

Achieving TMDL Bacterial Goals through Conservation Plan Implementation

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Whatcom Conservation District Manager

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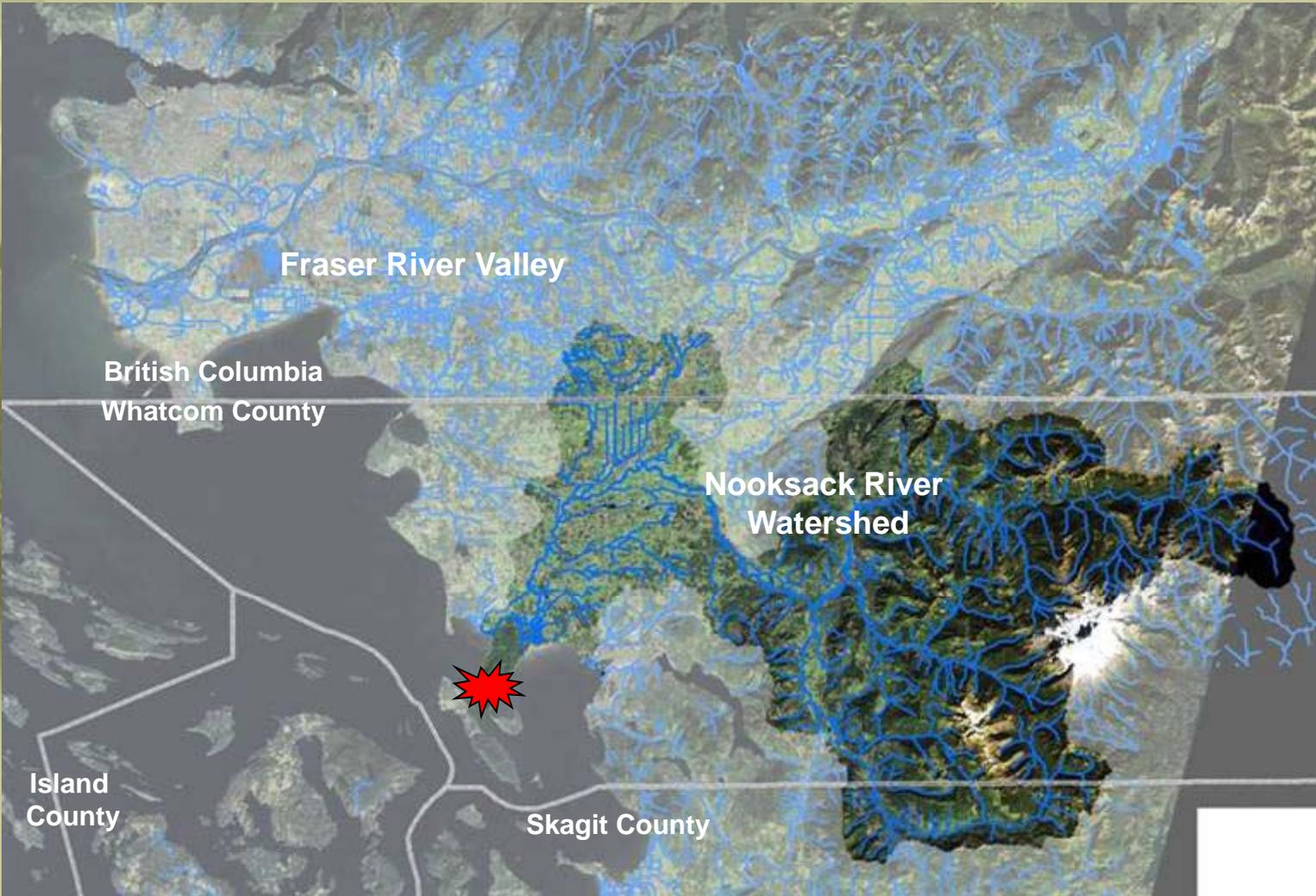


Will talk about...

Nooksack Bacterial TMDL

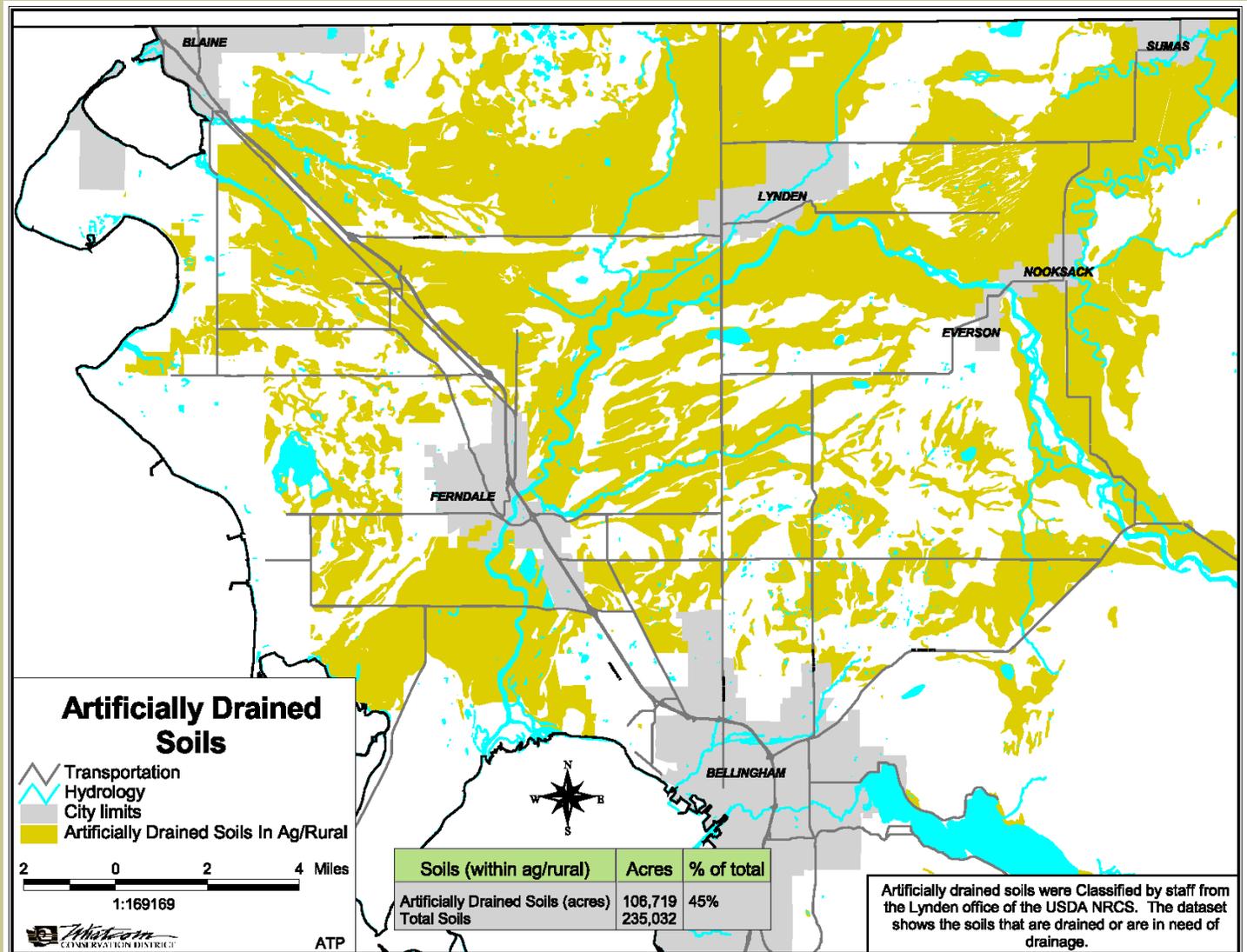
Assistance Provided to Dairy Producers

Water Quality Results





Wet soils.





Drainage is essential . . .

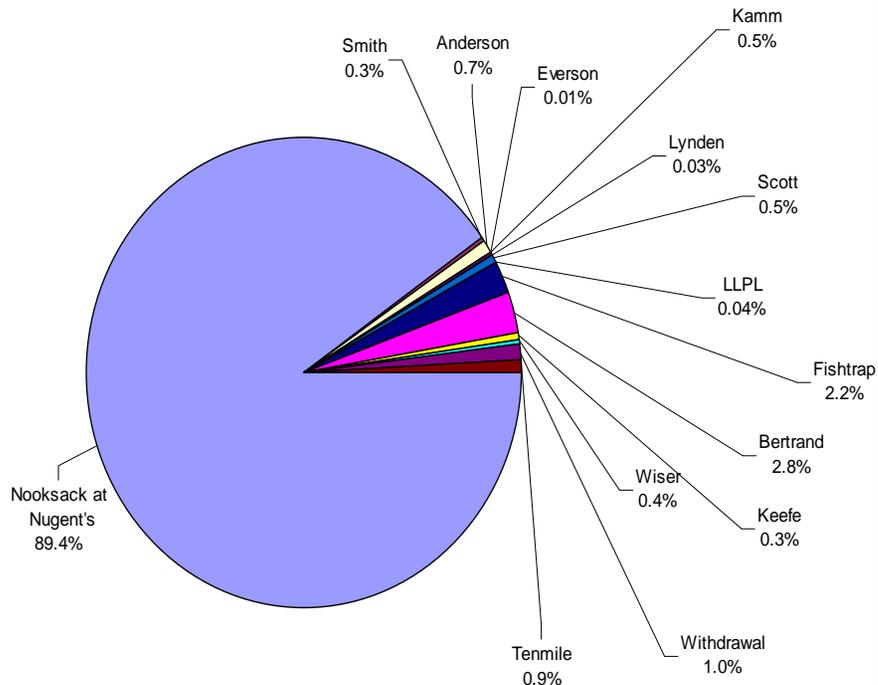


but can have
negative impacts.

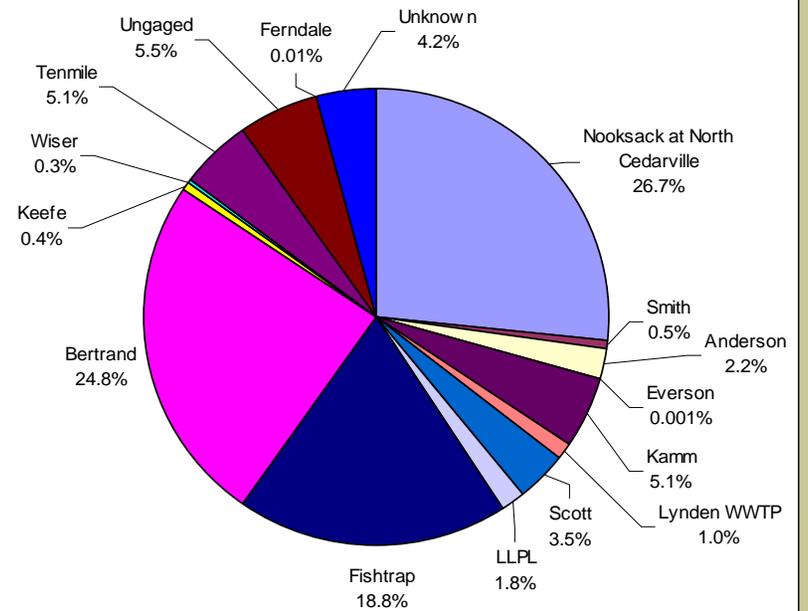


Bacterial TMDL

Nooksack River Water Balance 1997-1998



Annual FC Loads to lower Nooksack River: 1997-98





1998 Dairy Nutrient Management Act

- Goal -- Zero Discharge of Pollutants
- Management Plan by 7/31/2002
- All Dairies Implement the Plan by 12/31/2003
- Compliance: Pro-active Inspection, Referral & Fine





Technical Assistance Provided

Plan Development

- Structure Design
- Vegetative Practices
- Nutrient Management Practices

Plan Implementation

- One on One
- General

Nutrient

~~Manure~~ Management



Grass Filter Strip - Winter

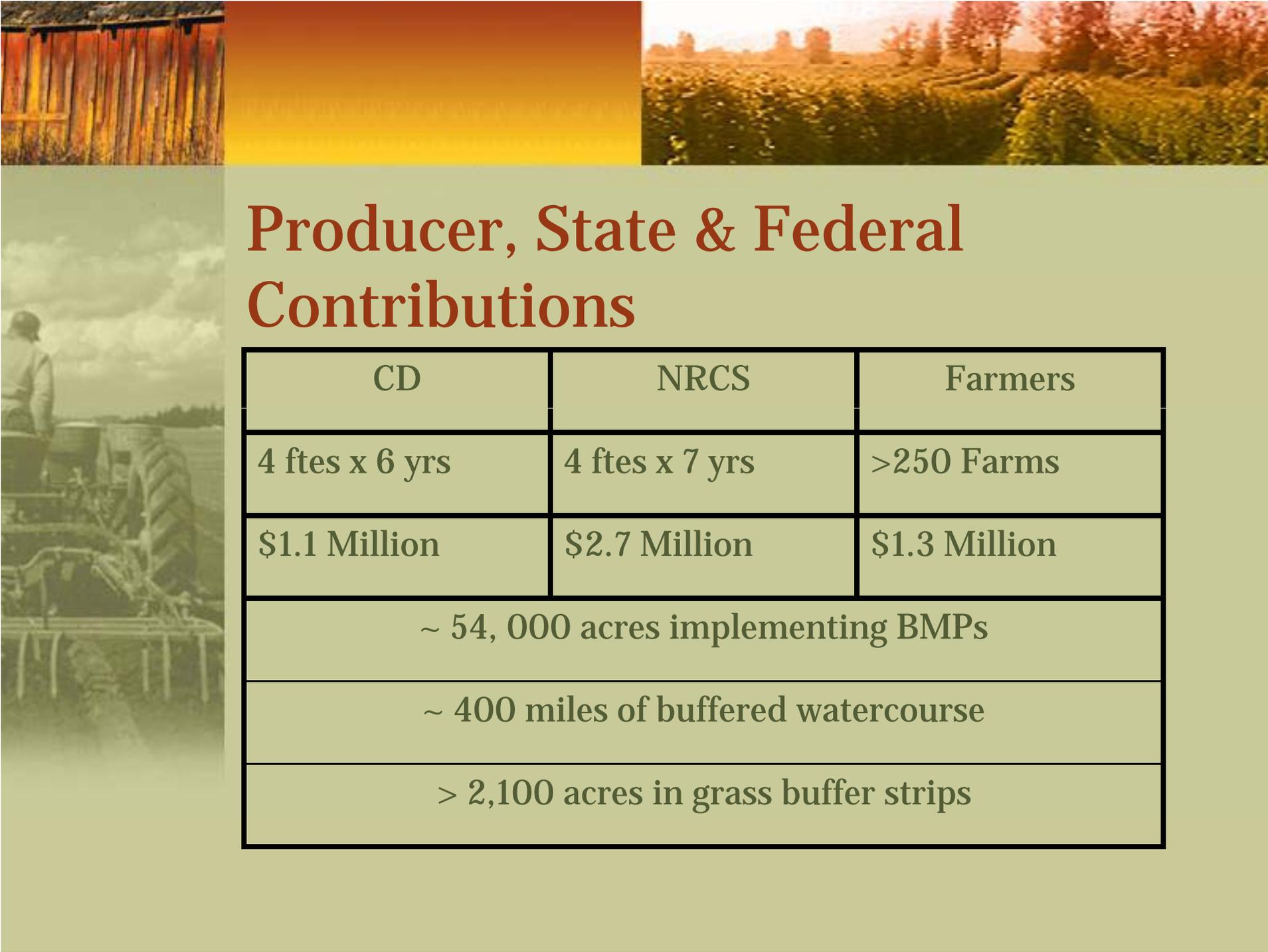


Grass Filter Strip - Summer



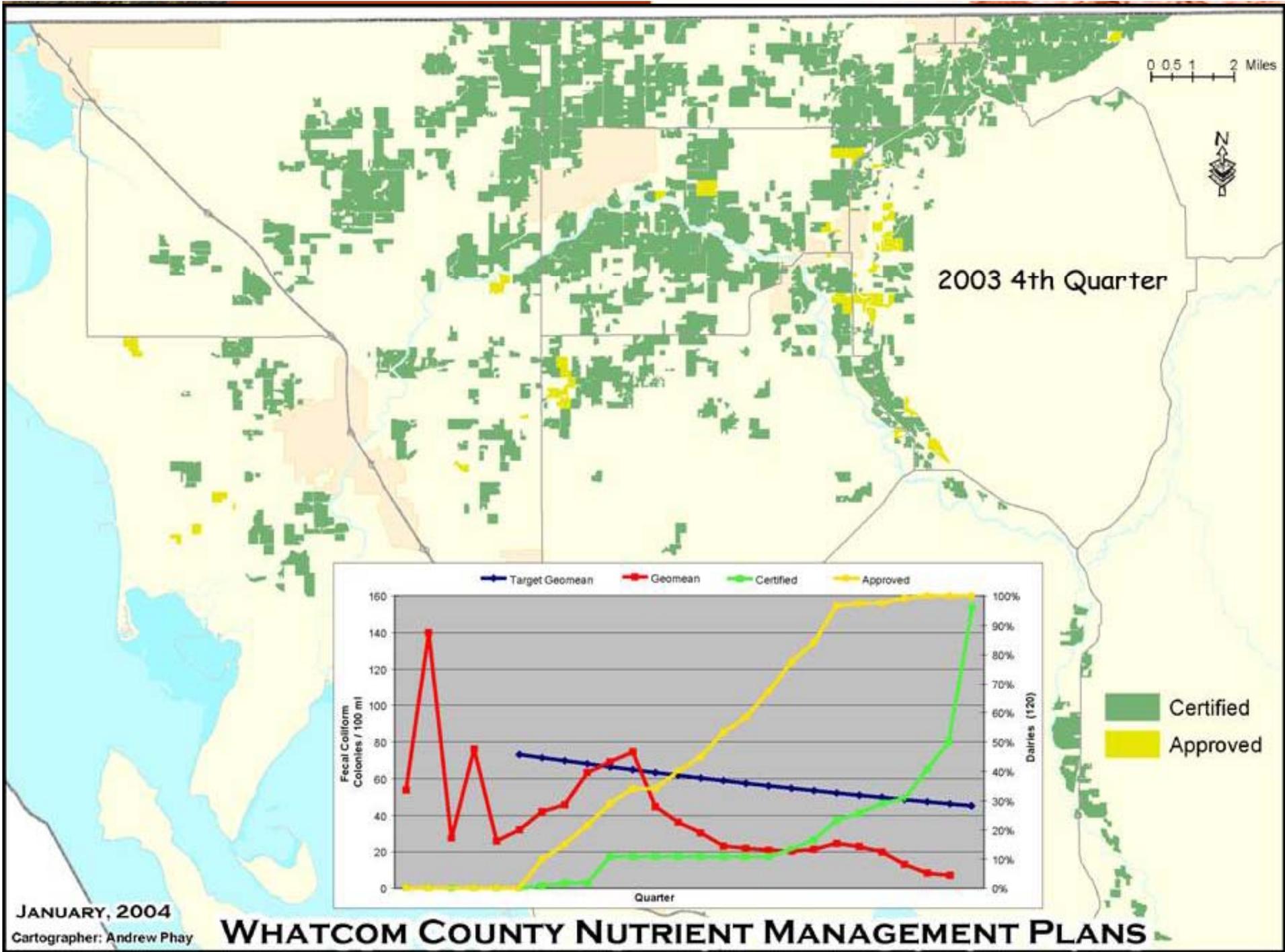
Relay Crop





Producer, State & Federal Contributions

CD	NRCS	Farmers
4 ftes x 6 yrs	4 ftes x 7 yrs	>250 Farms
\$1.1 Million	\$2.7 Million	\$1.3 Million
~ 54, 000 acres implementing BMPs		
~ 400 miles of buffered watercourse		
> 2,100 acres in grass buffer strips		

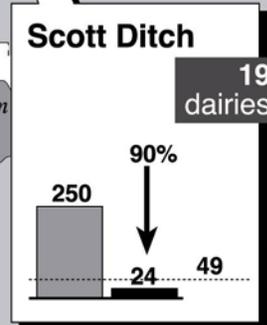
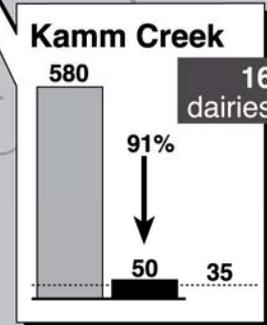
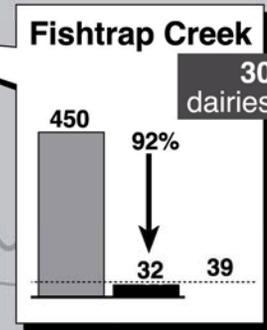
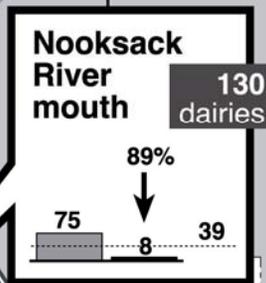
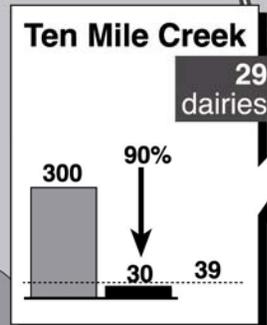
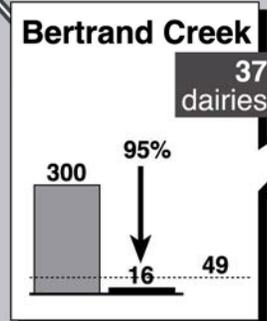


JANUARY, 2004
 Cartographer: Andrew Phay

WHATCOM COUNTY NUTRIENT MANAGEMENT PLANS

Improving creeks

The amount of fecal coliform bacteria is dropping throughout the Nooksack River system, thanks largely to manure handling improvements at dairy farms. Here are a few examples:



1st Qtr. 1998 2nd Qtr. 2002 State cleanup goal

Concentration of fecal coliform bacteria colonies per 100 ml. of water. Results are an average of samples taken during the previous 1 1/2 years.

Shellfish beds





So, we've got milk and water quality too!

Key program elements

- Industry & Tribal acceptance of Program
- Adequate Technical & Financial Assistance to Producers
- Regulatory Backstop

Seems to be lasting though

- Inspection Program Cut in Half
- Other livestock operations & OSS largely ignored
- Dairies under financial pressure





Acknowledgements

USDA-NRCS & FSA

USEPA

Wash State Departments of Health

Ecology & Agriculture

Land & Nation

Nooksack Tribe of Indians

North West Indian College

Whatcom County

WSU Cooperative Ext

Whatcom Co. Ag Preservation & Farm Friends

Special thanks to the Farmers

**Dairy Producers & Landowners of Whatcom
County**