

Dairy Farmers' Efforts Contribute to Significant Water Quality Improvements

Water quality in tributaries of the Nooksack River has continued to show significant improvement since the beginning of a monitoring program that started in 1998 and will continue until at least 2005. Results indicate that fecal coliform counts have been reduced by an average of 71% in five watersheds included in the monitoring program. Dairy farmers have contributed to this dramatic turn around in water quality over the last three years by implementing practices that have reduced fecal coliform levels in field runoff.

Two practices that deserve the most credit for lowering bacteria counts associated with farming activities are filter strips (or buffer strips) and nutrient management. Countywide, filter strips are now being maintained on over 3000 acres of farmland adjacent



... fecal coliform counts have been reduced by an average of 71% ...

VeenHuizen Dairy, Lynden, WA: The field on the right was in corn during the previous growing season. A perennial grass buffer strip was established between the field and a ditch on the left in order to reduce bacteria and sediment in field runoff. This practice has played a key role in improving water quality locally.

to streams and ditches. Filter strips have helped in lowering the number of surviving fecal coliform by increasing the time and distance they must travel between field areas where manure is ap-

plied and surface water.

Nutrient management plans covering 50,000 acres of county farmland have been written in the past 3 years

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The Whatcom Conservation District: A Good Place to Serve Your Community!

The Whatcom Conservation District (WCD) is governed by a volunteer board of five supervisors, representing a cross section of landowners in the local community. In March of this year, we are anticipating that two positions on the WCD Board of Supervisors will become vacant. **What a great chance to get involved and have a positive effect on protecting our local natural resources!**

In addition to supervisor positions, an alternative way to becoming involved with the district is as an associate supervisor. WCD participates in a wide variety of committees dealing with issues such as habitat res-



Ken Thomas
New Board of Supervisors Chairman

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9th ANNUAL PLANT SALE

- 22 Seedling Trees and Shrubs to choose from
- 3 species never previously offered

ALSO AVAILABLE:
Native Perennials



See the Plant Sale insert for details
or check out our website at
www.whatcomcd.org

Conservation Districts Hope Legislature Gives Districts Election Option

As a result of a ruling by the State Attorney General last summer, a Conservation District Supervisor position (1 of 5) appeared on the general ballot last November for the first time in the district's 55 year history in Whatcom County. Prior to last year the district conducted its own elections which were supervised by the League of Women Voters. Turn out for these elections was often quite small but so was the cost to the District. This seemed reasonable because most of the state's 48 conservation districts (including Whatcom

CD) collect no local fees or assessments and most have no way to pay election costs. Conservation districts from around the state hope to persuade the

Office sent a bill to the District for last November's election. Out of 57 jurisdictions the county billed, the District was assessed the fourth highest amount: \$20,392.43 (11% of the election's total cost). Only the State of Washington at \$36,756, Whatcom County at \$32,678, and the Port of Bellingham at \$24,521, were billed for more, and the Conservation District's fee exceeded Bellingham's by over \$5,500.

District Billed for Over 11% of the Cost of Whatcom County's Last General Election

State Legislature to change election rules during the current legislative session. In the future they want Districts to have the option of either holding their own elections as before, or going on the general ballot, but only if a source of funding is made available.

In December the County Auditor's

To get involved with the Whatcom Conservation District see article on page 1.

Dairy Farmers' Efforts Contribute to Significant Water Quality Improvements

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and the adoption of this practice has further reduced fecal coliform counts in two ways. First, manure applications are timed to occur during the growing season when the opportunity for nutrient uptake by crops is at its peak. Second, applications are eliminated during winter months due to the increased potential for bacteria to enter streams via field runoff during that period.

The watershed showing the most improvement is Bertrand Creek Watershed

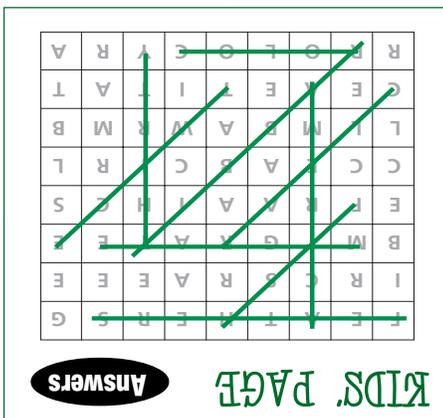
The goal of the Department of Ecology (DOE) is to reduce fecal counts in all watersheds listed in the table to less than 50 colonies by 2005. To date the watershed showing the most improvement (and also the one with the most dairies) is Bertrand Creek Watershed. Since 1998 the fecal count has been reduced by 75% and it has never exceeded the quarterly goal set by DOE.

Watershed	# of dairies in watershed*	1998 1 st Qtr FC count	2001 4 th Qtr FC count	% reduction from 1998	% of time FC counts have exceeded TMDL goal 1998 - 2001
Kamm Creek	16	580	150	74%	(7%)
Scott Ditch	19	250	50	80%	(57%)
Bertrand Creek	37	300	75	75%	0
Fishtrap Creek	30	450	150	66%	(57%)
Ten Mile Creek	29	300	125	58%	(43%)
Nooksack River at Marine Drive	130	75	25	66%	(7%)

* Some dairies have land in more than one watershed

** FC count: Fecal coliform (FC) bacteria colonies per 100 mL water

***TMDL: Total Maximum Daily Load. A plan to clean up fecal coliform in the Nooksack River was adopted by the DOE and U.S. Environmental Protection Agency in 2000. This water clean up plan, called a "total maximum daily load" (TMDL), sets forth the goals, objectives, and tactics for meeting water quality standards in the Nooksack watershed.



WHATCOM CONSERVATION DISTRICT – Mission Statement: *the Whatcom Conservation District promotes conservation education and provides technical assistance to foster a healthy relationship between the environment and people.*

Purchase of Development Rights Program Considered for Whatcom County



Article by Matt Shipkey, Whatcom County Planning and Development Services

The presence of well-managed agricultural land in a community can contribute to a healthy environment and a better quality of life for the whole community. Specific advantages of maintaining well-managed farmland in our community include the following:

- Agricultural land is unpaved and soils are permeable, thereby maintaining opportunities for water to infiltrate into the soil. Urban development, on the other hand, increases the amount of impermeable surface area, such as pavement and building rooftops, and decreases water infiltration. Higher runoff volumes often associated with urban development present greater opportunities for pollutants to wash off impermeable surfaces directly into streams, greater potential for flooding, and less opportunity for groundwater recharge.
- Agricultural land provides habitat and cover for migrating wildlife, especially important in Whatcom County because of its location along the Pacific Flyway, one of only four major migratory routes in North America.
- Farmland requires fewer public services than other types of land. This contributes to lower tax rates for the community as a whole.
- Preserving farmland helps to ensure continued success of a traditional enterprise that makes a substantial contribution to our diverse local economy.

The **Purchase of Development Rights (PDR)** technique is an increasingly popular method of farmland preservation used successfully across the country and being examined for use here in Whatcom County. PDR is a vol-



untary program that pays farmers for the development value of their land. In exchange, the landowner signs over his or her current and future rights to develop the land for other uses. The owner retains the right to farm the land and the right to sell or otherwise transfer the land.

The key benefit of a PDR program is the permanence of protection it affords, unmatched by more standard techniques such as zoning or subdivision regulations. PDR benefits the farmer by providing equity and lowering tax liabilities. PDR can also benefit the larger farming community by helping to preserve a 'core' amount of farmland within Whatcom County. A stable 'core' acreage of farmland can help ensure that farm support industries stay

in business, and that costly conflicts with non-farm neighbors are reduced.

The primary limiting factor of a PDR program is its cost. Nationwide, development rights on farmland have been purchased at an average cost of \$1000-\$2000 per acre. Given the significant amount of farmland within Whatcom County and the County's limited financial resources, a PDR program in Whatcom County necessarily would be small, focused, and targeted at specific areas.

In addition to PDR, other farmland preservation techniques exist and could be examined for use in Whatcom County. One possibility is a transfer of development rights (TDR) program in which development rights are bought, sold and transferred between farmers and land developers.

A diverse PDR Steering Committee is currently examining options for a local PDR program. Whatcom Conservation District staff member Sharon Digby is providing support to the Steering Committee during the program's design phase, which will continue over the next several months.

Interested in hearing more? You can request a Fact Sheet that answers more specific questions by contacting Sharon Digby or Kraig Olason at Whatcom County Planning, 360-676-6907. **Interested in contributing?** Several meetings will be held this year that will offer opportunities for input.

When Choosing Plants, Consider the Advantages of Going Native

Native plants are plants that occur naturally in your region. For example, Douglas fir is a native plant in much of Western Washington. English holly is not a native plant in Washington because it was originally brought here by Europeans (it is, however, a native plant in England). Plants native to a specific region have grown alongside the native insects, fungi, plant diseases, wildlife, and other native plants for thousands of years. Plants native to our area are adapted to growing in our region's soils and climate, and so generally require less maintenance (such as watering) than do non-natives.



Pacific Ninebark- example of a native shrub that is commonly used in stream restoration

Non-native plants are often called "exotic plants" or "introduced plants". Occasionally they can become a problem, spreading aggressively and damaging wildlife habitat.

Problem aquatic and terrestrial plants are often referred to as **invasive non-native plants** or **invasive weeds**. Most of the problem aquatic and terrestrial plants in Western Washington are not native to this area, having been introduced to our region through hu-



Reed Canary Grass (shown here) is an example of a non-native invasive species.

man activities. Due to their aggressive growth patterns and a lack of natural enemies here, they spread rapidly into native plant communities. This reduces habitat diversity, food and shelter for many wildlife species, and the ability of the natural environment to perform a wide variety of important ecological functions. Examples include Himalayan blackberry and reed canary grass.

A **noxious weed** is legally defined in Washington as "any plant which when established is highly destructive, competitive, or difficult to control by cultural or chemical practices". (Whatcom County Noxious Weed Control Board, *Selected Noxious Weeds of Washington State*)

Using native plants raises important issues about exactly what "native" means. For example, red-osier dogwood (*Cornus sericea*) is native to Western Washington. But it is also native to other places as diverse in climate as southern California and Maine. Although they are all the same species, red-osier dogwoods growing naturally in other areas have adapted to a very different combination of climate, soil, diseases, and other plants and animals from what is found in Western Washington.

As the relatively new field of restoration ecology evolves, more information will become available as to the importance of specifying coinciding seed zones as seed sources for plant material to be used for restoration projects (i.e. whether local



Japanese Knotweed - example of a noxious weed that is abundant in Whatcom County

restoration projects must use plant material grown from seed collected in Puget Sound coastal lowlands). Within the restoration community, professionals will continue to wrestle with seed zone issues as they study success levels of restoration projects.



The **Conservation Reserve Enhancement Program (CREP)** in Whatcom County is leading the state in number of total acres enrolled (668 acres) and number of contracts (48). Winter planting on new CREP contracts is currently underway and you will be seeing new trees and tree protection tubes appearing along waterways throughout the county.

How are appropriate plant materials selected for these sites? Why do we plant such small trees and why do we plant in the winter? These are subjects that we will address more in depth in upcoming newsletters. For now, as you evaluate your property, consider what types of plants to plant on your property, and read descriptions of various plants, here are some plant terms you may come across (much of the information below is taken from WSU Cooperative Extension, Western Washington website (<http://gardening.wsu.edu/nwnative/>)).

Septic System and Well Water Education Campaign Underway

Submitted by Chris Chesson, Whatcom County Health and Human Services

A newspaper insert, entitled "Take Care of Your Septic System and Well Water", has been designed by Whatcom County Health and Human Services (HHS) to help all Whatcom County resi-

and have the insert mailed to them. Septic system education classes (also called "Septics: 101") are also available for interested groups.

Chris Chesson, Environmental

Providing easy to read and to use educational materials is vital to the public health of our county.

dents and businesses maintain their septic systems and/or drinking water wells.

With much of the county's ground water supply lying within just 50 feet of the surface, continued development in the rural areas, less desirable sites being available for septic system installation and many owners not knowing the basics of operating and maintaining their human waste system or drinking water supply, the possibility of health problems increase.

Anyone with a septic system and/or well water who would like a free copy is invited to call HHS at (360) 676-6724

Health Supervisor with HHS Liquid Waste Program, said: "Providing easy to read and to use educational materials is vital to the public health of our county. In Washington State, the home or business owner with a septic system and/or well is ultimately responsible for preventing human waste from contaminating our soil and ultimately preventing communicable diseases from entering our groundwater. The insert provides easy, inexpensive ideas on how to

take care of our daily needs and preventing repair costs, environmental damage or illness."



Agriculture Preservation Committee Provides "Trees for Streams"

As part of the Trees for Streams project, Whatcom County's Ag Preservation Committee (APC) is giving away **free** 2'-3' tall Douglas fir trees for planting along the streams and rivers in Whatcom County.

The APC, representing over 700 farmers in Whatcom County, endorses volunteer efforts to improve the health of local streams. One way to improve stream health is to provide shade by establishing buffers of trees and shrubs along waterways to help filter out pollutants, control Reed canary grass, and reduce water temperature.



When: Every Saturday during February, from 9:00 am to 1:00 pm.

Where: Pick up at the SW corner of Prairie and Benson field. Drive north on the Guide to Prairie Rd. just past mile marker 14. Turn right on Prairie. Drive two sections. You will see the Nursery on the right just before Benson.

How:

- Plan where your trees will be placed. Prepare the planting site. If you are picking up a large order, you may want to dig your holes prior to pick up day.
- Volunteer students from Meridian High School FFA will be on hand to help you dig, tie/wrap, and load your vehicle. The roots of the trees must

Whatcom Conservation District Employee Receives Statewide Recognition

Wayne Chaudiere, a project manager for the District's Conservation Reserve Enhancement Program (CREP), received the **2001 Professional Service Award** at the Washington Association of Conservation District's 60th Annual Meeting held in November 2001 in Bellingham. The Professional Service



Award is given in recognition of outstanding accomplishments to the state's conservation program. Wayne's ability to collaborate, innovate and provide leadership in developing CREP resources has helped WCD become the Washington State leader in the categories of total CREP plans (48) and total contracted acreage (668 acres).

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Quality Water for Future Generations: Facts about the WRIA 1 Watershed Management Project



Submitted by Scarlet Tang, Whatcom County Water Resources

Under the 1998 state Watershed Management Act, five governments—City of Bellingham, Lummi Nation, Nooksack Tribe, Public Utility District No. 1, and Whatcom County—initiated the WRIA 1 Watershed Management Project in the Nooksack River basin and smaller, adjacent drainages such as California Creek and Lake Whatcom. Together, these watersheds are known as Water Resource Inventory Area No. 1 (WRIA 1).

In Whatcom County, an increasing demand for water, dwindling salmon runs, and public health concerns about our drinking water supplies are complex issues that are all connected. There is no quick and easy fix for any of them. The WRIA 1 Watershed Management Project provides a framework for citizens, local governments, tribes, and state and federal agencies to discuss these issues and try to come up with solutions for them.

Participants have spent the last three years getting the project set up and collecting scientific information about the state of water resources in WRIA 1. Now the project is entering the planning phase, where a unified strategy for managing water supplies, water quality, fish habitat, and instream

flows will be developed for the next decade and beyond. **If you want to have a voice in the future of water resources in Whatcom County, now is the time to get involved with this project.**

You can get involved in the WRIA 1 Watershed Management Project in several ways:

- Join the water resource interest caucus that most closely represents your interests (see sidebar).
- Volunteer your expertise to the ongoing research.
- If you belong to a community organization, book a speaker to discuss the project with your group. Or get some neighbors and friends together and invite a speaker over. You'll find out specific information about your local sub-watershed and about issues that you care about.
- Come to a public meeting to discuss possible ways to manage water resources, research findings, and other critical issues. Keep an eye out for meeting announcements this spring.
- Visit the project web site at <http://wria1project.wsu.edu>. Sign up to receive the electronic Fresh Sheet, a regular e-mail update of project happenings.

Agriculture Preservation Committee Provides "Trees for Streams"

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be kept wet.

- The Nooksack Salmon Enhancement Association is providing written planting instructions. All your questions will be answered.

APC suggests you pick up only the amount of trees that you can plant that

weekend to ensure a higher survival rate. However, you may return as often as you like.

For more information about APC, the Trees for Streams project, or to place large orders call: Dorie Belisle 398-9187 or email jdbelisle@hotmail.com

WRIA 1 Participants

Contacts for Water Resource Interest Caucuses

AGRICULTURE

Henry Bierlink, 354-1337, wcagpres@aol.com

ENVIRONMENTAL

Carl Weimer, 733-8307, carlw@re-sources.org

FISHERS

Dan Coombs, 398-1637, djcmb@aol.com

FORESTRY

Dick Whitmore, 647-1246, whitmores@aol.com

LAND DEVELOPMENT

Pat Jones, 733-6666, pat@jeiwa.com

NON-MUNICIPAL WATER SYSTEMS

Skip Richards, 738-9544, cdl@catalyst-consulting.com

PRIVATE WELL OWNERS

Bill Clothier, 734-2730, bcwell@premier1.net

If none of these caucuses is exactly what you're looking for, contact your local government (city, county, or special purpose district) and get involved through your elected officials.

Contacts for Special Purpose Districts and Small Cities

DIKING/DRAINAGE

Ed Henken, 384-3006, nwclaydes@telcomplus.net

WATER DISTRICTS

Elisabeth Britt, 733-5224, ebritt@bossig.com

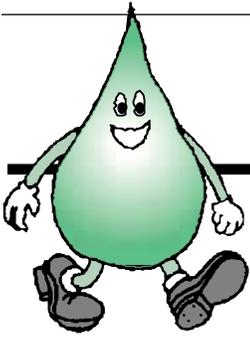
SMALL CITIES

Roland Signett, 384-4302 ext. 3005, signett@ci.ferndale.wa.us

JOINT BOARD

City of Bellingham: 676-6850
Lummi Nation: 384-2272 or 384-2212
Nooksack Tribe: 592-2632
Public Utility District No. 1: 384-4288 ext. 13
Whatcom County: 676-6876

For general information, please call the Whatcom County Water Resources Division at 676-6876.



WHATCOM CONSERVATION

KIDS' PAGE

ANSWERS ON PAGE 2

Did you know that the bald eagle is the national bird of the United States? It was chosen in 1782 because of its long life, great strength, majestic looks. It is also a symbol of freedom.



The underlined words in the numbered sentences below can be found hidden in the box of letters. See if you can find them all! Words may be arranged horizontally, vertically, or diagonally.

F	E	A	T	H	E	R	S	G
I	R	C	S	R	A	E	E	E
B	M	I	G	R	A	T	E	E
E	F	R	A	A	I	H	C	S
C	C	E	A	B	C	I	R	L
L	L	M	B	A	W	R	M	B
C	E	A	E	T	I	T	A	T
R	R	O	L	O	C	Y	R	A

1. The species is called the "bald" eagle even though it has feathers on its head because bald used to mean white.
2. Bald eagles can see fish in the water from several hundred feet up in the air.
3. Female eagles are larger than males; they sometimes weigh twice as much.
4. There are an estimated 50,000 eagles in North America.
5. Eagles can fly at an average speed of thirty miles per hour.
6. Eagles have color vision four times sharper than that of a human with perfect vision.
7. They can probably see a rabbit moving up to a mile away.
8. Eagles have one set of eyelids to close when they sleep and another clear set to blink with during the day.
9. Eagles often migrate south or to the ocean when lakes and streams freeze over and fish become hard to get.



Info gathered from www.baldeagleinfo.com. Visit the site to find out more!

WINTER ANNOUNCEMENTS

26th Annual Cattleman's Winterschool - Saturday February 9, 2002
8am- 4:00 pm. Skagit, Snohomish and Whatcom County Cattlemen's Associations, together with WSU Extension and Skagit Valley College, will host this all day event in Mt. Vernon. Winterschool is a single day educational opportunity packed with the latest information and ideas for cattle people.



Stream Team Water Quality sampling begins in Bertrand Creek. Stream Team restoration and maintenance projects will take place throughout the winter and spring. Call Beth or Andrea at the WCD office (354-2035 ext. 3) for more information!

Our 9th annual Conservation Plant sale - March 8th & 9th – see plant list, order form, and details in this newsletter issue!

2002 Regional High School Envirothon competition, sponsored by local conservation districts, will be held April 2002 at Warm Beach Camp in Snohomish County. Exact dates TBA.

Drayton Harbor Shellfish Openhouse - Saturday January 26th, 2002. The Drayton Harbor Shellfish Protection District Advisory Committee is holding their second annual Open House and Oyster Feed on Saturday, January 26 at the Marine Drive Harbormaster's Conference Room at Blaine Harbor, 11am to 3 pm. For more information, contact Ami Stillings, Whatcom County Shellfish Resource Planning at 676-6876 or Geoff Menzies, Committee Chairman at 384-9135.

A Good Place to Serve Your Community!

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toration, farmland preservation, dairy nutrient management, funding, public outreach, etc., and many opportunities exist to provide input and represent the District as an associate supervisor on these committees.

GET INVOLVED!

Contact Dawn Bekenyi at the WCD office (354-2035 ext. 3) for more information about supervisor and associate supervisor positions and about the appointment process.

- New Whatcom Conservation District Board Member Officers
- Ken Thomas – Chair, Board of Supervisors
- Brian Cieslar – Vice-Chair
- Fred Tjoelker – Treasurer/Secretary



THIS NEWSLETTER is published by the Whatcom Conservation District with support from the Centennial Clean Water Fund under the authority of the Washington State Conservation Commission and the Washington State Department of Ecology. Call the district's office at (360) 354-2035 if you know of anyone who would like to be on the mailing list, or if you have articles of interest or questions concerning the Whatcom Conservation District.



Whatcom Conservation District

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