does It Take to Build a Rain Garden?

While the name makes it sound simple, rain gardens are actually fairly technical and should be well-planned and designed. Don't give up yet – with the guidelines listed below, and a little help from District staff, you'll be on your way in no time!

Step 1: Locate. The location of your rain garden should be downhill of your rainwater collection area (roof, driveway, lawn), at least ten feet from building foundations, and on well-draining soils. (Learn more about your site's soils at <http://websoilsurvey.nrcs.usda.gov>). If your home is on a steep slope or near a bluff, please consult a professional. Once you've chosen a site, it is important to check the soils to be sure they can absorb the runoff.

Step 2: Design & Build. The size of your rain garden will depend on how quickly your soils drain (results from Step 1), and how much roof or other impervious area will drain into the rain garden. The inlet should be slightly higher than the outlet (more like the overflow on a dam) to ensure it does not flow towards your foundation. The bottom of the rain garden should be level. The rain garden can be any shape to fit your yard and preference. Lay out the shape and dig a depression 12 to 24 inches deep. Fill this depression with soil up to six inches from the top. Use a rich, fluffy, compost-amended soil mix. If your excavated soils have no clay, you can reuse a mix of that plus compost.

Step 3: Plant. Choose plants wisely. There are three zones within a rain garden ranging from wet to dry -- each zone needs to be planted with different kinds of plants. The sun exposure of your rain garden also needs to be considered when choosing plants. District staff are happy to work with you on appropriate plant choices for your garden. Our annual plant sale offers a wide variety of plants well-suited for rain gardens! Remember to apply a thick (3 to 4 inches) mulch layer to help hold moisture in and keep weeds at bay.

Step 4: Monitor and Maintain. It is important to monitor your rain garden's inlets and overflow for erosion and sediment deposits (which you don't want). It's just as important to monitor how quickly your rain garden drains during the first few storm events to be sure there are no problems. Make sure no debris inhibits the flow and that water is draining properly (standing water should disappear within 24 to 48 hours). Plants will need to be watered the first year or two to help them get established. Maintain the thick mulch layer to help keep moisture in and weeds out.

The District is ready and willing to assist you in building your rain garden. Contact Stacy Smith, District Low Impact Development Coordinator at 425-335-5634, ext. 102 or email her at stacy@snohomishcd.org. You can also check out our website at <http://snohomishcd.org> for more tips.

We will be happy to help you do your part to reduce or prevent contaminated runoff from reaching Puget Sound.



RAIN GARDEN PLANTS

We recommend native plants for rain gardens as they are used to having wet feet in the winter and are drought tolerant in the summer.

Plant ideas for sunny or shady locations:

Sunny Site

Red-osier Dogwood
Pacific Ninebark
Tall Oregon Grape
Serviceberry
Snowberry
Dwarf Arctic Willow
Vine Maple
Thimbleberry

Shady Site

Deer, Lady and Sword Ferns
Low Oregon Grape
Black Twinberry (best in larger gardens)
Salmonberry
Indian Plum
Piggy-back Plant

Emergent plants for bottom (wettest part of garden):

Sunny Site

Small-fruited Bulrush
Dagger-leaf Rush
Taper-tipped Rush

Shady Site

Slough Sedge
Small-fruited Bulrush
Other ornamental grasses



Rain garden along a street.



We Are Looking for a Public Site for a Demonstration Rain Garden

Snohomish Conservation District is looking for partner organizations with a public site (schools, parks, public buildings, etc.) to install a demonstration rain garden.

If you know of a good location that is visible, accessible, and would benefit from stormwater management, please call Stacy Smith at 425-335-5634, ext.102 or email stacy@snohomishcd.org.

New Forester Joins District



Conservation District staff have a new forester to look up to - literally. Six foot, five inch-tall Leif Fixen is a forester from the great state of South Dakota and has joined the District to add some diversity (and height) to our team of farm planners.

Leif holds a BS in Forestry and Agronomy from South Dakota State University and has spent the last five years working as the City of Boston's Urban Forester.

Leif will be ramping up the District's Firewise program as well as working with farmers and landowners throughout the area. He lives in Seattle with his wife Katie and Golden Retriever Penny. If you have forestry questions, you can contact Leif at leif@snohomishcd.org or 425-335-5634, ext. 110.

We're Shopping for the 2011 Plant Sale!

For those of you who take advantage of our **annual conservation plant sale**, you are no doubt aware that it takes lots of planning to distribute 60,000+ trees and shrubs into the hands of eager shoppers in only two days. We're already gearing up for the 2011 sale by shopping for great plants, and new and different species, to help you create the wildlife habitat, yard, or forest of your dreams. New forester Leif Fixen and Plant Sale Manager Lois Ruskell recently scoped out area nurseries for unique, new plants. Make sure to watch our website for last-minute updates!

March 4 & 5, 2011 - Evergreen State Fairgrounds in Monroe*.

**Note - don't look for us in the old rabbit barn, it's being torn down! Watch for signs to our new location at the fairgrounds.*



Gayfeather in full bloom.

Upcoming Event

Tour of W Bar B Ranch (part of Warm Beach Camp & Conference Center south of Stanwood)

Saturday, October 30, 2010

1:00 PM - 3:00 PM

Free

Sign up by emailing: workshops@snohomishcd.org

Add your name, number attending, and a daytime phone number in the body of your email, please.

Learn About:

- Fencing wet areas
- Frost-free hydrants
- Chore-efficient waste storage
- Managing a large equine stable
- Preparing your farm for the wet, muddy months ahead!



Come see how a large equine operation keeps their animals healthy and clean, and their riders happy too!

Sponsored by Snohomish Conservation District, the Stillaguamish River Clean Water District, and Snohomish County Surface Water Management to help landowners protect resources and keep our water clean.



Are You Looking for Volunteer Opportunities in Conservation?

By Monte Marti, District Manager

It's an exciting time of growth for us here at the District. We are currently looking for local residents who care about the environment and have an interest in guiding our programs to address local resource concerns. If that sounds like something that would interest you, read on.

Snohomish Conservation District is seeking nine members for its Citizen Advisory Committee. This group, made up of 12 citizens serving three-year terms, meets two to five times during the year to review and provide advice on the District's programs and activities.

This committee is critical to the long-term success of the District and its timely delivery of services to landowners, cities, counties, and groups within Snohomish County and on Camano Island. The committee will help ensure that the District is accountable and is focused on addressing natural resource concerns in an effective and efficient manner.

If you are interested in learning more about the Citizen Advisory Committee and a potential volunteer appointment to the committee, please contact me at 425-335-5634 ext. 107, or monte@snohomishcd.org.



"Do not wait for extraordinary circumstances to do good action; try to use ordinary situations."

— Jean Paul Richter
German Romantic
novelist and humorist



Celebrate Farming at Free Festival

by Elizabeth Emmons, Sky Valley Chamber of Commerce

Looking for a fun activity for the whole family? Take a free tour of three heritage farms in the Skykomish area east of Monroe. Your children and grandchildren will get to see animals up close, learn about gardens and where food comes from, play on a rope swing, take a hayride and much more. What a great way to spend a Saturday making memories!

The 2010 Sky Valley Farm Festival will be Saturday, October 9, from Noon - 5 PM, at three working farms on lower Fern Bluff Road between Sultan and Monroe. This festival celebrates our rich farming heritage, while educating the public about where their food comes from.

The first farm is the Rivers End Ranch, where you can tour a working cattle ranch, play on the rope swing in the hayloft, take a wagon ride, ride a horse, learn how to throw a lasso, create a keepsake, browse educational booths, and relax in a beautiful farm atmosphere. Bring a picnic lunch or buy a snack onsite.



The next stop is at the 240-acre Groeneveld Dairy Farm, a third generation working dairy farm. Say hello to the many 4-H award-winning dairy cows, the Snohomish County Dairy Ambassadors and local Dairy Women, who can tell you more about the dairy industry and answer all your questions. There will be educational booths featuring the farm's history, local honey for sale and more – milking starts at 4 PM.

Last year, two calves were born during the festival. This year, there will be an open jam session, featuring local bluegrass musicians. Visitors are invited to bring their guitar, banjo, bongos or fiddle and join in!

The final destination is Stockings Garden and Nursery. Visitors will enjoy the corn maze (\$5 on festival day), shopping for fresh produce and finding the perfect Halloween pumpkin. Sky Valley Chefs Gordon MacDonald and Mimi Stockmann will host cooking classes throughout the day, demonstrating how to turn fresh Sky Valley produce into a fabulous feast.

Farm coordinator Elizabeth Emmons says, "I appreciate this festival because it gives my daughter a first hand look at all the work that goes into putting her dinner on the table. Beyond the educational aspects, I love that she can spend a day getting muddy, petting animals and making herself feel at home at these three beautiful farms."

This all volunteer event is facilitated by the Sky Valley Chamber of Commerce with support from Snohomish County, Sultan School District, Northwest Agriculture Business Center, Water Tectonics and the Antique Tractor Club.

Call the Sky Valley Visitors Information Center at 360-793-0983 (contact person Debbie Copple) for more information.



Snohomish Conservation District

Board of Supervisors

Mark Craven, Chair
Adam Farnham, Vice-chair
Karl Hereth
Steve Van Valkenburg

Associate Members

Dick Barr & Duane Weston

District Manager

Monte Marti

Phone

425-335-5634, ext 4

FAX

425-335-5024

Contact:

Lois Ruskell

425-335-5634, ext 108

Editing:

Donna Gleisner

The Written Edge

425-923-7110

www.snohomishcd.org

The NEXUS is published quarterly and distributed free of charge to residents of the District. Funding provided by Snohomish County Surface Water Management, Washington Department of Ecology, and the Washington State Conservation Commission.