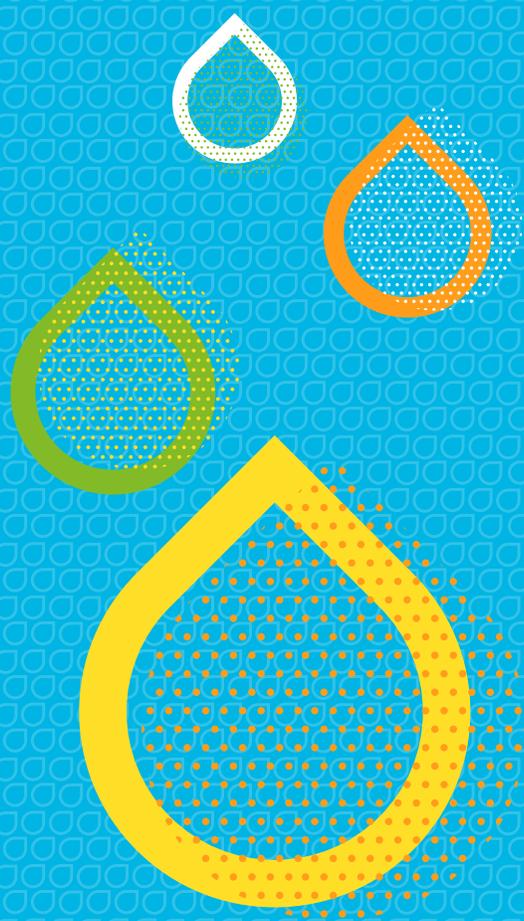


# DO WHAT MATTERS

{ Lake Friendly Practices + Actions for Farms }



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 Capital 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.

**THE LAKE FRIENDLY PRACTICES FOR FARMS ARE ENDORSED BY:**

*International Institute for Sustainable Development (IISD), Manitoba Conservation Districts Association, Keystone Agricultural Producers, Canadian Fertilizer Institute, 4R Nutrient Stewardship, the Province of Manitoba and Green Manitoba*



International  
Institute for  
Sustainable  
Development Institut  
International du  
développement  
durable



Manitoba  
Conservation Districts  
Association



# WHY WE MUST ACT NOW:

*Water is our most precious resource. 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.

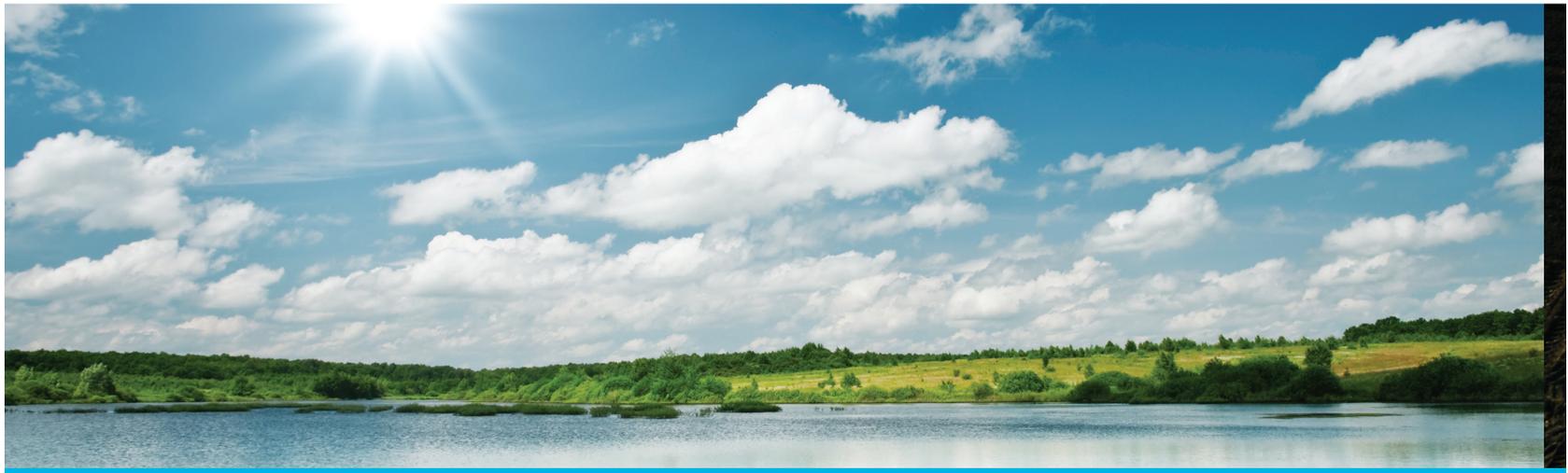
Collaboration and collective effort is the only way this can occur. It is the responsibility of each and every Manitoban to do what they can to support Lake Winnipeg, our great lake, and all of our waters for ourselves and future generations.

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.

*Here is what we're asking of you...*



## ON YOUR FARM

### COMPLETE AN ENVIRONMENTAL FARM PLAN

[gov.mb.ca/agriculture/environment/environmental-farm-plan](http://gov.mb.ca/agriculture/environment/environmental-farm-plan)

### NUTRIENTS AND SOIL

Nutrients from commercial fertilizer or manure are important inputs for crop production, but when certain nutrients, particularly phosphorus, enter surface water, they stimulate the growth of algae and aquatic plants.

*Participate in the 4R Nutrient Stewardship program Right Source at the Right Rate, Right Timing, Right Place:*  
[nutrientstewardship.com](http://nutrientstewardship.com)

**Right Source:** Select the correct source of nutrient for your soil ensuring a balanced supply of essential plant nutrients including granular or liquid fertilizers or manures is used.

**Right Rate:** Consider the availability of nutrients from all sources (e.g. livestock manures, commercial fertilizers and atmospheric nitrogen fixed by legumes).

Perform annual soil testing.

Apply nutrients to meet crop requirements while accounting for the nutrients already in the soil.

Calibrate application equipment to deliver target rates.

Include crops in the rotation that uptake nutrients.

**Right Timing:** Apply fertilizer at the right time so nutrients will be available when crop demand is high.

Do not apply fertilizer or manure on snow or frozen soils.

**Right Place:** Apply or maintain fertilizer where the crop can access the nutrients most efficiently.

Respect recommended setback distances for nutrient application near waterways.

Employ erosion control practices where erosion is a problem (e.g. conservation tillage or perennial forage on sloping land).

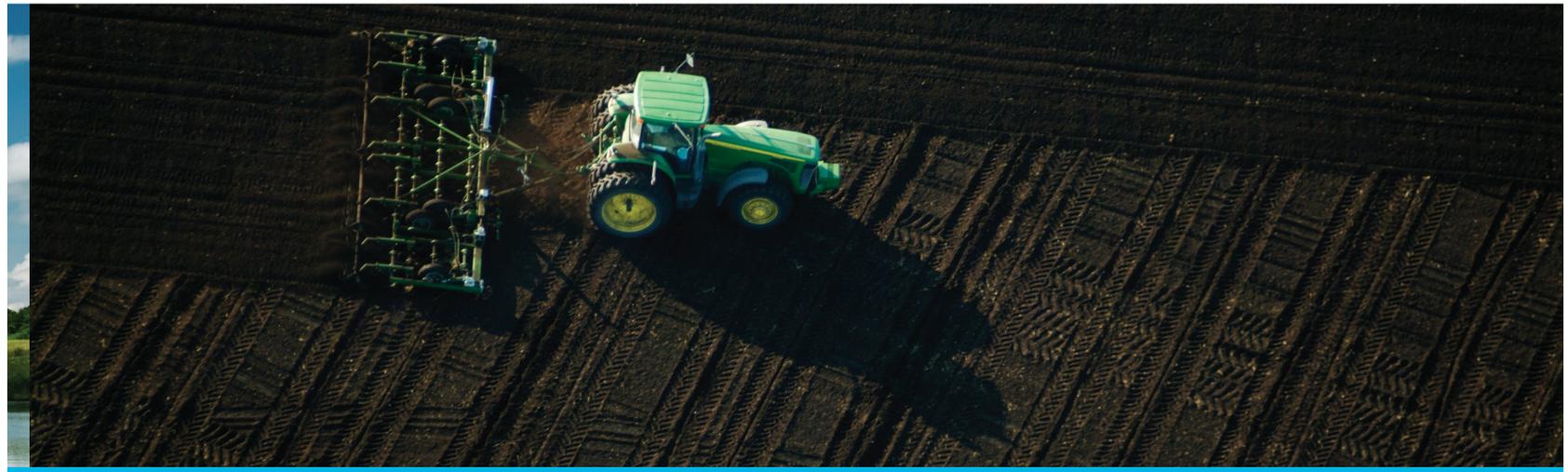
Follow the recommendations in the Manitoba Soil Fertility Guide to maximize agronomic efficiency and minimize the risk of nutrient losses to surface water and groundwater.

[gov.mb.ca/agriculture/crops/soil-fertility](http://gov.mb.ca/agriculture/crops/soil-fertility)

Carry out nutrient management planning on an annual basis.

Ensure compliance with Provincial and Municipal Regulations (e.g. the Provincial Livestock Manure and Mortalities and Nutrient Management Regulations).  
[gov.mb.ca/agriculture](http://gov.mb.ca/agriculture)

Ensure buffer strips are created and protected around all waters including next to ditches and drainage areas.



### **DRAINAGE AND IRRIGATION**

*Drainage water can carry nutrients, pesticides or pathogens to surface water.*

Follow all regulations for drainage and participate in watershed planning with your local conservation district and municipal government.

Explore opportunities to store and re-use runoff and drainage water on the farm (e.g. conserved and restored wetlands, small dams and reservoirs, back floods, collection basins, or dugouts.)

For irrigated crops, avoid build up of surplus water in the soil due to inaccurate or excessive irrigation.

Consider crops that grow well in local conditions (e.g., grow crops that use large amounts of water in wet regions and drought tolerant crops in dry areas.)

### **LANDSCAPE MANAGEMENT OF NATURAL LANDS**

*Water bodies and natural areas are valuable parts of Manitoba's agricultural landscape. These areas include wetlands and riparian areas, woodlands and native prairie grasslands. These areas often provide valuable agricultural resources such as water and forage. They help to clean and filter water, provide much of the food, protective and thermal cover and water resources that are necessary for fish and wildlife to flourish. In addition, they are important for plant and animal diversity.*

Convert natural lands and marginal or sensitive land from annual crops to permanent cover, especially if the area is affecting water quality or is costing you money to maintain production.

Before draining a wetland, consider the impact on the natural environment.

Provide off stream watering for livestock.



## MANAGE YOUR LIVESTOCK

*Good management of pasture, manure and livestock facilities will result in both economic and environmentally positive outcomes. Pasture management is important not only for forage and livestock production, but also for maintaining healthy ecosystems. Understanding and recognizing the impact of livestock grazing on ecosystem properties, is key to maintaining productive pastures. Applying manure, either fresh or composted, to agricultural land can be a sustainable way for livestock producers to recycle nutrients on the farm. However, manure is typically an unbalanced fertilizer, in that nutrients are rarely present in ratios that enable application rates to closely match crop requirements for more than one nutrient. Improper management of manure may lead to soil, water and/or air pollution.*

### **Pasture Management:**

Use proper stocking rates.

Provide rest periods that are adequate to allow plant recovery from grazing, drought or other disturbances.

Conserve native grassland, forested land and wetlands.

Understand the nutrient requirements of a pasture, and ensure nutrient applications match, but do not exceed the needs of plants and livestock.

Distribute grazing activity evenly.

### **Manure application:**

Ensure there is enough productive land base to receive manure annually.

Select fields and manage crops and manure to ensure that rates of nutrient application match rates of nutrient removal over the long term.

### **Livestock Facilities:**

Ensure you have a proper system to collect and store groundwater and recharge areas for contaminated runoff from the yard.

Check the location of livestock yards and ensure there is sufficient distance from nearby wells, springs, sinkholes and surface water.

Regularly remove/clean manure from confined livestock areas.

Regularly rotate areas used for in-field overwintering system such as bale-grazing.



## MANAGE YOUR STORAGE AND HANDLING

*On farm storage and handling of farm inputs, including fertilizer, fuel and pesticides, is necessary but can pose an environmental hazard if not done properly. Any one of these products can move quickly through the soil and into groundwater or runoff into dugouts and streams. Proper farm management includes ensuring that all farm inputs are stored safely to ensure that no spills or leaks occur that would result in the contamination of surrounding soil and water.*

### **Manure:**

Inspect your manure storage structure regularly. Check for signs of wear, damage and leakage in all parts of the structure.

Choose field storage locations that have low risk of runoff or leaching from the piles.

Prepare an emergency plan to deal with a spill.

### **Petroleum:**

Make sure storage tanks are installed properly and protected from corrosion.

Monitor and inspect storage tanks regularly.

### **Pesticides and commercial fertilizer:**

Handle pesticides and fertilizer carefully, especially during mixing and loading.

Rinse and recycle empty pesticide containers.

Ensure that the transportation of commercial fertilizer and pesticide is done in a safe way to avoid an accident and spillage.

**Keep informed about global water issues by visiting [lakefriendly.ca](http://lakefriendly.ca) and [unwater.org](http://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](http://lakefriendly.ca) and [unwater.org](http://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 solution-focused 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](http://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*



Environment  
Canada



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