# McGregor and Jeannettes Creek Phosphorus Reduction Program







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The Lower Thames Valley Conservation Authority (LTVCA) is pleased to announce the launch of the McGregor and Jeannettes Creek Phosphorus Reduction Program. The voluntary program will be available to farmers in the

McGregor and Jeannettes Creek subwatersheds from 2019-2021. The purpose of the project is to improve soil health and reduce the amount of agriculturally sourced phosphorus entering the Thames River, Lake St. Clair and ultimately the Western Basin of Lake Erie.

Agricultural Best Management Practice (BMP) incentives and technical support will be available to farmers to implement a targeted suite of BMPs within each subwatershed.

Reductions achieved through the implementation of BMPs will be quantified through subwatershed monitoring and modeling activities to assist Ontario and Canada with meeting the Thames River 40% reduction target for total and soluble reactive phosphorus loads entering Lake St. Clair and Lake Erie. The



goal of the target is to reduce the severity and development of green and blue algae blooms in the Lake Erie Basin.

Financial support for this program was provided by Environment and Climate Change Canada (ECCC). The applied research activities are funded in part through the Canadian Agricultural Partnership (the Partnership), a federal-provincial-territorial initiative. The Agricultural Adaptation Council (AAC) assists in the delivery of the Partnership in Ontario.

The views expressed in this program brochure are the views of the Lower Thames Valley Conservation Authority and do not necessarily reflect those of the governments of Canada, Ontario, or AAC.

## **Funding Availability**

#### **Funding**

Funding will be available to farmers to implement the following agricultural BMPs:

- BMP 1 Cover Crops
- BMP 2 Alternative Phosphorus Application Practices
- BMP 3 4R Nutrient Management Services
- BMP 4 Erosion Control Structures
- BMP 5 Marginal & Sensitive Land Restoration
- BMP 6 Farmer Innovative Solutions

The LTVCA will be accepting applications during the time period of March 31st – December 1st. Farmers must submit an application prior to implementing the project. Applications will be accepted and reviewed on a first come, first serve basis, until all available annual funding has been allocated.

#### **Farmer Data Sharing Requirements:**

Participating farmers must be willing to complete a field land activity survey with LTVCA staff once over the duration of the project (2019-2021). The survey will ask farmers to provide information on their general crop production systems (crop rotation, tillage, fertility, average yield estimates), for use in configuring the subwatershed Soil and Water Assessment Tool (SWAT) Model. The data will only be shared in an aggregate form publically and no business or personal identifiers will be shared.



## STEPS TO COST-SHARE FUNDING

## Step 1

Review your field drainage information and the enclosed subwatershed map to ensure you are eligible for the program.

## Step 2

Review the program BMPs and funding structure outlined from page 8 to 19. Determine what BMPs you would like to implement.

Step 3
Contact an LTVCA project staff member to set up a site visit to discuss your project and the funding application process.

## Step 4

Apply for BMP project funding by submitting a completed project application form to the LTVCA.

## Step 5

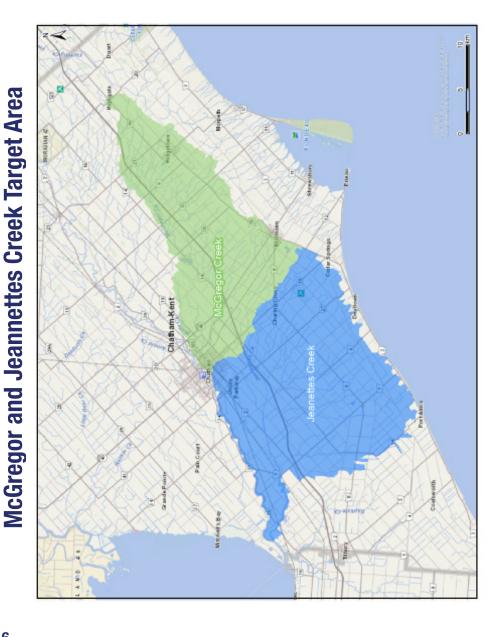
The LTVCA will review the submitted application and will inform you of project approval within 30 business days. You will also receive confirmation of the funding amount allocated to your project.

## Step 6

Once the project is complete, submit a claim form to the LTVCA to receive your approved funding contribution.

### **AM I ELIGIBLE FOR THE PROGRAM?**

To be eligible to participate in the program you must be a farmer, and the farm where you are implementing a BMP must be in the McGregor or Jeannettes Creek subwatershed.



## **BEST MANAGEMENT PRACTICES**

## **Cover Crops**

BMP<sub>1</sub>

## **Alternative Phosphorus Application Practices**

BMP 2

## 4R Nutrient Management Services

**BMP 3** 

## **Erosion Control Structures**

BMP 4

## Marginal & Sensitive Land Restoration

BMP 5

## Farmer Innovative Solutions

BMP 6

## **BMP 1** Cover Crops

Funding is available to encourage an increased use of cover crops. This will provide undisturbed cover on fields, when they would otherwise be exposed to erosion and nutrient runoff during the non-growing season.

Cover crops can be utilized to:

Prevent Soil Erosion
Increase Water Infiltration
Retain & Capture Nutrients
Improve Soil Health/Structure
Combat Weeds



### **Eligible Activities**

- \$/acre incentives will be available for the planting of frost-terminated or overwintering species
- An increased incentive will be available for overwintering species, as they will provide more soil cover over the entire duration of the non-growing season

#### **Ineligible Activities**

- Costs associated with mechanical or chemical termination of the cover crop
- Cover crop plantings that will be terminated during the Fall or Winter
- Commercial crop plantings that overwinter, are not eligible to receive cover crop funding through the program

#### **Practice Claim Information**

 Before issuing cover crop planting financial contributions, the LTVCA will confirm the cover crop was planted and remained undisturbed during the non-growing season. Approved cover crop incentive contributions cheques will be sent via mail.

Program Funding Structure: Cover Crops		
Targeted BMP	Eligible Activities	Eligible Funding
Cover Crops	Frost-Terminated Species	\$10.00/acre
	Overwintering Species	\$12.50/acre

## Alternative Phosphorus Application Practices

Funding is available for farmers to adopt alternative phosphorus application practices that will optimize the placement and timing of fertilizer application on their field, making the nutrient less susceptible to runoff.

Alternative phosphorus application practices can be utilized to:

Improve the efficiency of crop nutrient uptake

Reduce susceptibility to nutrient runoff & loss

**Increase crop yields** 



### **Eligible Activities**

 \$/acre incentives will be available for alternative phosphorus application practices that reduce the risk of runoff through surface water and tile drainage flow pathways

#### **Ineligible Activities**

- Low rate/volume starter applications of Phosphorus. Targeting bulk phosphorus applications.
- Funding is not available for Nitrogen applications

#### **Practice Claim Information**

• The LTVCA will require farmers to provide a proof of phosphorus application document with the claim. This can be a picture of the equipment implement in the field on the day of the application, a service provider invoice, or a service provider receipt.

Program Funding Structure: Alternative Phosphorus Application Practices		
Targeted BMP	Eligible Activities	Eligible Funding
	Strip Tillage Phosphorus Application	\$10.00/acre
Alternative Phosphorus Application Practices	Variable Rate Application of Phosphorus	\$10.00/acre
	Below Canopy Application	\$10.00/acre

## **4R Nutrient Management Services**

Funding is available to support farmers with implementing 4R Nutrient Management Strategies. By adopting 4R Nutrient Management practices, farmers can significantly reduce the risk and occurrence of severe nutrient loss during rain, melt, and runoff events.

Funding will be available to support farmers with creating field nutrient management plans that consider the following factors:

**Nutrient Source** 

**Application Rate** 

**Application Timing** 

**Nutrient Placement** 



#### **Eligible Activities**

- Soil Sampling, testing and mapping services completed under the supervision of a Certified Crop Advisor (CCA) or 4R Nutrient Management Specialist
- Crop and field nutrient management plans written by a CCA
- Nutrient management planning and support tools/ services

#### **Ineligible Activities**

- · Computer hardware
- Claims for time invested by producer to draft plan
- Routine crop scouting or pest management activities

Program Funding Structure: 4R Nutrient Management Services			
Targeted BMP	Eligible Activities	Eligible Funding	Funding Cap
	Grid or Zone Soil Sampling	50% Cost- Share	\$1,000.00
4R Nutrient Management Services	Field Profitability Mapping Services	50% Cost- Share	-
	CCA Written Crop and Nutrient Management Plan	50% Cost- Share	\$1,000.00

## **Erosion Control Structures**

Funding is available for farmers to construct Erosion Control Structures.

Constructing erosion control structures at field locations prone to surface water runoff and erosion can result in the following benefits:

Reduced movement of sediment & phosphorus

Drain bank stabilization

Reduced municipal drain maintenance

Mitigate the potential for gully & rill erosion



### **Eligible Activities**

- Infrastructure, material, and contractor costs to construct structures.
- Upgrades and modifications to existing structures

#### **Ineligible Activities**

• Installation of tile laterals or mains. Unless required for erosion control structure.

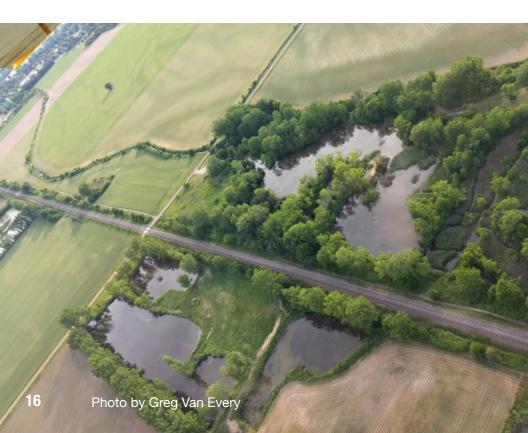
Program Funding Structure: Erosion Control Structures			
Targeted BMP	Eligible Activities	Eligible Funding	Funding Cap
	Rock Chutes or Outfalls	50% Cost-Share	\$4,000.00
Erosion Control Structures	Grassed Waterways	50% Cost-Share	\$4,000.00
	Water and Sediment Control Basins (WASCOBS)	50% Cost-Share	\$4,000.00

## **BMP 5** Marginal & Sensitive Land Restoration

Funding is available for farmers to restore marginal and environmentally sensitive land.

Restoration projects can provide a variety of environmental benefits, while acting as an additional method to capture and utilize phosphorus before it has the opportunity to enter watercourses. Benefits of such projects can include:

> Reduced wind erosion & water erosion Stabilize sediments & phosphorus Pollinator & wildlife habitat creation



#### **Eligible Activities**

- Costs associated with sourcing and planting native grasses, forbs, shrubs and trees to restore marginal or sensitive agricultural land
- Contractor costs to complete plantings
- Contractor and material costs associated with excavating and constructing wetlands

#### **Ineligible Activities**

- Projects that involve planting invasive species
- Ongoing maintenance costs

Program Funding Structure:  Marginal & Sensitive Land Restoration		
Targeted BMP	Eligible Activities	Eligible Funding
Marginal & Sensitive Land Restoration	Buffer Strips	
	Field Windbreaks	
	Wetlands	Funding Pending Project Proposal
	Native Grasslands	
	Tree Plantings	

## Farmer Innovative Solutions

The Farmer Innovative Solutions project category is available to provide farmers with the opportunity to apply for funds to offset the cost of implementing new concepts that may have the potential to reduce agriculturally sourced phosphorus loads.

The purpose of the category is to support the agricultural industry with developing new solutions to improve soil health and water quality.

Farmers must submit a brief proposal that describes the project, project cost, and how the said project will improve soil health and water quality.



#### **Eligible Activities**

- Farmer developed solutions/projects
- Equipment modifications
- · Phosphorus adsorption or filter technologies
- · Water control structures

#### **Ineligible Activities**

- Any equipment that does not support an improvement to soil health or decreased risk of phosphorus loss
- Tires
- Maintenance costs
- GPS units

Program Funding Structure: Farmer Innovative Solutions		
Targeted BMP	Eligible Activities	Eligible Funding
Farmer Innovative Solutions	Innovative farmer proposed projects that may result in water quality or soil health improvements.	Funding Pending Project Proposal

<sup>\*\*\*</sup> Each applying landowner will be required to explain how the project could benefit their soil health or reduce phosphorus loss.

### **LANDOWNER SURVEY & INTERVIEW**

Applicant farmers who receive funding to implement BMPs through the program will be asked to perform a land use survey with a representative from the LTVCA.

The survey will ask questions regarding previous and current land use practices, such as:

Crop Rotation
Fertilizer Application
Manure Application
Tillage Practices

Surface Residue Cover



### LTVCA CONTACT INFORMATION

If you are interested in implementing a Best Management Practice on your farm in the McGregor or Jeannettes Creek subwatershed through the program, please contact:

#### **Colin Little**

Agricultural Program Coordinator Colin.Little@ltvca.ca Phone: 519-354-7310 ext. 231

#### **Ryan Carlow**

Soil & Water Quality Technician Ryan.Carlow@ltvca.ca Phone: 519-354-7310 ext. 228







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