



Manitoba Eco-Network Water Caucus Submission to the Surface Water Management Strategy Public Consultations

August 2012

We would like to thank the Manitoba Water Council (MWC) and Manitoba Conservation and Water Stewardship (MCWS) for the opportunity to provide input into this vital consultation process.

Mission

Our Water Caucus brings together various environmental groups working on water and related issues to share information and resources, prioritize issues, and support positive actions for improved water stewardship.

Vision

Collective action to protect water

Manitoba is now known as being home to one of the most degraded large freshwater lakes in the world. Solving the issues facing Lake Winnipeg lies in the sustainable management of its watershed. In other words, the fate of the lake will be determined in the meadows, fields, and forests well beyond its shores. Of particular importance in stewardship of the watershed is the protection of Manitoba's wetlands.

The Manitoba Eco-Network Water Caucus commends the Province on the progress that has been made towards better stewardship of our water resources; however, we are extremely concerned that very little action has come about from the public consultations on wetlands. The Council reports that the public had a great sense of urgency on the topic, and called for immediate action, which has yet to be delivered.

We recommend a stop to the drainage of wetlands

Canada has over 127 million hectares of wetlands, one quarter the world's total. Twenty-two million (17%) hectares of these are in Manitoba. Unfortunately, pollution, urban encroachment, industrial activity, and artificial drainage are taking their toll on the resource. Agricultural expansion is the major cause of 85 per cent of Canada's wetland losses. Since European settlement, wetland conversion to agriculture is estimated at over 20 million hectares, 71 per cent in the Prairie Provinces. Preserving and restoring Manitoba's wetlands will take a serious commitment from the Province. *It is time to stop compromising on this issue, time to stop draining wetlands, and time to develop agricultural policy which reflects the reality that wetlands are too essential to all types of survival (including economic) to continue allowing for their destruction. Education, incentives, regulation, monitoring, and enforcement are critical.*



We recommend protection of wetland biodiversity

Recognize ecosystems as legitimate water users with specific requirements for soil quality and water quality, quantity and timing to maintain their health, integrity and productivity.

Wetlands are uniquely productive ecosystems that support a wide range of plant and animal species. Wetlands often provide all three components of wildlife habitat: food, water and cover. As many as 80 per cent of prairie species depend on wetlands for at least part of their lifecycle. These include mammal species great and small from lemmings and voles to moose and cougars, not to mention our province's many snakes, frogs and salamanders, and countless insects and invertebrates. Wetlands are crucial bird habitat, with over one hundred nesting species in Canada.



In bogs and fens, sedges and grasses, mosses, shrubs or black spruce predominate. Manitoba swamps are characteristically woody with stands of maple, ash and elm. Marshes contain lush growth of cattails, rushes and reeds. The unusual, and often harsh, soil and water chemistry of different wetlands make them home to many rare species that are adapted to these niches. The Gull Lake Wetlands southeast of Lake Winnipeg contains at least 28 rare species of orchids. Wetland ecosystems are threatened by invasive plant species including saltcedar and purple loosestrife. *With increased urban expansion, development and global trade, serious preservation planning and transboundary cooperation are needed to protect our local species.*

We recommend wetland preservation incentives which reflect the true value of ecological services



Wetlands such as marshes, bogs, swamps and fens are essential for a number of environmental services including: flood and drought prevention, storing carbon to prevent global climate change, water purification, protection for lakes and rivers from contamination by excess nutrients, and helping to replace groundwater. Wetlands are also important as habitat for countless species. They have long been important to the wild rice growing, fishing and hunting cultures of the Aboriginal Peoples of the province. Wetlands play an important role in Manitoba's economy, culture and environment, providing services to Canadians valued at over 20 billion dollars annually. *The value of all these services needs to be reflected in realistic incentives that allow landowners to preserve these areas and implement best management practices.*

If the boreal forests are the lungs of our region, then wetlands are the kidneys. They filter out toxic chemicals and nutrients from our water systems. Between 87 and 98 percent of nitrogen and phosphorus may be absorbed by wetlands. As a result of wetland deterioration, an extra 114 tonnes of phosphorus reaches Lake Winnipeg every year from southwest Manitoba, equivalent to 10 semi-truck loads of commercial fertilizer being dumped into the lake each year. These nutrients are responsible for the growth of toxic algae blooms in Manitoba lakes and rivers. Wetlands also prevent pesticides and other chemicals from being released into the wider environment.

At the same time, wetlands slow erosion and prevent sediment from clogging waterways or disrupting ecosystems downstream. Wetlands keep water on the land for longer periods of time, keeping drought at bay and floodwaters out of the main stream and river channels of watersheds. Manitobans know well the difficulty and costs of flood control. Wetlands provide this important service free of charge, at a scale that no human-made infrastructure could match. Without wetlands, southern Manitoba's costly floods of 1997 and 2009 would have been much worse. Indeed, the loss of our wetlands in recent decades is a contributing factor to many large flood events in this province.

Hundreds of billions of tonnes of carbon are also stored in wetlands, slowing the effects of global warming. Over the centuries, as plant matter has decayed, it has accumulated in swamps, marshes, fens and bogs. The high water table prevents oxidation, so instead of being released as carbon dioxide, it is stored as peat or soil. Globally, there is as much carbon dioxide held in wetlands as there is in the atmosphere. When a wetland is drained, much of the stored carbon is released, accelerating climate change. For the Prairies, global warming will mean increased severity of drought and flood events, so wetland protection is key to adaptation.

We recommend increased research on water use in Manitoba and the lessons we can learn from other regions

It is necessary that the Province gather and provide access to reliable data on water use, including the volume of withdrawals, including those under 25 000 litres (both licensed and actual amounts), the timing and purpose of use and the quality of water returned to the environment. The Province must more diligently apply the spirit of our water policies, as outlined in Manitoba's Sustainable Development Strategy, and *produce an overview of the threats/possible solutions to water quality and quantity, and progressive examples of planning models, conservation strategy and stewardship tools from other regions.*



We recommend a prioritization of water conservation over supply expansion

Significant water savings can be achieved by maximizing the productivity of existing infrastructure and water takings through integrating water efficient technologies, conservation-oriented water fees, and public education. For example, in key industries such as the agricultural sector and hydro, funding currently directed at expanding infrastructure such as drainage, dams and pipelines should be shifted. *The Province could instead finance studies and implementation of innovative demand management techniques such as energy conservation, water scheduling, efficient end-use technologies, public education, reducing losses in conveyance systems, water reuse and recycling and exploring into the limited and carefully planned use of off-stream storage.* This approach will also increase our resilience in the face of predicted climate change produced extreme water events.

We recommend a prioritization of ecosystem and basic human needs over economic activity

According to Manitoba's Sustainable Development Strategy, the Province must promote, and regulate where necessary, land and water management practices to reduce or eliminate water pollution at the source. This is achieved through implementing a multi-barrier approach, which counters threats to water all the way from watershed landscapes to the household tap or agricultural/industrial use, and back to natural systems. The Province must regularly review and revise Manitoba's water quality objectives to ensure that they reflect emerging scientific knowledge and ecological issues. Natural water flows and levels must become the norm, as opposed to artificial regulation. Best management practices from phosphate and toxin-free product sales to riparian protection and organic agriculture must be enforced, rather than relegated to 'alternative choices'. Water policy must reflect both the Water Soft Path approach, and the precautionary principle. Again, the Province must *use the true spirit of our water quality objectives in conjunction with education, licensing, regulation, monitoring, and enforcement to ensure that developments, activities, or operations do not impair water quality for required water uses.*

