### **Field to Faucet Tips**

Water is our most precious and valuable natural resource. Farmers are also vital to the Canadian economy by providing the food we eat.

Some basic strategies are as follows:

- Plant native trees and shrubs along water courses. This prevents both soil erosion and runoff contamination
- Fence livestock back from water courses
- Practice conservation tillage to minimize loss of organic soil and conserve water
- Follow best management practices when it comes to handling, storage and application of manure, fertilizer and pesticides, livestock burial as well as storage of fuel
- Coordinate the timing and frequency of plowing as well as the application of fertilizers, pesticides and irrigation water to adapt to local and changing conditions
- Maintain private water well(s) and decommission any old or abandoned wells that are not in use
- Maintain septic systems with routine pump outs and best management practices (see the Septic Solutions program in this series)



## **Agricultural Websites**

Ontario Ministry of Agriculture, Food and Rural Affairs www.omafra.gov.on.ca

Ontario Soil and Crop Improvement Association (environmental farm plan information) www.ontariosoilcrop.org

Agriculture and Agri-Food Canada www.agr.gc.ca

Farm & Food Care Ontario www.farmfoodcare.org

Ontario Rural Wastewater Centre www.orwc.uoguelph.ca

Raisin-South Nation Source Protection Region www.yourdrinkingwater.ca

Mississippi-Rideau Source Protection Region www.mrsourcewater.ca

### For more information Ottawa.ca/sourceprotection

Information in this pamphlet provided by the Raisin-South Nation Source Protection Region



# **AGRI-ACTION**

# Protecting water from field to faucet

Balancing knowledge and action.







## **Runoff & Water Quality**

The runoff from agricultural operations can have a significant impact on surface water sources such as streams, lakes, and rivers.

These potential contaminant sources can pollute both surface water and groundwater wells, when spread over a wide area like a field.

Pollutants like fertilizers, pesticides, and heavy metals found on agricultural fields attach to soil particles and can be washed into water bodies spreading chemical toxins and bacteria. As a result, drinking water can be contaminated by algae blooms, oxygen depletion and pathogenic diseases, impacting both humans and livestock.

#### **Causes of Contamination:**

- Manure runoff from animal waste and livestock in watercourses
- Fertilizer application runoff (nitrogen and phosphorus)
- Lack of buffer zones (vegetation, trees) that separate working fields from water courses
- Poor pesticide storage, application or handling that lead to spills or runoff
- Chemicals or pharmaceuticals in livestock waste
- Failing septic systems and abandoned wells provide gateways for contaminants to enter surface or groundwater
- Unregulated dams and/or water diversions
- Fuel tank leaks or spills

## Your Water. Your Decision.

From fertilizer applications to livestock management, decisions in the field or on the farmstead can affect the water coming out of the tap for you and your neighbours. Learning and implementing today's best practices can improve water quality for future generations.

Livestock that roam free through watercourses can erode stream and riverbanks as well as contaminate water through their waste. Consider fencing off or bridging streams and/or providing animals with alternative water sources.



Contaminants can affect groundwater by seeping through underground pathways into your well water. An **Environmental Farm Plan** can provide a well-rounded plan for protecting your own water and that of your neighbours.

Contact Ontario Soil and Crop Improvement Association for more information.

### **Good Farming = Good Water**

Canadian agriculture relies on healthy ecosystems to provide enough clean water for drinking, livestock, and irrigation.

Farm operations that practice methods that are known as agricultural "Best" or "Beneficial" Management Practices (BMPs) are recognized as good stewards of water and land resources.

Farmers can reduce erosion and sedimentation by as much as 90% by applying management practices such as planting windbreaks and buffer zones that control the volume and flow rate of runoff water. This keeps the soil in place and reduces soil transport.

Other key approaches include integrated pest management and use of proper waste

management techniques.

Many of the strategies used by farmers to reduce contamination of water sources also help to produce good crop yields By adopting farm based BMPs, drinking water is safeguarded while also promoting a vibrant, competitive, and profitable agricultural industry.

**and** reduce costs by saving money spent on fertilizers and pesticides.

