

March 31, 2008

**PROVINCE MOVING AGGRESSIVELY
ON LAKE WINNIPEG ACTION PLAN: MELNICK**

One year after the release of the Lake Winnipeg Stewardship Board's final report, the province has completed or taken action on 94 per cent of the report's recommendation to address the health of Lake Winnipeg and its basins, Water Stewardship Minister Christine Melnick said today.

"The Lake Winnipeg Stewardship Board's final report provided a clear road map on the steps the province and our partners should take to improve the health of the lake," Melnick said. "We know we have much work ahead of us to address a problem that was decades in the making, but Manitoba is on the right track and we will continue to move ahead with the guidance of the board."

The board's 135 recommendations to address the health of the lake were contained in its last report to the province, released in February 2007. The province has already acted or initiated action on 128 of the recommendations.

The province gave the board an expanded mandate following delivery of its final report last year. The board has taken on additional responsibilities, including the provision of broad general direction for watershed management planning within the Lake Winnipeg Basin, that will continue to allow the province to move forward on appropriate action to restore the health of the lake based on sound science and the input of the province's foremost water experts, said Melnick.

The renewed terms of reference also mandate the board to assist in the preparation of periodic state-of-the-lake reports through contact with lake users, communities, scientists and others.

The minister noted Manitoba has boosted investment in measures to enhance research and improve the health of provincial waterways in light of the board's recommendations and has moved aggressively to bring in first-in-Canada measures to reduce the flow of excess nutrients into the province's lakes and rivers.

Recent provincial action includes:

- a \$350-million provincial commitment for waste-water projects across the province including a \$206-million provincial investment for the upgrade of all three treatment plants in Winnipeg as part of tri-level negotiations to address the city's capital requirements;
- introduction of legislation to virtually eliminate the phosphorus content in household automatic dishwasher detergent, a Canadian first;

- first-in-Canada action to restrict application of lawn fertilizers containing phosphorus in residential areas;
- a nearly \$1-million investment this year for new and ongoing research in and around Lake Winnipeg including support for the Lake Winnipeg Research Consortium and the research ship Namao;
- a public education campaign urging Manitobans to seek alternatives to phosphorus-based products to reduce nutrient loading in the province's waterways;
- stronger measures and additional resources for licensing drainage projects and improving drain maintenance across the province;
- the creation of a new Manitoba Water Council, a senior advisory board to co-ordinate and oversee the work of all provincial advisory bodies on water protection; and
- regional moratoriums on new or expanding hog operations to protect water and ensure the long-term environmental sustainability of the hog industry.

Earlier this month the province announced a new regulation that will establish water protection areas across the province, an unprecedented step that will create buffer zones along every waterway in Manitoba.

Melnick noted the province has invested more than \$100 million in water-quality projects since 1999.

The Lake Winnipeg Stewardship Board was formed in 2003. The board comprises 17 members with representatives from a variety of interests and sectors including municipalities, First Nations, commercial fishing, water science and agriculture.

BACKGROUND INFORMATION ATTACHED

Background

Progress on implementing the Lake Winnipeg Stewardship Board's recommendations (2007 report) to enhance Manitoba's water quality and protection includes:

1. Public education on water quality protection
 - A public education campaign was conducted in summer 2007 and will be followed by another in 2008.
 - Consultations on use of lawn fertilizers and phosphorus-free household cleaning products included six public open houses in 2007.
2. Curriculum development and implementation in Manitoba schools
 - On Nov. 9, 2007, Education, Citizenship and Youth Minister Peter Bjornson and Water Stewardship Minister Christine Melnick announced a science curriculum development program aimed at Lake Winnipeg. Teaching materials will integrate Lake Winnipeg water stewardship into the science program at grade 8 and 12 levels at Gimli High School.
 - Water Stewardship has also launched a school program called SIM Fishery to be included in science (Grade 11) where students create a sustainable fishery on Lake Winnipeg (or other Manitoba lakes).
3. A scientific basis for protection of Lake Winnipeg
 - Science activities continue in collaboration with Lake Winnipeg Research Consortium, officials from Environment Canada, Fisheries and Oceans Canada and the Federal-Provincial Lake Winnipeg Action Plan Co-ordination Committee.
4. Setting long-term, ecologically-relevant objectives for nutrients in Lake Winnipeg
 - A nutrient literature review by North South Consultants Inc. has been completed and the Lake Winnipeg Stewardship Board held a workshop to review the report and identify next steps.
5. Transboundary and inter-jurisdictional issues
 - Co-operative approaches continue to be developed with jurisdictions, especially Minnesota and North Dakota, through the International Joint Commission's International Red River Board and its Aquatic Ecosystem Committee. Work also continues with Saskatchewan, Alberta and Ontario through the Federal-Provincial Lake Winnipeg Action Plan Co-ordination Committee.

6. Integrated watershed management planning
 - Work continues on designating more conservation districts as Water Planning Authorities under the Water Protection Act to complete integrated watershed management plans for the local watersheds.
 - Boundaries of existing conservation districts in Manitoba are being altered wherever possible to ensure they reflect natural watershed boundaries.
7. Cosmetic use of phosphorus-based fertilizers
 - On Dec. 20, 2006, draft regulatory language under the Nutrient Management Regulation was released for review and comment to limit the phosphorus content of fertilizers applied to lawns in urban and rural residential areas to no more than one per cent. The comment period concluded March 24. Phosphorus is no longer used in fertilization programs on provincial properties managed by Manitoba Infrastructure and Transportation.
8. Water usage, sewage treatment and related financing
 - Most Manitobans are served by waste-water treatment systems, however upgrades are required to a number of facilities which will take considerable time and funds. Each year, necessary upgrades are made to a number of systems on a priority basis.
 - The province committed to provide over \$200 million to assist the City of Winnipeg with its sewage treatment upgrades to achieve reductions of both nitrogen and phosphorus.
9. Water use efficiency
 - Discussions continue to identify water-efficient plumbing features for potential adoption within the National Building Code.
10. Regionalization of waste-water treatment services
 - Regionalization of systems is underway in a number of cases where practicable and is being implemented through Manitoba Infrastructure and Transportation and its Manitoba Water Services Board. The Red River corridor between Winnipeg and Selkirk has been identified as a priority area.

11. Development of nutrient abatement plans for large waste-water treatment facilities in Manitoba communities
 - New licences have been issued for the City of Winnipeg's three facilities requiring full removal of nitrogen and phosphorus. As of June 2007, phosphorus removal was being implemented at the city's north-end facility and, as of November 2007, was being implemented at the city's west-end treatment system. Nitrogen removal will follow at the west-end facility in late 2008 or early 2009.
 - As of December 31, 2007, removal of both nitrogen and phosphorus was being achieved at Brandon's industrial waste-water treatment facility.
12. Environmental planning for urban, rural and cottage development
 - Integrated watershed planning is well advanced in Manitoba and can now be expanded to include smart growth concepts. Some developers are incorporating these concepts into new subdivisions such Waverley West and Royal Oaks in Winnipeg.
 - Provincial land-use policies are undergoing review with revisions being incorporated to include improved policies.
13. Stormwater retention ponds
 - A task force will evaluate design of stormwater retention ponds to maximize nutrient removal efficiency.
14. Nutrient abatement options for small waste-water treatment facilities
 - In 2008, Manitoba Water Stewardship will be releasing for review and comment a proposed regulation converting the existing *Water Quality Standards, Objectives and Guidelines* from a policy document to a regulation under the Water Protection Act. At the same time, new standards for nutrient control at all waste-water treatment facilities in Manitoba will be proposed.
15. Effluent irrigation/land application of municipal effluents
 - Effluent irrigation is being pursued wherever practicable. Roblin is operating an effluent irrigation/wetland facility developed by the Manitoba Water Services Board and there is a system at San Clara that uses a constructed wetland as part of its strategy. Effluent irrigation is presently used as a means of disposal at Carberry and MacGregor. Wetland treatment systems are also in place at Grand Marias and Koch (formerly Simplot in Brandon).

16. Appropriate lagoon design, operation and storage capacity
 - Most overloading problems arise late in the lifespan of waste-water treatment facilities. Work has begun to prioritize upgrades for waste-water treatment systems that are hydraulically overloaded and routinely require emergency discharge orders. Proper design and sufficient storage capacity are assessed during licensing for new and expanding facilities.
17. Constructed/engineered wetlands
 - A multi-agency committee will review the efficiency of constructed wetlands in removing nutrients. This will also be the focus of international exchanges with water experts from Israel which has experience in this area.
18. Chemical treatment of lagoons
 - A multi-agency committee will assess the impacts to lands irrigated with effluent from water softener salt and the impacts to lands receiving waste-water sludge.
19. Conversion of lagoons to waste-water treatment plants with nutrient removal capabilities
 - In conjunction with regionalization of systems, lagoons will be converted to waste-water treatment plants with capability for full biological nutrient removal.
20. Other innovative approaches that will achieve nutrient reduction
 - A Manitoba–Israel water experts symposium is planned for later in 2008 and one of the themes will be innovative means to achieve nutrient reductions from waste water.
21. Environmental licensing fees and environmental review process for small waste-water treatment facilities
 - Environment Act licensing fees are reviewed by Manitoba Conservation and the fee structure is not believed to be a deterrent to proceeding with upgrades to waste-water treatment systems.
 - If a waste-water treatment facility is already licensed and an innovative nutrient reduction alteration is proposed, it is possible to expedite the licensing process.
22. Leachate handling
 - Work is underway by the City of Winnipeg regarding leachate handling as recommended by the Clean Environment Commission. Public access to the Miller Environmental collection depot in Winnipeg has been expanded to two days per week. Drop-off can occur at other times by appointment.

23. Nutrient management issues on First Nations communities
 - Work is underway through the Canadian Council of Ministers of the Environment and by Environment Canada to develop a Canada-wide municipal waste-water strategy. The lead on recommendations relating to First Nations will need to be taken by the federal Department of Indian and Northern Affairs.
24. Septic field maintenance and alternatives to septic fields
 - Manitoba Conservation distributes the *Homeowners Manual for Onsite Wastewater Management Systems* which provides clear tips for maintenance of septic fields.
 - In many parts of the province, septic fields are no longer being approved for new subdivisions and are being replaced by alternative waste-water treatment methods.
25. Management of domestic septage and grey water
 - A team will review potential impacts and issues surrounding the use of grey water for irrigation purposes including practices underway in other jurisdictions.
26. Manitoba Water Services Board
 - Environmental criteria are already in place that are used to prioritize and determine support funding levels for municipal waste-water treatment facilities. These will be reviewed to ensure they include nutrient reduction priorities.
 - In addition, the Manitoba Water Services Board actively explores regionalization opportunities wherever possible. However, not all areas will benefit from regional waste-water treatment facilities. There may be alternate, more cost effective ways to address the need for regional waste-water treatment facilities.
27. Phosphoric acid use in water supplies
 - A committee is reviewing the extent of phosphoric acid use in Manitoba to control leaching of lead from drinking water lines, the amount of additional phosphorus added to waterways as a result of this practice and whether alternatives are available.
 - Bill 8, introduced to the Manitoba legislature on November 29, 2007, provides provisions to develop regulations, if necessary, to control the addition of phosphorus-based water conditioners to drinking water systems.

28. Phosphorus content in cleaning supplies

- Bill 8, introduced to the Manitoba legislature on November 29, 2007, requires automatic dishwashing detergent to contain no more than 0.5 per cent phosphorus by July 1, 2010. This legislation also provides provisions to develop regulations, if necessary, to control phosphorus content in other cleaning products.
- The federal government published notification on February 15, 2008, that it intended to revise existing federal environmental regulations to limit the concentration of phosphorus to no more than 0.5 per cent in detergents and, if necessary, other cleaning products as well.
- The Canadian Consumers Specialty Products Association will implement a voluntary reduction of phosphorus in automatic dishwasher detergents to a maximum of 0.5 per cent by July 1, 2010, and has also encouraged Canada to implement consistent national standards for the phosphorus content of household cleaning products.

29. Nutrient loss from confined livestock areas and over-wintering sites

- Management of confined livestock areas is regulated by the Manitoba Livestock Manure and Mortalities Management Regulation. This regulation requires confined livestock holding areas to be set back from water courses at least 100 metres, not to be operated in such a manner as to cause pollution of surface or groundwater, require manure to be removed at least once each year as well as other provisions. Construction of confined livestock areas can only occur following conditions contained in individual permits issued under the regulation and the director has the discretion to require collection basins if required. The existing regulation also includes engineering specifications for collection basins. According to the existing Livestock Manure and Mortalities Management Regulation, manure is not allowed to build up in confined holding facilities. This information will be provided to livestock producers.

30. Livestock access to riparian areas and waterways

- Beneficial management practices are available and supported through the Agricultural Policy Framework environmental farm planning process that limit livestock access to waterways and riparian areas (the banks of rivers, streams, creeks, etc.). Demonstration projects have been implemented in a number of areas through the leadership of local Conservation Districts. Education programs such as *Managing the Water's Edge* are also being implemented to encourage protection of these sensitive areas.

31. Soil fertility and manure testing
 - Under the Nutrient Management Regulation, emphasis is on sound nutrient planning through either adherence to the regulatory limits or by submission of nutrient management plans. Nutrient management plans need to be supported by soil test information. Thus, it is expected there will be significant growth in the use of soil test information in Manitoba.
 - Manitoba Agriculture, Food and Rural Initiatives announced the creation of the Soil Test Awareness Committee which is implementing soil test extension programs in rural areas, implementing fertilizer awareness programs in urban areas, providing updates to the provincial *Soil Fertility Guide* and providing soil test information packages to regional offices.
32. Matching nutrient inputs with crop nutrient requirements and exports, and establishing soil phosphorus limits
 - Recommendations are provided to municipal and provincial regulatory authorities that new and expanding livestock operations be required to have sufficient land available at startup to ensure phosphorus application can be balanced with crop removal rates at no more than soil test phosphorus levels of 60 parts per million.
 - Clause 15 of the Nutrient Management Regulation provides the director with the ability to undertake regional sustainability assessments.
33. Evaluation of beneficial management practices as nutrient reduction strategies
 - The Canada–Manitoba Farm Stewardship Program has been important in promoting the uptake of beneficial management practices by producers. Through this program, funding assistance to implement beneficial management practices have been approved and has provided nearly \$15 million in incentive payments. Additional scientific study is needed on the effectiveness of various beneficial management programs under Manitoba’s climatic and landscape conditions.
34. Nutrient inputs from agricultural tile drainage
 - Studies have been undertaken and are ongoing related to assessing the quality of tile drain water discharged to municipal ditches and provincial waterways. In addition, a committee will investigate and implement recommendations related to nutrient inputs from tile drains.

35. Drainage of surface water from agricultural lands
 - Considerable work is underway on the issue of drainage on agricultural lands. New enforcement officers are in place to ensure existing regulations are met. Alternate Land Use Services (ALUS) is an incentive-based pilot project in the RM of Blanchard aimed at providing an economic return to producers for implementing environmentally-beneficial actions such as preserving wetlands rather than undertaking drainage activities. The province's Manitoba Habitat Heritage Corporation offers landowners financial incentives to preserve wetlands by perpetual easements through the Conservation Agreements Act. In addition, the province presently provides incentives through the Riparian Tax Credit Program to protect marginal lands and sensitive areas that might otherwise be drained.
36. Natural wetlands as nutrient abatement options
 - There are a number of initiatives underway aimed at preserving natural wetlands as they act as natural filters for nutrients. In addition, studies are underway by the International Institute for Sustainable Development to look at the role played by the Netley-Libau marsh in removing nutrients from the Red River system, prior to the water entering Lake Winnipeg.
37. Retention basins as nutrient abatement options
 - A committee will look at ways of improving nutrient abatement within existing and new stormwater retention basins.
38. Implementation of Lake Winnipeg Stewardship Board's recommendations
 - Extensive discussions have already been held among senior managers of key provincial departments to identify actions underway and prioritize further work to be done. Implementation of many of the recommendations requires co-ordination between Canada, Manitoba and upstream jurisdictions and this work is being addressed by the Federal-Provincial Lake Winnipeg Basin Co-ordination Committee.