

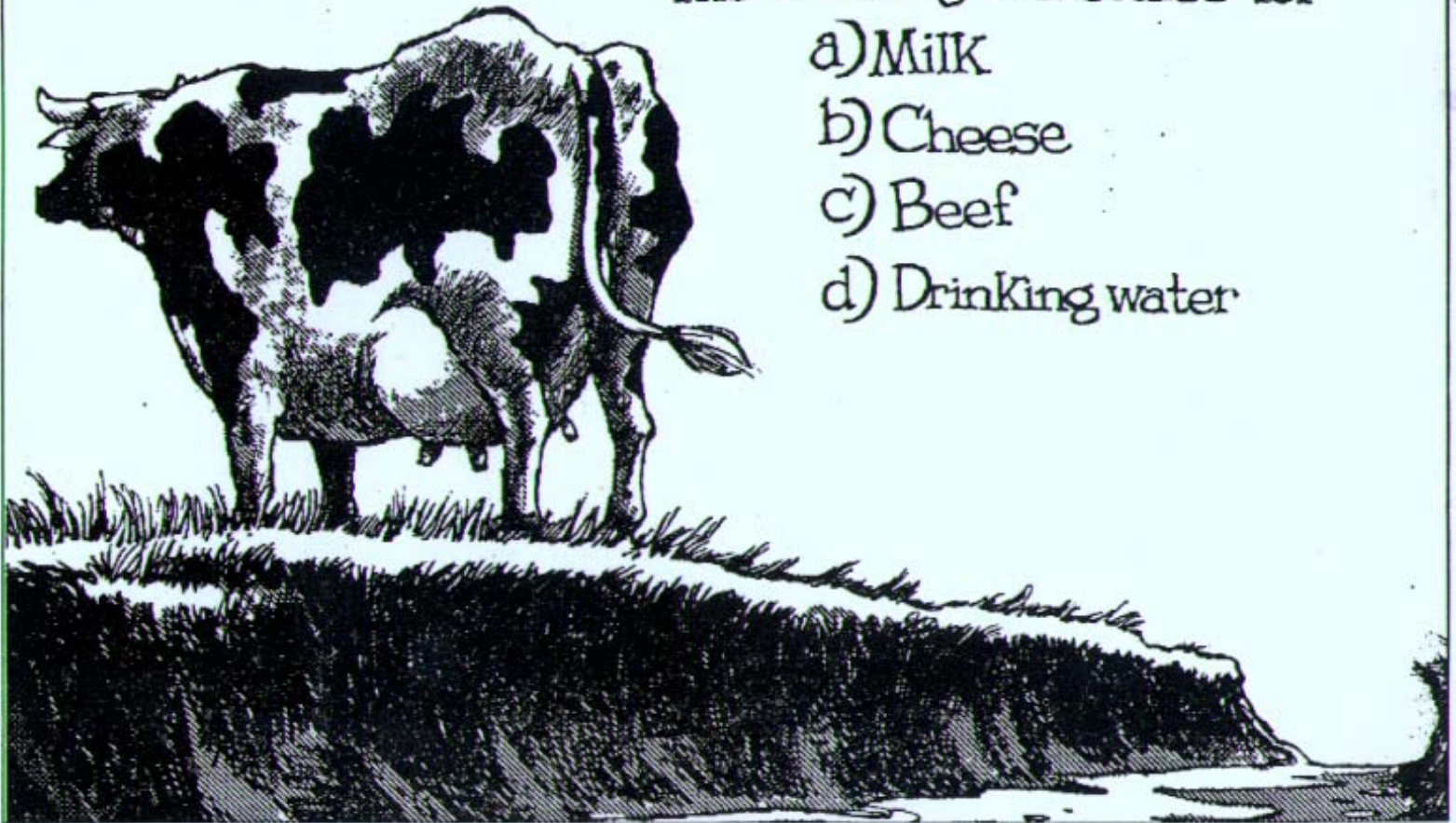
Regulatory & Incentive-Based Municipal Water Protection Programs: Challenges

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Regional Municipality of
Waterloo, Ontario

QUESTION:

The following is a source for

- a) Milk
- b) Cheese
- c) Beef
- d) Drinking water



Today's Presentation...

- *Water Resource Protection in Waterloo Region*
- **BMP Program Areas**
 - New Business Development
 - Existing Farmers
 - Existing Urban Businesses

Water Supply in Waterloo Region

- 395,000 served
- Kitchener, Cambridge, Waterloo, and rural communities through 4 townships





120 wells

Grand River



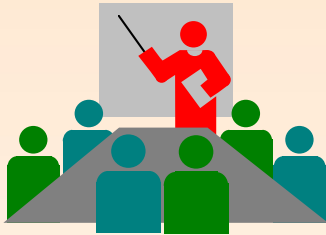
Waterloo Region Is Unique

- Prosperous Urban and Agricultural Economy
- Local Water Resources
 - Municipal drinking water supply
 - Private water supply
 - Treated wastewater discharge
- Experienced Impact of Not Protection Water Supply
 - Industrial well contamination in 1989
 - Nitrate well contamination in 1994

Water Resource Protection Strategy



Water Protection Tools



Education



Regulatory

Land use planning
Sewer bylaw
Environment regs

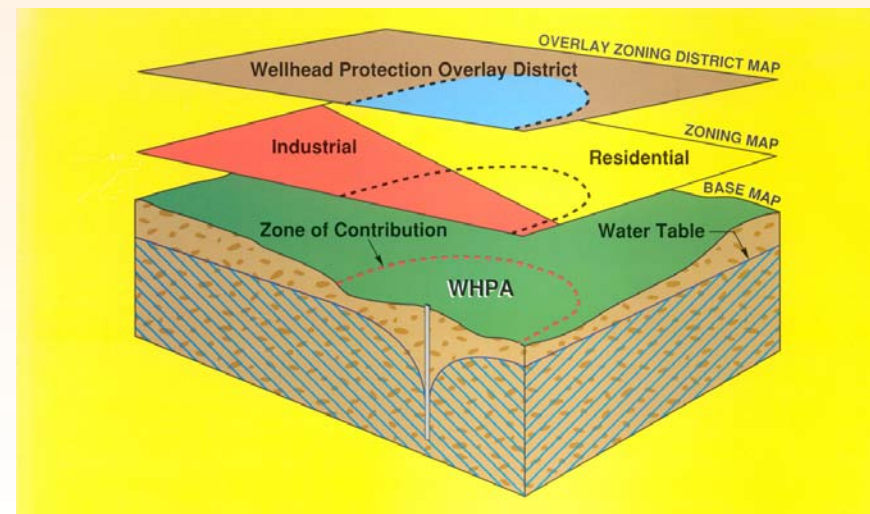
Incentives



Business WQP
Rural WQP

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New Non-Residential Development

- Two Step Process
 - Restrictions on where new businesses can locate
 - Development Permit System
 - Construction of BMPs as part of business expansion and/or operation change

New Non-Residential Development

- Planning Policies Approved November 2000
 - Limit High Risk Development Near Wells
 - Concerns Determined by:
 - Distance from well
 - Sensitivity of well area
 - Type of business land use

Examples of Prohibited Land Uses

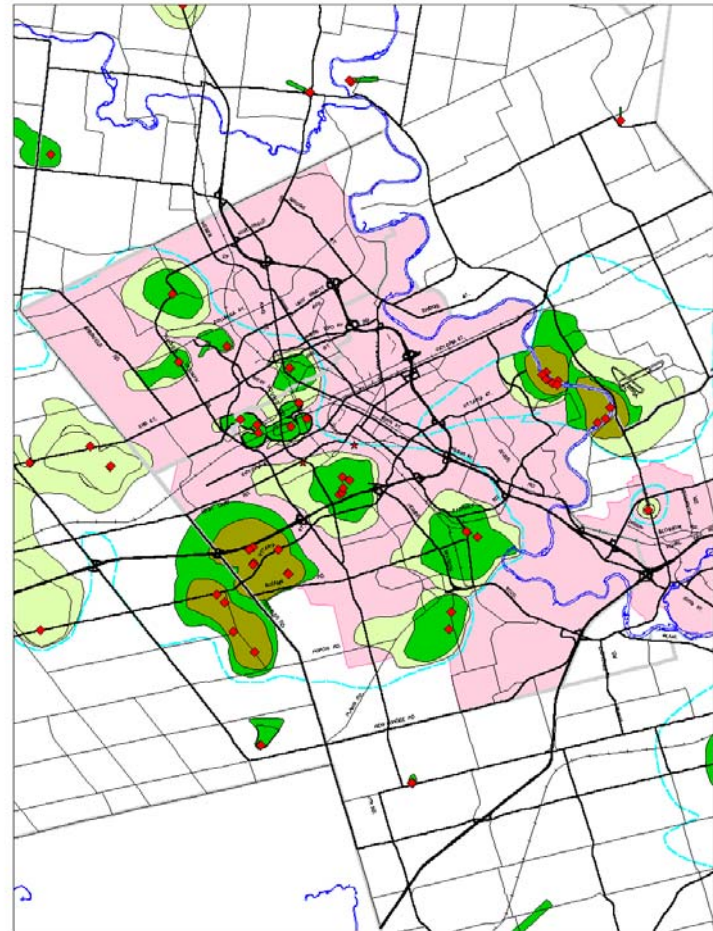
- A**
 - Lagoons/landfills
 - Wrecker/salvage yards

- B**
 - Metal fabrication
 - Chemical/pharmaceutical manuf'g
 - Electronic manuf'g

- C**
 - Rubber manuf'g
 - Printing, photographic
 - Golf courses

New Non-Residential Development

- Impacts
 - Applies only to undesignated uses
 - Most urban areas already designated
- Consultation
 - Maps generated
 - 2000+ businesses aware



Development Permit System

- Enable Best Management Practices conditions
 - Construction only!!
- Currently developing with cities



Implementation



Raised Awareness



Disagreement on What Needed

- Site planning vs. engineering control
- Regulate chemicals only



Existing Tool Inappropriate

- Couldn't legally require BMPs
- No overall groundwater protection leg'n
- Provincial approval for DPS

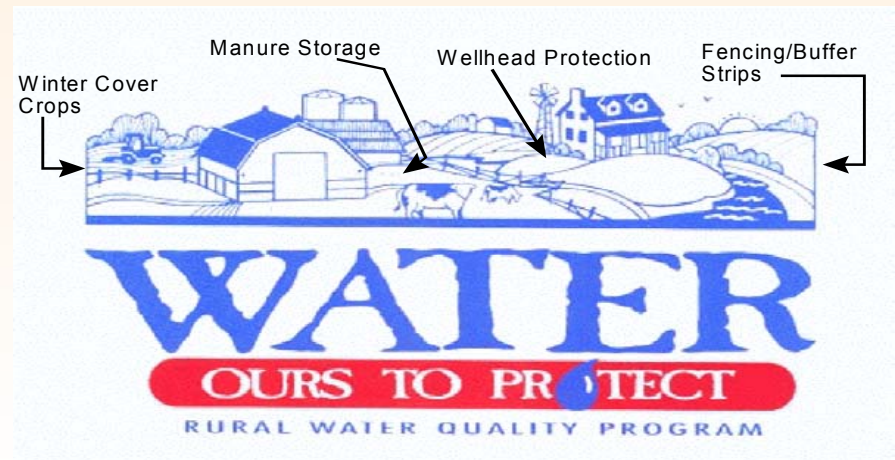
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Rural Water Quality Program

- Provide financial incentives for projects to improve water quality
 - 50 to 75% cost share
 - Grants and performance incentives
- \$1.5M over 5 years



Manure Storage



Fencing



Implementation



Partners

- GRCA, Agriculture & Agra-Food Canada
- 20+ farm associations



Success to end 4th year

- 199 projects completed
- \$837K incentives for \$2M+ projects
- Kept 8,800 kg of phosphorus on the land
- 4* increase in EFPs



85% conservative Mennonite participation

Today's Presentation...

- Water Resource Protection in Waterloo Region
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Business Water Quality Program

- Provide financial assistance to businesses to implement measures that prevent spills to groundwater, surface water, and sewers
 - Facility Assessment
 - Implement Project
- *50% cost share



Capital BMPS



Secondary Containment



No-drip Nozzles and Spill Containment



Spill Kit

Procedural BMPS



Training



Environmental
Management Systems

Implementation



Partners



Program Design

- 20 businesses
- Env. Can Eco-Efficiency template



Success to end 1st year

- 10 projects approved
 - 6 completed assessments
 - 4 BMP projects
- 8 business sectors involved
- 75% cost share for audits <\$1000



Barriers: cash flow and not priority



Environment
Canada

Environnement
Canada



OCETA



Ontario

Ministry of the
Environment

Ministère de
l'Environnement



Summary

- Applying both regulatory and incentive approaches
- Partnerships are essential
- Need appropriate regulatory tools
- Complementary