

Environmental Update ...

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Protecting Water Quality

Maintaining the quality of our water in Prince Edward Island is essential to the health of Islanders, our environment and our economy. We depend on groundwater for drinking water supplies; our waterways provide habitat for a wide variety of species; and industries such as fisheries, aquaculture and tourism are dependant on healthy streams and rivers. That is why we all must pay special attention to what goes into our groundwater and surface water. This is the first of a three-part series that will look at how human activity affects water resources; and how Islanders are helping to protect water quality through measures such as crop rotation, buffer zones, and nutrient management.

Land Use Impacts on Water Quality

Nutrients provide an excellent example of how human activity can have a significant negative impact on both our groundwater and surface water resources in Prince Edward Island. Nutrients such as nitrogen and phosphorous occur naturally in the environment. However, excess nutrients can come from a variety of sources such as failing septic systems and poor agricultural practices.

In some agricultural areas of the province, more than 15 per cent of wells exceed the guideline for nitrate concentration in drinking water.



Nitrogen in the form of nitrates is found at low levels in most groundwater. Average nitrate levels in PEI groundwater are in the range of 3 to 4 mg/L. But in some agricultural areas, more than 15 per cent of domestic wells exceed the 10 mg/L guideline recommended in the *Guidelines for Canadian Drinking Water Quality*. Common sources of nitrate in groundwater include agricultural fertilizers, manure, and domestic sewage. Nitrate in groundwater not only affects drinking water supplies, it also contributes to excess nutrients in surface water. Next week's column will look at that and other land use factors impacting on surface water quality in many PEI watersheds.

*This week's Environmental Update
was prepared by*



Fisheries, Aquaculture
and Environment