

Province needs water management plan

- The Guardian (Charlottetown)
- 18 Mar 2014

Editor:

Domestic, industrial and agriculture water use is rising across Canada, putting many rivers and lakes under increasing strain. As an organization that works to protect natural areas across P. E. I., Island Nature Trust is concerned that any increase in the number of high- capacity groundwater wells will affect fish and wildlife in the province negatively. How much water can be withdrawn while still maintaining healthy natural aquatic ecosystems? It takes the expertise of hydrologists, engineers and biologists to understand and predict the changes in fish habitat in response to altered flow regimes/ water systems. Conservation practices such as longer crop rotations that include forages, better residue management and strip cropping increase the moisture holding capacity of the soil. The presence of organic matter enhances the soil's structure, thermal, and nutritional regimes; and decreases wind and water erosion. Healthy soils hold moisture better than those with low organic material. In other words, soils with high organic matter need less water for healthy plant growth.

Withdrawing water from existing ground water supplies at times of the year when those water levels are at their lowest and at a time when 100 per cent of the surface water flow is from groundwater (springs) will further reduce the volume of ground water flowing into springs, streams, rivers and estuaries. Reduced water flow coupled with high levels of nutrients currently found in the very potato- rich watersheds to be irrigated in central P. E. I., will lead to increased over- nutrification of water systems and then to an increase in anoxic events.

Wildlife in all parts of waterways will be affected by less water and by the associated issues such as eutrophication and anoxia. Extracting more groundwater from P. E. I. is about so much more than simply water volume issues. The permanent loss of high volumes of water in an already fragile aquifer at a very sensitive time of year will have negative impacts on aquatic animals and plants, including those harvested by humans.

Human health is important, and the high nitrate level found in groundwater in many wells in high potato production areas is a serious concern to the health of Islanders. However, wildlife and natural areas often take a back seat to human needs and health issues. In many jurisdictions fish and wildlife management agencies sit on the sidelines of important water management decisions.

On behalf of the health of our natural systems, including springs, streams, rivers, their riparian zones and estuaries we strongly encourage the P. E. I. Government to adopt a provincial water management plan to effectively integrate water quantity, quality and wildlife management and to maintain the existing moratorium on highcapacity deep water well construction. Fiep de Bie, President, Island Nature Trust, Board of Directors