

# DO WHAT MATTERS

{ Lake Friendly Practices + Actions for Municipalities }

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The South Basin Mayors and Reeves (SBMR), leaders from 9 communities in the south basin of Lake Winnipeg, recognized a need for action by all, to protect the health of Lake Winnipeg. In 2009 they, in cooperation with Manitoba Conservation and Water Stewardship, initiated the Lake Friendly Program to build community awareness of the serious issue of deteriorating water quality in Manitoba, Canada and throughout the world. The Lake Friendly Program is a call to action, it encourages cooperation from all sectors and provides clear, coordinated and immediate steps we can all take to do what matters in protecting and preserving our precious fresh water resources.

#### THE MEMBERS OF THE LAKE FRIENDLY WORKING GROUP ARE:

*Rick Gamble,* Mayor Village of Dunnottar, Chair, South Basin Mayors and Reeves **Colleen Sklar,** Executive Director, Lake Friendly Project Henry David (Hank) Venema, International Institute for Sustainable Development **Dimple Roy,** International Institute for Sustainable Development *Mike Scatliff,* Scatliff, Miller, and Murray **Doug Chorney,** Keystone Agricultural Producers Alanna Gray, Keystone Agricultural Producers **Donna Dagg,** Manitoba Liquor and Lotteries Shane Robins, Manitoba Conservation Districts Association Armand Belanger, East Interlake Conservation District Colleen Andreychuk, Manitoba Conservation and Water Stewardship Marla Riekman, Manitoba Agriculture, Food and Rural Initiatives Sue Barkman, Manitoba Chambers of Commerce Christine Hutlet, North Basin Manager, Red River Basin Commission Grant Nordman, Chair, Partnership of the Manitoba Capial Region

This 'Manitoba First' approach engaged the working group, key stakeholders and experts who graciously volunteered their time and expertise, providing the best solutions we have, based on what we know today. We cannot list them all, but we thank them for their contributions.

International Institute for Sustainable Development (IISD), Manitoba Conservation Districts Association, South Basin Mayors and Reeves, Association of Manitoba Municipalities, the Province of Manitoba and Green Manitoba



## WHY WE MUST ACT NOW:

Water is our most precious recource. One of the greatest problems facing lakes, rivers and streams today is excess nutrients (primarily phosphorus) entering our waters. These nutrients cause an overgrowth of algae, that is choking our waters, destroying habitat, fouling beaches and can be toxic to humans and animals. If this continues, our waters will not be able to recover.

There are two ways to deal with this problem: 1) reduce the amount of nutrients entering our waterways and 2) recover the nutrients at the shorelines.

We must do both and we must act quickly.

Lake Friendly Practices are actions that will reduce the amount of nutrients entering our waterways. These practices, and projects underway to recover nutrients at the shoreline and on the land, will help restore the health of lakes.

A Lake Winnipeg bioeconomy approach—an economy built on renewable resources that focuses on nutrient capture and recycling—can create opportunities for new industries and jobs in rural and urban Manitoba and bring revenue into the province that can improve our quality of life.

Saving Lake Winnipeg is a huge challenge.

It will take time and commitment by many to achieve.

But we must take action now.

#### **IN FIVE YEARS:**

Lake Winnipeg's water quality is improving.

Manitobans have a whole new way of thinking about how we manage our resources and how we view the environment. We have a new relationship with water.

Being Lake Friendly is an essential part of who we are as Manitobans. Everyone knows what is being done to save the lake and what they are being asked to do. We are doing this together.

We have made serious long term investments toward solutions that improve the state of the lake while growing our economy, improving our quality of life and developing solutions for the world.

#### WHO ARE WE?

We are the Lake Friendly Working Group—a collaboration of people whose hearts, minds, careers and livelihoods have been focused on defining the challenges and developing solutions for our struggling waters.

We came together to define a solution approach, with practical actions that all Manitobans can take to improve the health of our waters.

This 'Manitoba First' approach engaged key stakeholders and experts who graciously volunteered their time and expertise, providing the best solutions we have, based on what we know today.

#### WE BELIEVE:

The best approach is to focus on our own actions, working toward solutions.

We need to start from where we are today. We don't have all the answers, but we can use the best solutions we have, based on what we know, now. This approach will call us to continuously improve what we do and how we do it across all sectors.

Collaboration and collective effort is the only way this can occur. It is the responsibility of each and every Manitoban to do what they can to support Lake Winnipeg, our great lake, and all of our waters for ourselves and future generations.

Before we can ask our neighbors for support, we need a 'Manitoba First' plan of action. Manitobans must be leaders in this effort.

We believe this community can be an example for the world.

We believe this is achievable.





### IN YOUR MUNICIPALITY

#### IN YOUR MUNICIPAL FACILITIES

Use cleaning products dish washing compounds and hand soaps which have either a Green Seal, EcoLogo or UL Environment certification mark.

Never pour chemicals down the drain.

Avoid using the garburators in the cafeterias and lunch rooms.

Consider obtaining green building certifications for all municipal facilities (e.g., BOMA Best, Green Globes or LEED certification).

On your grounds, reduce nutrients and other harmful substances from entering the street or storm drain.

#### **IN YOUR PUBLIC WORKS**

Incorporate stormwater and wastewater management practices that reduce nutrient loads to waterways.

#### **Optimize wastewater treatment facility operations:**

Develop and/or ensure the existing wastewater sampling program provides ample information to operating staff on the condition and performance of the system and allows for early warning of possible upsets or operational problems:

- > Test effluent discharged to the waterway.
- Ensure compliance with Provincial Water Quality Standards, Objectives and Guidelines and Environmental Act Licence requirements.

- > A 1 mg/L phosphorus limit applies for all new, expanding or modified wastewater treatment facilities. Small wastewater treatment facilities (serving less than 2,000 people or equivalent) have the option of implementing a demonstrated nutrient reduction strategy instead of the 1 mg/L phosphorus limit.
- > Existing wastewater treatment facilities serving more than 2,000 people or equivalent due to industrial contributions will be required to meet a 1 mg/L phosphorus limit by January 1, 2016.
- > Nitrogen removal to 15 mg/L is also required on a site-specific basis for new and expanding wastewater treatment facilities serving more than 10,000 people or the equivalent load.

Conduct nutrient recycling or recovery from treatment facilities.

Create a road maintenance plan for the municipality that reduces the impacts to all waterways.

#### Dust control:

Review the chemical formulations for the various dust control products and select those which meet both the municipality's needs and cause the least impacts when applied near ditches and bodies of water.

Eliminate applying dust control products during rain.



Use water (whenever feasible) as a dust control product. Apply materials in a matter that is not detrimental to either water or vegetation, and in accordance with the manufacturers' recommendations.

Provide adequate spill containment materials on site when dust control is applied.

Dispose of excess materials per manufacturers' recommendations.

#### De-icer use:

Develop a snow and ice control policy/procedure, and a salt management plan, to comply with provincial and federal requirements.

Review the chemical formulations for the various de-icer(s) and other chemical additives needed and select those which meet both the municipality's needs and cause the least impacts.

#### Ditch maintenance:

Create a plan to enhance water retention and reduce nutrient loads to the receiving waterbody.

Inspect roadside ditches regularly to identify sediment accumulations and localized erosion.

Remove vegetation only when flow is blocked or excess sediments have accumulated.

Schedule regular ditch maintenance in early Fall, where possible. This allows vegetative cover to be reestablished by the next wet season, minimizing erosion of the ditch as well as making the ditch effective as a biofilter. Stabilize ditches with plant cover to reduce the need to re-trench to remove silt build-up. Consider conversion of ditches to native grasses or grass swales to promote the conveyance of storm water at a slower, controlled rate and act as a filter medium removing pollutants and allowing storm water infiltration, when feasible.

Do not leave ditch cleanings on the roadway surfaces. Sweep, collect, and dispose of dirt and debris remaining on the pavement at the completion of ditch cleaning operations.

Maintain municipal parks, open spaces, golf courses etc., in a sustainable manner.

Use native grasses and plants requiring low nutrient and water inputs to landscape and maintain open spaces, parks and golf courses.

#### **Employ landscape maintenance services that minimize impacts to waterways**:

Reduce the need for chemical weed control through proper plant and material selection, appropriate site preparation and careful maintenance. Weed control should be accomplished by the use of organic mulches, manual labour, and herbicide controls, in that order.

Perform a soil fertility test before fertilization. Fertilizer should only be applied, if the soil is without adequate nutrients for plant vigor. The intent is to reduce the potential to carry nutrient laden runoff into drains and catchment areas.



#### Use the Right Source of fertilizer at the Right Rate, the Right Time and the Right Place:

*Right Source:* Buy a fertilizer recommended for your lawn or garden.

*Right Rate:* Know the size of your lawn and only buy what you need. Apply at the application rate as recommended on the label. Use a good quality fertilizer spreader.

**Right Time:** Apply in the correct season. Spring and Fall are the best times to fertilize. Don't apply if heavy rain is expected. Don't apply on frozen ground.

**Right Place:** Sweep on to the lawn any fertilizer that might land on hard surfaces such as sidewalks and driveways. Never apply fertilizer near ponds, streams, rivers or lakes.

#### **IN YOUR GOVERNANCE**

Support and develop a Lake Friendly Municipal Plan.

#### **Development and Secondary plans:**

When detailed reviews are scheduled, amend the Development Plan and Secondary Plan (if applicable) for the planning district/municipality to draw attention to landscape features and management practices that are key to improving wastewater and storm water run-off management.

Follow the water protection policies contained within the planning regulations associated with the *Provincial Planning Act* to strengthen your Development Plans, ie:

- > Identify sensitive landscapes, drainage facilities and vulnerable water bodies.

- > Prepare an Integrated Watershed Management Plan and Wastewater Management Plan.
- > Prepare to guide flood management, the quality of water discharge, water conservation and habitat management.
- > Coordinate watershed and local wastewater management plan with local municipalities and planning districts.

#### Protect natural wetlands and shorelines:

Ensure developments within these areas comply with existing provincial and federal legislation.

Require the employment of constructed wetlands, native plantings, bioswales, buffer strips and other bioengineered systems for stormwater and wastewater management.

Promote the use of building and landscape technology that recycles grey water, rainwater and snowmelt.

Promote development that minimizes the need for stormwater management, ie: the use of water conservation, permeable surfaces and vegetation which supports stormwater percolation back to the aquifer.

Promote the use of native plants and ground covers.

#### **ByLaws and Development Agreements:**

Ensure Zoning Bylaws and Development Agreements are consistent with the Lake Friendly requirements set out in the Development Plan and any Secondary Plan Bylaws.

Approve rezoning and subdivision requests which adhere to the Development Plan and Secondary Plan conditions.

Support Lake Friendly developments in the municipality.



#### Construction Contracting and Consultant Contracting specifications:

Require contractors to propose a Lake Friendly design and construction strategy that is specific to the project for municipal approval, as part of the selection process and to be included in the procurement contract documents.

Require Lake Friendly construction performance specifications for all construction projects.

Require the use of professionals within the construction contracting and consulting contracting industries that have advanced their capabilities and can produce wetlands, native plantings and or drainage systems that perform to the design concept expectations.

Develop performance incentives as enforcement tools to ensure the Lake Friendly results are achieved.

#### Project Management:

Develop tools to ensure the implemented projects will continue, over time, to perform to the intended plans and are achieving the municipalities Lake Friendly goals.

Develop a cooperative arrangement with provincial and federal regulatory officials to support environment activities.

#### **Maintenance**:

Ensure municipal staff can support the maintenance of the systems installed to manage wastewater and stormwater runoff within the municipality.

Retain advocate consultants where necessary to measure performance and results.

#### **Public Education**:

Engage the entire municipality in Lake Friendly living.

Disseminate Lake Friendly information to the public, including: local seminars, website and print pieces. Share your success stories and results.

#### **Procurement**:

Adopt a sustainable procurement policy and purchase goods manufactured in a responsible manner. Purchase products that are made by manufacturers that have taken steps to reduce their impacts on the environment and minimize pollution to our waterways.

Use the Manitoba Sustainable Procurement website to support sustainable procurement decisions required within the Provincial Sustainable Development. *manitobasustainableprocurement.com* 

Buy cleaning products which have either a Green Seal, EcoLogo or UL Environment certification mark.

Buy paper and wood products that come from responsibly managed forests such as Forest Stewardship Council® (FSC®) certified products.

Buy Electronic Product Environmental Assessment (EPEAT) certified electronic equipment. EPEAT certified computers are manufactured with less hazardous material like lead and mercury.

Attend workshops for local governments showcasing your governance model and activities to encourage Lake Friendly Practices in other municipalities.

Keep informed about global water issues by visiting lakefriendly.ca and unwater.org



## **EVERYWHERE**

#### TREAT WATER AS IF WE HAD TO DRINK IT.

Don't be wasteful with water.

Never put used oil or other chemicals down storm drains or in drainage ditches. Bring chemicals to a hazardous waste management depot for proper disposal.

Reduce nutrients (fertilizers, etc.) and other harmful substances from entering the drain.

#### USE YOUR CONSUMER POWER FOR GOOD.

Purchase goods made by manufacturers that have taken steps to reduce their impacts on the environment and minimize pollution to our waterways:

Buy cleaning products which have either a Green Seal, EcoLogo or UL Environment certification mark.

Buy paper and wood products that come from responsibly managed forests such as Forest Stewardship Council® (FSC®) certified products.

Buy Electronic Product Environmental Assessment (EPEAT) certified electronic equipment. EPEAT certified computers are manufactured with less hazardous material like lead and mercury.

Support businesses that sponsor and promote Lake Friendly initiatives.

#### SPEAK YOUR MIND. GET INVOLVED.

Promote and support Lake Friendly actions and events.

Get community groups involved.

Support initiatives that help protect our waterways.

Spread the word about ways in which we can all help protect our waterways.

Let your elected representatives and local officials know that you support and encourage policies and processes that protect our waterways.

Take part in municipal planning meetings to make sure developers and planners consider alternatives to drainage conventional ways to manage runoff.

Support proposals that contain adequate consideration and design detail to collect, convey, manage and treat overland runoff and drainage.

## Keep informed about global water issues by visiting lakefriendly.ca and unwater.org



## JOIN US BECOME PART OF THE SOLUTION...

Lake Winnipeg will only be saved if we all do our part. It is time for us to develop a whole new relationship with our water.

The Lake can't be saved by governments, by businesses, by agriculture, by changing our personal habits, or through science alone. It can be saved by doing ALL these things TOGETHER, in a Manitoba-first solutionfocused approach.

We are the stewards of an incredible and precious collection of natural resources that is the envy of the world. It is our privilege and our responsibility to save the lake today and protect it for tomorrow.

All levels of government, leaders in the business community, the science community, the agriculture industry and other jurisdictions beyond Manitoba are working on innovative solutions to protect our waters. In the coming months and years you will hear much more about the projects that are underway. That's why now, more than ever, our everyday actions will make an impact. If we get this right, we will save our lake and be a model for communities around the world.

Join us today in protecting and preserving our fresh water resources.

Visit *lakefriendly.ca* for information on being Lake Friendly and to find out what is happening in:

- > Homes
- > Farms
- > Cottages
- > Schools
- > Businesses
- > Municipalities

THE LAKE FRIENDLY PRACTICES ARE PROUDLY SUPPORTED BY: South Basin Mayors and Reeves, the Province of Manitoba and Environment Canada

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