

Abbotsford-Sumas Aquifer International Task Force

Presentation to the
Environmental Cooperation Council
Vancouver, BC

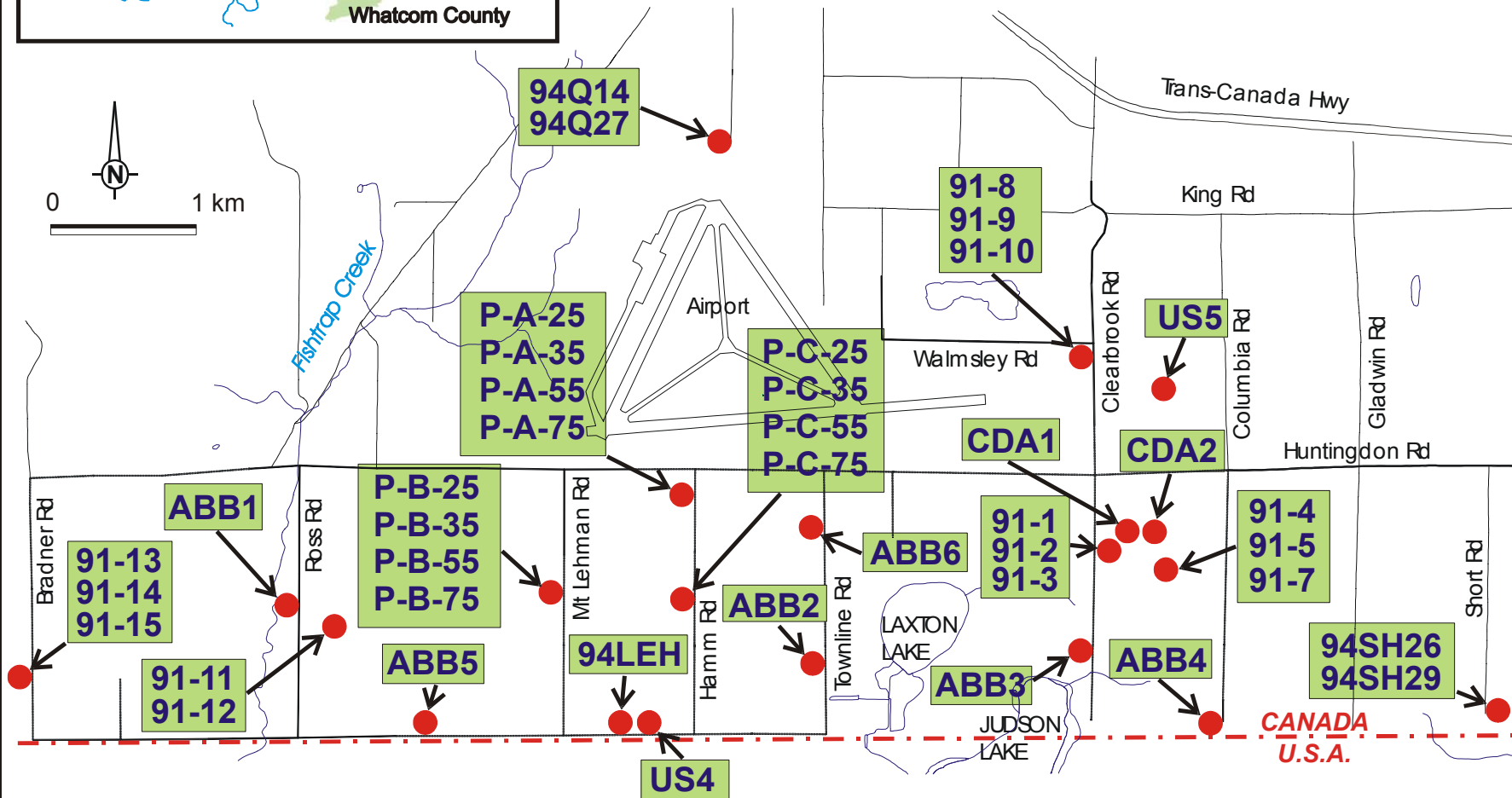
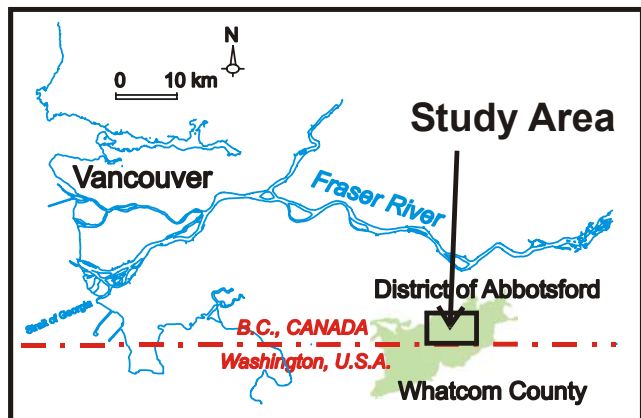
April 2, 2003

Richard Grout, Co-chair – Washington

Marc Zobel, acting Co-chair - BC

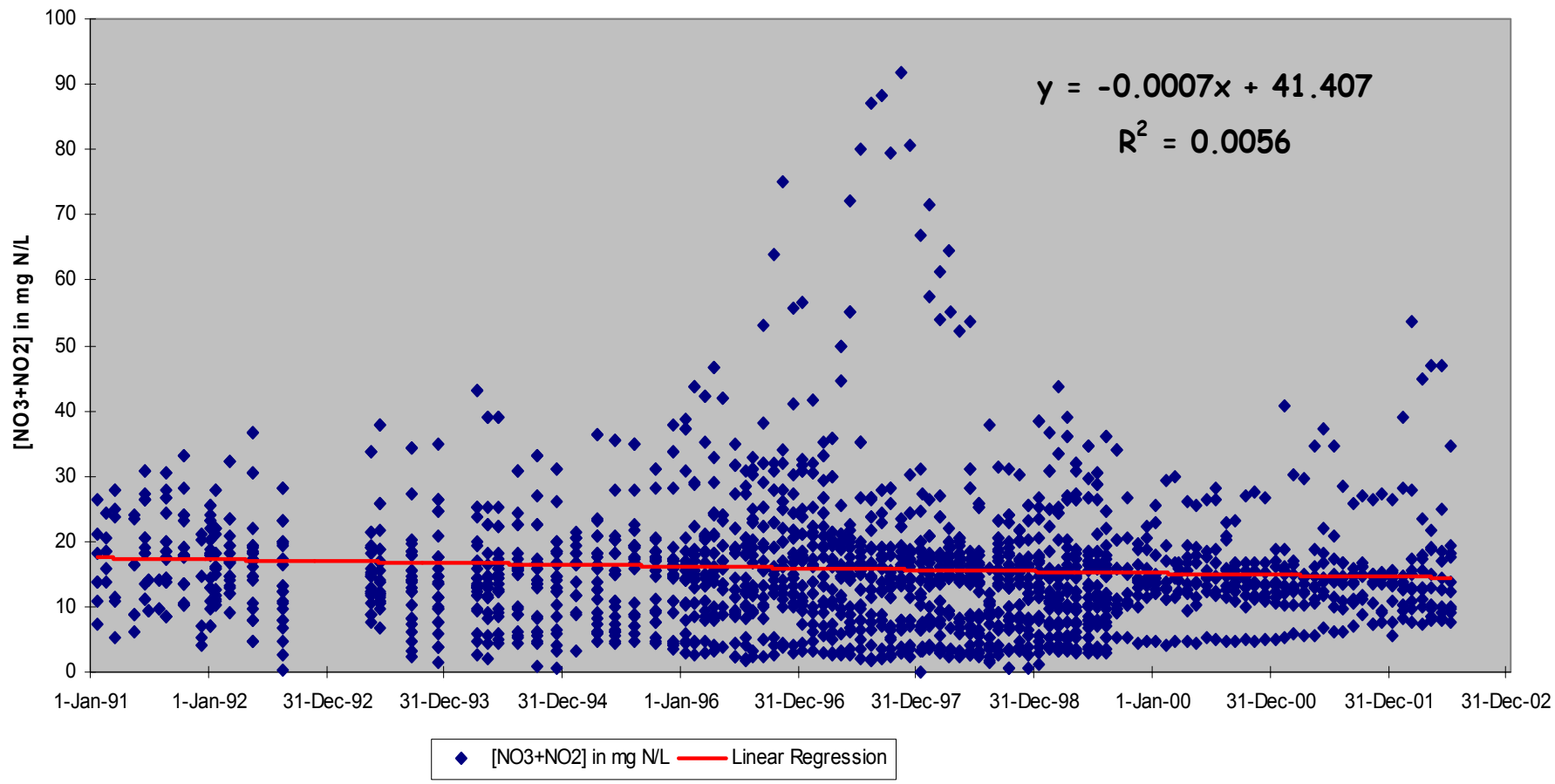
2002 Activities & Accomplishments

- Nitrate Trends

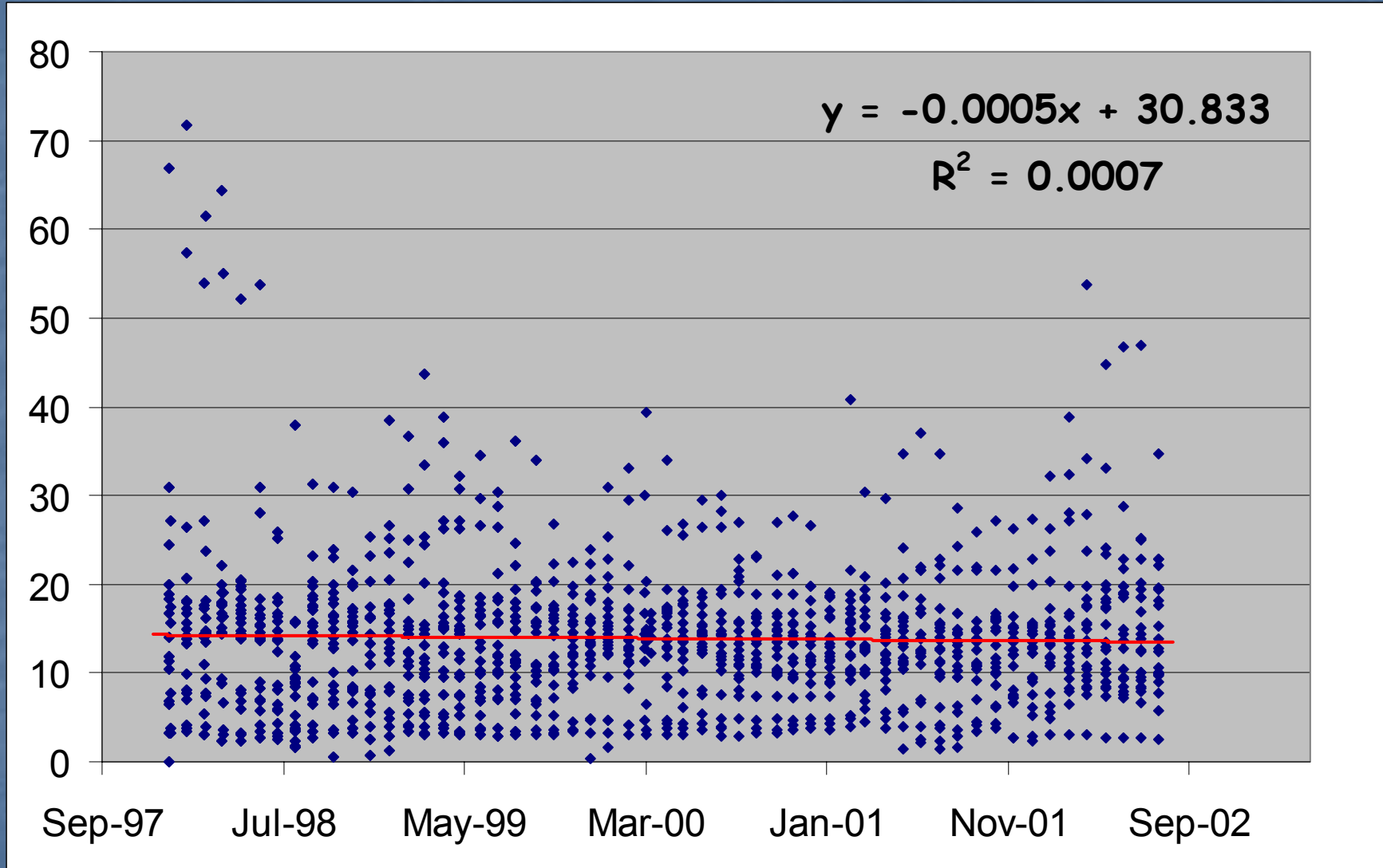


ABBOTSFORD AQUIFER

Piezometers ABB1,2,3,4,5,6; 91-4,5,7,8,10,13,15; 94SH29; 94Q14,27;P-A-35; P-B-20,35,55,75; P-C-35; US4



NITRATE TREND 1997 - 2002

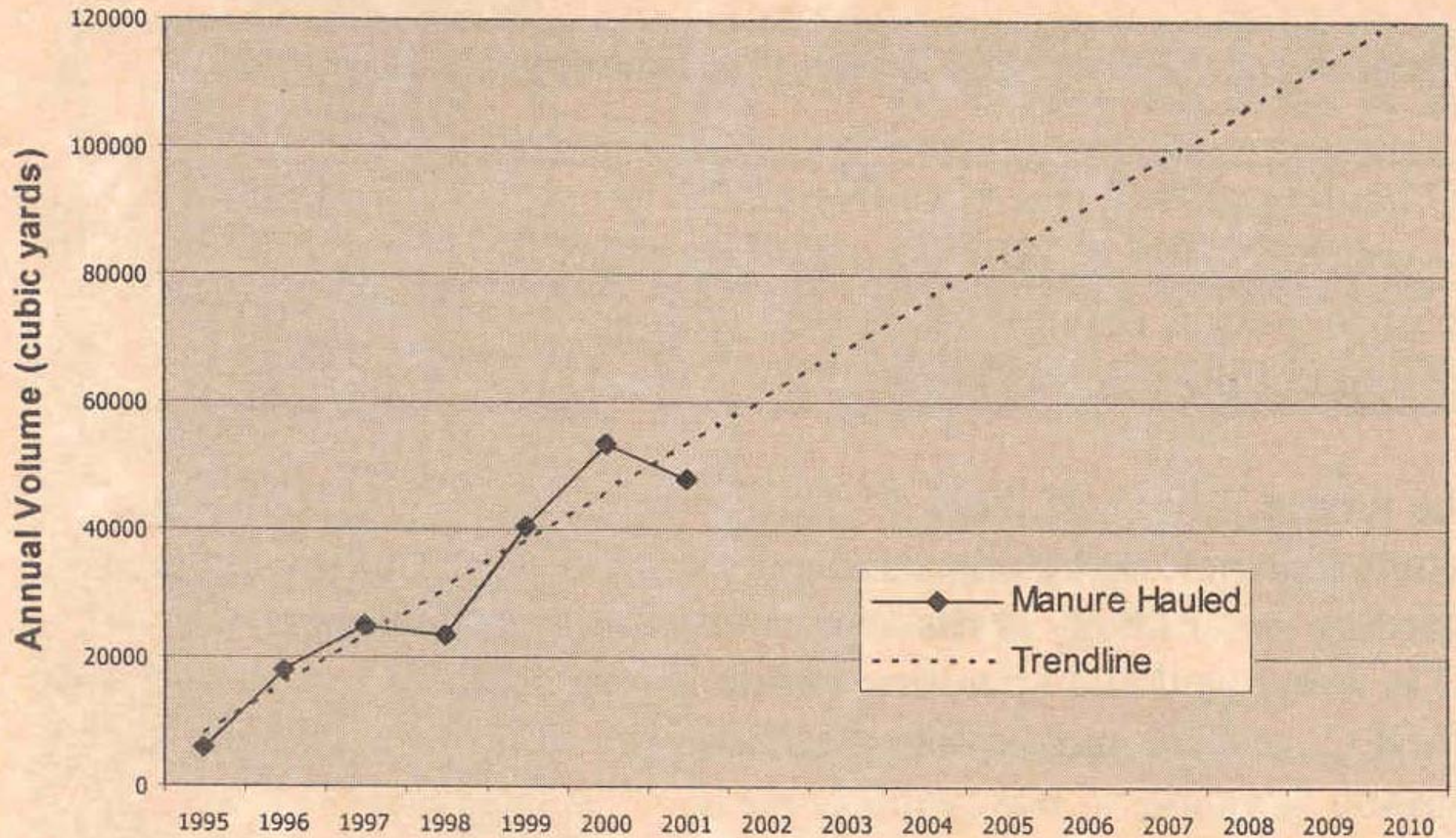


2002 Activities & Accomplishments

- Nitrate Trends
- Sustainable Poultry Farming Group



**Figure 2 Manure Hauled to Distant Markets by SPFG
- Present Amount and Future Prediction -**



2002 Activities & Accomplishments

- Nitrate Trends
- Sustainable Poultry Farming Group
- **Agricultural Activities**

BC Ministry of Agriculture, Food & Fisheries

- Developing Nutrient Management Planning Materials
- Developing Environmental Farm Planning Program Reference Guide



University of BC

- Under Dr. Hans Schreier, UBC is currently developing a computerized agricultural nutrient balance model that may have application over the aquifer.

BC Raspberry Growers Association

- For third year in row, have conducted post harvest soil nitrate testing on 65 fields or 40% of land over the aquifer.



BC Raspberry Growers Association

- Results show 1/3 of the fields had little excess nitrogen; 1/3 had moderate amount; and 1/3 had excess nitrogen that could negatively impact groundwater.



BC Ministry of Water, Land & Air Protection

- Very few agricultural inspections on BC side due to staff reductions in past year.
- Ministry Conservation Officers have provided assistance in performing agricultural site reconnaissance drive-by's to identify potential pollution concerns.

Washington State Department of Ecology

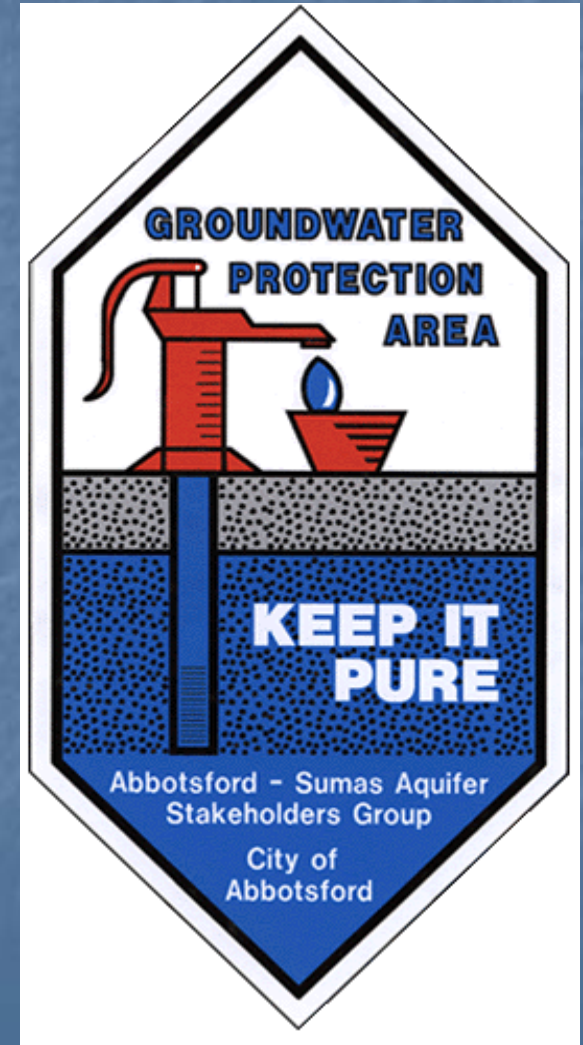
- Dairy Farm inspections are continuing to be conducted.
- Inspections are down by 25% in Whatcom County.
- Total Maximum Daily Loading (TMDL) monitoring of Fecals was conducted on Nooksack River and tributaries. Results met all targets – indicating dairy Best Management Practices have improved manure management.

2002 Activities & Accomplishments

- Nitrate Trends
- Sustainable Poultry Farming Group
- Agricultural Activities
- City of Abbotsford / City of Sumas

City of Abbotsford / City of Sumas

- Abbotsford-Sumas Aquifer Stakeholders' Group met quarterly last year and are continuing to encourage and find ways to promote aquifer protection, including:
 - Environmental Pledge Program,
 - Aquifer Signage



2002 Activities & Accomplishments

- Nitrate Trends
- Sustainable Poultry Farming Group
- Agricultural Activities
- City of Abbotsford / City of Sumas
- **Aquifer Modelling**

Aquifer Modelling Activities

- Simon Fraser University, under Diana Allen, is progressing on a conceptual and numeric groundwater flow model of the Abbotsford-Sumas aquifer (BC side).
- Utah State are progressing on the WRIA-funded contaminant transport model.

2002 Activities & Accomplishments

- Nitrate Trends
- Sustainable Poultry Farming Group
- Agricultural Activities
- City of Abbotsford / City of Sumas
- Aquifer Modelling
- **Other Activities**

Other Activities

- Western Washington University, under Bob Mitchell, have been provided a research grant targeted at studying groundwater pollution over the Abbotsford-Sumas aquifer.

ASAITF Concerns

- Washington State is facing a \$2.6B budget deficit that is likely to result in less resources (staff and funds) available for various aquifer protection activities, such as the successful Dairy Farm inspections.
- Declining attendance by US and Canadian agencies, notably: USEPA, USGS, Whatcom County, Ecology, BCMWLAP, BCMAFF, Agriculture-Canada, due to funding cuts, other priorities and retirements are affecting the task force's ability to conduct subcommittee activities.

Concluding comment according to Alan Kohut, retiring employee of BCMWLAP and original member of ASAITF (11 years ago):

- Was the task force worth the effort?
- Yes.
- In the late 1970's and early 1980's nitrate contamination from agricultural activities over the Abbotsford-Sumas aquifer were getting out of hand.



Concluding comment according to Alan Kohut, retiring employee of BCMWLAP and original member of ASAITF (11 years ago):

- The task force has been successful in not letting things get worse.
- I've been amazed at the positive multi-agency involvement.
- Protecting the aquifer will take time, patience, and a need to keep communications open.