

# In Balance

A Newsletter for the Whatcom County Dairy Industry



## CONSERVATION RESERVE ENHANCEMENT PROGRAM RULE REVISED: New Minimum Buffer Ranges from 35 to 100 Feet



Two year old CREP project

A rule change regarding the minimum forested buffer width necessary to be eligible for Conservation Reserve Enhancement Program (CREP) funds should come as welcome news to some dairy producers. Until now, the minimum CREP buffer in Whatcom County was between 75 and 130 feet. The new minimum buffer standard ranges from 35 to 100 feet. The average buffer in the County has been around 150 feet. A 150-foot wide buffer

that is ¼ mile long removes almost 4.5 acres from crop production – too much for most dairy producers. The new rule will allow buffers as narrow as 35 feet to be installed along eligible channels without floodplains. This amounts to just over an acre in a ¼ mile long buffer. Since many streams already have a zone of unfarmed land between the cropped portion of the field and the stream's brush line (ordinary high water mark), many farms may now be able to participate in CREP without trading off crop need for nutrient balance.

CREP is the program that pays landowners, through establishment of 10-15 year contracts, to plant trees along streams in order to improve habitat conditions for salmon. The amount of rent paid to the landowner per acre is 200% of the rental rate for the soil type mapped in the contracted acreage. Locally through CREP the top soil rental rate is over \$400 per acre, with some lands eligible for an additional incentive. CREP pays for eligible costs associated with planting and maintaining program sites. If you are interested in CREP please contact the District office.

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*Whatcom*  
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## SUMAS RIVER WATER QUALITY UP TO STANDARDS

### Water Quality in Sumas River Similar to Nooksack Tributaries



Sumas River off Jones Road looking toward Canada at location where water quality samples are taken.

For the past six years considerable effort has gone into improving water quality in the Nooksack River watershed, with the goal of reopening Portage Bay shellfish beds closed due to high fecal coliform (FC) counts. Those water quality improvement efforts have been successful. Late last year the Department of Health reopened most of Portage Bay's shellfish beds for commercial harvest. While the Nooksack has received a lot of favorable publicity about this, little has been said about how water quality in the Sumas River and its tributaries has also improved. Perhaps this is because the Sumas River flows into Canada?

FC counts for the Sumas and Nooksack watersheds look very similar; both are within targets! Table 1 lists ten county streams by their respective watershed along with FC count (geometric

mean for the last nine samples measured in colonies per 100 milliliters). Water samples for both watersheds were collected and processed by the Northwest Indian College. Testing in the Nooksack watershed began in 1998, while testing for the Sumas Watershed began in 2002. The average for the Nooksack's tributaries was 33 FC col/100 ml, while the average for Sumas River streams was 36 FC col/100 ml. Since 37 dairies are currently operating within the Sumas drainage (20% of the county's total) and dairy farming is the predominant land use, we can thank these producers for lower FC counts. Their better manure handling and management improvements are really paying off in environmental benefits.

Table 1

<u>Waterbody</u>	<u>Watershed</u>	<u>Fecal coliform geo. mean (col./100 ml)</u>
Bertrand Creek	Nooksack	23
Fishtrap Creek	Nooksack	47
Johnson Creek	Sumas	18
Kamm Creek (Slough)	Nooksack	44
Nooksack River (Marietta)	Nooksack	8
Pangborn Creek	Sumas	47
Scott Ditch	Nooksack	22
Squaw Creek	Sumas	33
Sumas River (Jones Rd)	Sumas	44
Ten Mile Creek	Nooksack	28

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### Canadian Researchers Hope to Introduce Cocksfoot Mottle Virus Resistant Orchardgrass by 2005

Orchardgrass is a popular forage in Whatcom County. With good management it produces high yields of excellent quality feed. However, it does have one significant disadvantage when compared to other forage species. Many orchardgrass varieties are susceptible to a disease called cocksfoot mottle virus (CMV). Fields affected by CMV will quickly drop below optimum production and require reseeded in as little as 2 or 3 years to maintain their full yield potential. CMV symptoms are most noticeable in late March and early April when leaves of affected plants turn yellow. During other times of the year CMV afflicted fields have more areas of bare soil and higher weed populations (e.g. dandelions, chickweed and annual bluegrass) than would normally be expected. Orchardgrass growers can avoid spreading this disease by harvesting newly planted fields before they harvest older seedings where the disease has probably already become established, and by cleaning harvesting equipment after use in CMV infected fields. To help address this problem, Agri-Food Canada has developed nine orchardgrass populations with resistance to CMV. These populations are now being tested. If all goes well, the best performing synthetics will be released for commercial production in 2005.



Orchardgrass affected by  
cocksfoot mottle virus (CMV)

### Crop Nutrient Budgeting: Don't Forget to Credit Irrigation Water Nitrogen

Irrigation water from many wells in Whatcom County contains enough nitrate-nitrogen (NO<sub>3</sub>-N) in it to provide a significant amount of a crop's requirement for that nutrient. Producers that account for irrigation water nitrogen realize the following benefits:

- They will reduce the amount of nitrogen they are purchasing.
- They will be applying nitrogen in its most readily available form to plants.
- They will reduce the amount of NO<sub>3</sub>-N already in groundwater.
- By properly accounting for all N sources, problems that may result from over application of nitrogen, such as high nitrate feed and elevated NO<sub>3</sub>-N in groundwater, may be reduced.
- They will avoid excess fertilization that can delay crop maturity and yields.

A well water test for NO<sub>3</sub>-N is the first thing needed in order to credit irrigation water nitrogen. Because well water NO<sub>3</sub>-N levels tend to vary throughout the year, the test should be taken during the irrigation season. Local labs running this test charge less than \$20 per sample. To determine the pounds of available NO<sub>3</sub>-N per acre in 1 inch of irrigation water, multiply the water test value for NO<sub>3</sub>-N ppm times .225. Then multiply that value by the inches of water applied per acre during the irrigation season to determine the total annual irrigation nitrogen credit. Example: If a well water sample contains 18 ppm NO<sub>3</sub>-N it would contain just over 4 lbs. of NO<sub>3</sub>-N per acre inch of irrigation water applied (18 ppm NO<sub>3</sub>-N X .225 = 4.05 lbs/acre/inch irrigation water). A crop receiving 12" irrigation water would receive 48 lbs. of nitrogen per acre over the course of the irrigation season, and because it is in the nitrate form it isn't subject to volatilization losses.

### Export Phosphorous Rich Waste Storage Pond Solids

Summer provides a good opportunity to do maintenance clean-outs of waste storage structures, but consider these two facts before deciding what to do with the solids and sludge:

1. Solids settling to the bottom of waste storage structures are much higher in phosphorous than other liquid and solid wastes collected on the farm.
2. The field closest to the waste storage structure(s) generally tests higher for P than other fields. To make good use of this material, export it to distant fields with low to moderate levels of phosphorous, or offer it to berry growers seeking a nutrient rich soil amendment for fields in which they intend to plant raspberries and blueberries.

### Protect Domestic Wells

#### From Nutrient Applications With A Sanitary Control Area

Spreading manure near a well increases the potential for contaminating groundwater. To reduce this risk, Whatcom County Health Department established a sanitary control area (SCA) around wells. Manure should not be spread within 100 feet of private domestic wells. Some public wells may require an even wider SCA.