



# GROW Program Guide

For Landowners and Producers



## What is the GROW program?

Identified under the Water Pillar in Manitoba's Climate and Green Plan, Growing Outcomes in Watersheds (GROW) is a way of encouraging the delivery of ecological goods and services (EG&S). GROW promotes conservation of natural areas or changes to land uses that provide EG&S by helping farmers develop projects that maintain or improve local watershed health and work for their operations. GROW is a made-in-Manitoba program on working lands that focuses on **"farming the best, conserving the rest."** With a focus on watershed health, management and resiliency, GROW will help reduce flooding and drought vulnerability and improve water quality and nutrient management in Manitoba. The GROW framework will be delivered by watershed districts in partnership with landowners, non-government organizations, and all levels of government.



### Principles of GROW

- Watershed-Based
- Locally-Driven
- Producer-Focused
- Measurable
- Sustainable
- Balances Incremental with Existing EG&S
- Collaborative

## Outcomes and Co-Benefits of GROW

### Priority Outcomes

- improved watershed resilience to the impacts of a changing climate (e.g., extreme weather events, drought, flooding)
- improved water quality (e.g., improved nutrient management)

### Co-Benefits

- improved on-farm water management
- enhanced sustainable agricultural production
- improved biodiversity and habitat
- carbon sequestration and storage

## GROW is Locally Driven, Locally Delivered

- ✓ a group of local people passionate about improving watershed health
- ✓ local people entrusted to make decisions on projects based on local priorities ✓ farmers leading farmers in local committees through peer-to-peer learning and influence ✓ local champions and leaders focused on long-term change guided by science, integrated decision making
- ✓ a locally targeted approach to improving watershed health

## What is the GROW Committee?

Each watershed district has a Local GROW Committee which consists of at least 50% producers, nonvoting representatives of provincial departments, and staff members of the watershed district. The committee's job is to establish local priorities and target areas within the watershed to

implement GROW. They also establish payment rates for eligible activities and project cost-shares based on GROW criteria and established provincial guidelines. The committee will determine term lengths where required, based on GROW eligible activity criteria. The committee will prioritize and approve local GROW projects brought forward by watershed district staff and approve contracts with landowners.

## What projects are eligible within the GROW Program?

The GROW program allows for five areas of Ecological Good and Services: Water Retention; Buffer Establishment; Upland Area Conservation, Enhancement, or Restoration; Riparian Area Management and Wetland Conservation, Enhancement or Restoration.

### **GROW Activity: Water Retention**

Projects including small dams, temporary backflows, or on-farm water retention basins can reduce flooding downstream, improve water quality, and provide local habitat benefits. The purpose of the water retention activity is to build structures that improve the management of surface water throughout a watershed to protect against flooding, drought and the impacts of climate change, and provide:

- Enhanced water storage;
- Reduced peak flows, which can moderate the timing and volume of runoff and reduce negative impacts downstream;
- Improved water quality by capturing sediments, nutrients, contaminants and pesticides; • Protection to aquifers and enhancement of recharge;

### Eligible Practices:

- ✓ Small dam construction.
- ✓ Culvert re-sizing, berms and controlled tile- or surface- drain outlets to manage on- farm water through permanent or temporary water retention.

### Ineligible Practices:

- × Water retention activities designed to consolidate wetlands.
- × Irrigation infrastructure (although could be integrated into an approved GROW-funded project at the landowner's expense).
- × Surface and sub-surface drainage excavation/installation (although could be integrated into an approved GROW-funded project at the landowner's expense).

*Preference will be given to projects that provide multiple benefits. All projects will be required to obtain all necessary licenses, permits, and approvals prior to construction.*

### **GROW Activity: Buffer establishment – shelterbelts, multi-species buffer strips**

Buffers are natural or engineered transitions between landscape features managed for different outcomes – for example, shelterbelts between annual cropland and other features to reduce wind based soil erosion; perennial cover buffers between field edges and riparian areas to protect riparian vegetation from chemical or mechanical disturbance. Planting shelterbelts in yards, fields, around livestock facilities, and near dugouts offers many benefits from minimizing the impacts of wind, creating habitat and providing shelter to farmyards and livestock. Shelterbelts planted near annually cropped fields also reduce wind erosion, while providing yield benefits to adjacent crops. The objective of this activity is to help producers establish shelterbelts and support their maintenance. According to AAFC, eco-buffers are made up of multiple rows using a variety of native trees and shrubs in a mixed planting arrangement. Unlike most traditional single or limited species shelterbelts, there is a much higher variety of woody plants in an eco-buffer. The plants are predominantly native trees and shrubs chosen from the local ecozone.

Buffers and grassed waterways are areas of permanent vegetation in low areas that have water flow in

spring runoff or during heavy rain events. They are designed to convey concentrated runoff while preventing soil erosion, flood effects, the formation of gullies and nutrient and pesticide losses from a local collection area, between two bodies of water, or along a flowing waterbody.

The purpose of the Buffer Establishment Activity is to establish, enhance and/or restore shelterbelts or buffers that provide:

- reduced soil erosion;
- improved water conservation efforts;
- improved wildlife and pollinator habitat;
- increased crop yields;
- increased carbon sequestration;
- thermal protection for livestock;
- reduced surface runoff and enhanced water quality; and,
- stabilized stream banks.

#### Eligible Practices:

- ✓ Establishment or Creation of new buffers (shelterbelts, perennial cover buffers, or grassed waterways) on private lands. This could also include a period of required maintenance, e.g., weeding, mulching and watering.
- ✓ Enhancement of existing buffers on private lands that result in measurable incremental benefits. For example, expanding existing buffers by adding new rows or inter-planting to increase species diversity within existing buffers.
- ✓ Restoration of degraded buffers. For example, this may include re-establishment of buffer vegetation, pruning and removal of dead or diseased trees.

#### Ineligible Practices:

- × Tree species intended for harvesting for economic benefit (e.g. Christmas trees, fruit orchards, etc.).
- × Purchase and relocation of ornamental trees.
- × Purchase and relocation of established trees from non-nursery areas.
- × Species that are extremely vulnerable to disease (e.g., emerald ash borer) or deemed to be invasive.

#### **GROW Activity: Riparian Area Management**

Riparian areas are the vegetated (trees, shrubs and herbs) zones adjacent to rivers, streams, lakes and wetlands. A riparian area is considered a transition zone or interface between a water body or wetland and the surrounding drier upland. Riparian areas need to be healthy to function at a high level. Healthy riparian areas can produce an abundance of forage and provide shelter for livestock and maintain habitat for wildlife and fish. A producer can enhance economic and environmental productivity by improving both the condition and function of a riparian area. The purpose of Riparian Area Management is to conserve, enhance and/or restore riparian areas to provide:

- improvements to surface water quality, by capturing sediments, pathogens, nutrients and pesticides;
- water storage and flow reductions that reduce downstream flooding during high water events;
- greater landscape resiliency to the impacts of climate change;
- carbon storage and sequestration;
- riverbank and shoreline stabilization and erosion control;
- wildlife habitat and continuity and greater biodiversity through the re-establishment or rehabilitation of riparian vegetation.

## Eligible Practices:

- ✓ Conservation of existing healthy riparian areas on private lands.
- ✓ Enhancement of existing riparian areas on private lands that result in measurable incremental benefits. For example, this may include fencing that optimizes grazing impacts, alternative watering systems, improved stream crossings, constructed works to stabilize banks and prevent erosion, and re-establishment of riparian vegetation.
- ✓ Restoration of degraded riparian areas. For example, constructed works to stabilize banks and prevent erosion, re-establishing important riparian vegetation (e.g., native trees or shrubs) or other types of projects that would improve riparian health and function.

*Only riparian areas are eligible under this category. Pipelines must provide a direct riparian benefit and cannot extend significantly beyond the riparian area (typically less than 300m in total length). Pipelines extending from wet well or water source to nearby trough are eligible. Crossing improvements are not intended to supplement access points to fields or pastures for convenience of farming operations and field access. Must display strong riparian benefits.*



### **GROW Activity: Upland area conservation, enhancement, or restoration**

Natural upland areas, such as treed areas and grasslands, may require rejuvenation in order to function optimally. Some of these areas may also be vulnerable to conversion to other land uses, such as annual cropping or development. These natural areas are valued as they delay and reduce runoff from rain events and spring runoff, thereby reducing flooding and erosion, and stabilizing soils. They can also increase groundwater recharge and provide wildlife and pollinator habitat, thus enhancing biodiversity. Many areas of native grassland serve as important habitat for species at risk (SAR). Enhancement of grassland areas may require changes in grazing management practices and other activities, such as controlled burns.

Management of these areas through activities such as selective harvesting and replanting or brush management may be necessary to sustain ecological function. Upland area conservation, enhancement, and/or restoration supports the health of natural areas to:

- improve the ecological function of natural and managed upland areas;
- promote healthy wildlife and pollinator habitat, corridors and biodiversity;
- increase carbon sequestration and soil health;
- store water and reduce flooding; and,
- reduce soil erosion.

### Eligible Practices:

- ✓ Conservation of existing native prairie or highly erodible upland areas on private lands. ✓ Enhancement of existing natural and managed areas on private lands that result in measurable incremental benefits. For example, improved woodlot and native range management practices that enhance carbon sequestration and biodiversity.
- ✓ Restoration of soils, former natural areas or severely degraded existing natural areas. For example, this may include soil health crops, re-establishment of perennial native/tame cover on sensitive lands or reforestation of previous wooded areas. This could also include a period of required maintenance, e.g., weeding, mulching and watering.
- ✓ Permanent or alternative fencing and alternative watering systems are eligible under GROW to improve grazing strategies that support grassland and pasture health in sensitive/marginal areas.
- ✓ Establishment of soil health crops could include cover crops, green manures and polycropping:
  - Cover crops are defined as low-growing understory crops that often grow outside the main-crop growing period. Cover crops offer services to the cropping systems such as adding soil N, reducing soil erosion, increasing soil quality and suppressing weeds.
  - Green manure crops are crops grown specifically to replenish the soil system, typically with N, but also P and other nutrients.
  - Polycropping: Cover crops are also referred to as polycrops, polycultures, and cocktail crops, when diverse mixtures of crop types are grown together.

### Ineligible Practices:

- × Farm equipment used for conventional practices, including conservation and zero tillage equipment (not funded through GROW; however, may be an important component of soil management at landowner's expense).
- × Practices that are considered standard for most farmers in a region (e.g., zero tillage).

*Brassica species are not recommended in cover crop mixtures, especially if the current crop rotation includes other Brassica species (e.g., canola or mustard) as the main crop.*

### **GROW Activity: Wetland Conservation, Enhancement, or Restoration**

A wetland is a permanently or temporarily water-saturated area characterized by distinct plant and soil types. The benefits derived from wetlands are extensive: wetlands help to prevent flooding, filter and purify water, recharge groundwater, maintain baseflow to waterways (especially important during dry periods), reduce erosion and provide extensive habitat to support biodiversity. The purpose of the wetland Activity is to conserve, enhance and/or restore wetlands to provide ecological goods and services that include:

- Enhanced water storage;
- Reduced peak flows, which can moderate the timing and volume of runoff and reduce negative impacts downstream;
- Improved water quality by capturing sediments, nutrients, contaminants and pesticides;
- Protection to aquifers and enhancement of recharge;
- Improved wildlife habitat and biodiversity
- Increased carbon sequestration.

### Eligible Practices:

- ✓ Conservation of existing Class 1 and 2 wetlands on private lands:
  - GROW prioritizes Class 1 and 2 wetlands on annual cropland due to a higher risk of loss. Continued cropping of these wetlands does not affect eligibility, as long as wetlands are not drained or filled. Class 1 and 2 wetlands in pastures or in Class 4, 5 or 6 soils are a lower priority.

- Class 1 and 2 wetlands less than 5 acres in size
- ✓ Enhancement of existing wetlands (all classes) on private lands to provide measurable incremental increases in wetland benefits. For example, re-establishing a perennial upland buffer (inter-pothole seeding) around a wetland to limit mechanical disturbance, fencing off site watering, grazing management to limit grazing disturbance, or other types of projects that would improve wetland health and benefits.
- ✓ Restoration of drained or degraded wetlands on private lands. For example, this may include plugging surface drains or re-establishing natural topographic contours.
- ✓ Terminal basins could be included in Local GROW Programs, with a focus on extreme or chronic situations.

### Ineligible Practices:

- × Projects that are part of a compensation requirement under The Water Rights Act.
- × Projects that pay incentives for flooded acres without associated land use conversion within terminal basins.

*Projects will be required to obtain all necessary licenses, permits, and approvals prior to construction. Projects secured under GROW are not eligible as future compensation projects for authorizations under The Water Rights Act. Continued cropping of Class 1 and 2 wetlands will not affect eligibility, as long as wetlands are not drained or filled.*



## How can the GROW Program benefit me?

There are two types of landowner incentives:

1. **Establishment costs** (infrastructure): The cost of establishing projects that provide enhanced or new EG&S. These costs include labour, equipment and material costs, and eligibility is at the discretion of Local GROW Committees; cost-shares may vary depending on watershed district, Local GROW Program priorities, project type and local conditions.
2. **Annual payments** (may not be eligible for all projects): Annual incentive payments for acres enrolled in Local GROW Programs will be available for producers. Local GROW Committees will establish annual payment rates for participating landowners (where required) based on the following guiding principles: Incentive payments should not exceed land rental rates for similar lands in the watershed district.

Local GROW Committees will consider the following in the development of maximum incentive payment rates:

- i. **Assessed Land Value** – what is the assessed value of land in the area, watershed, or where the projects will be located?
- ii. **Agricultural Capability** (e.g., Class 2, Class 5, etc.) – what is the capability of the soil to sustain agricultural crops based on limitations due to soil properties, landscape features and climate?
- iii. **Local demand/price factors** – are there any external factors that are contributing to higher or lower land values or local land rental rates? (e.g., influence of urban areas on land assessment value, competition for available land to rent, etc.)

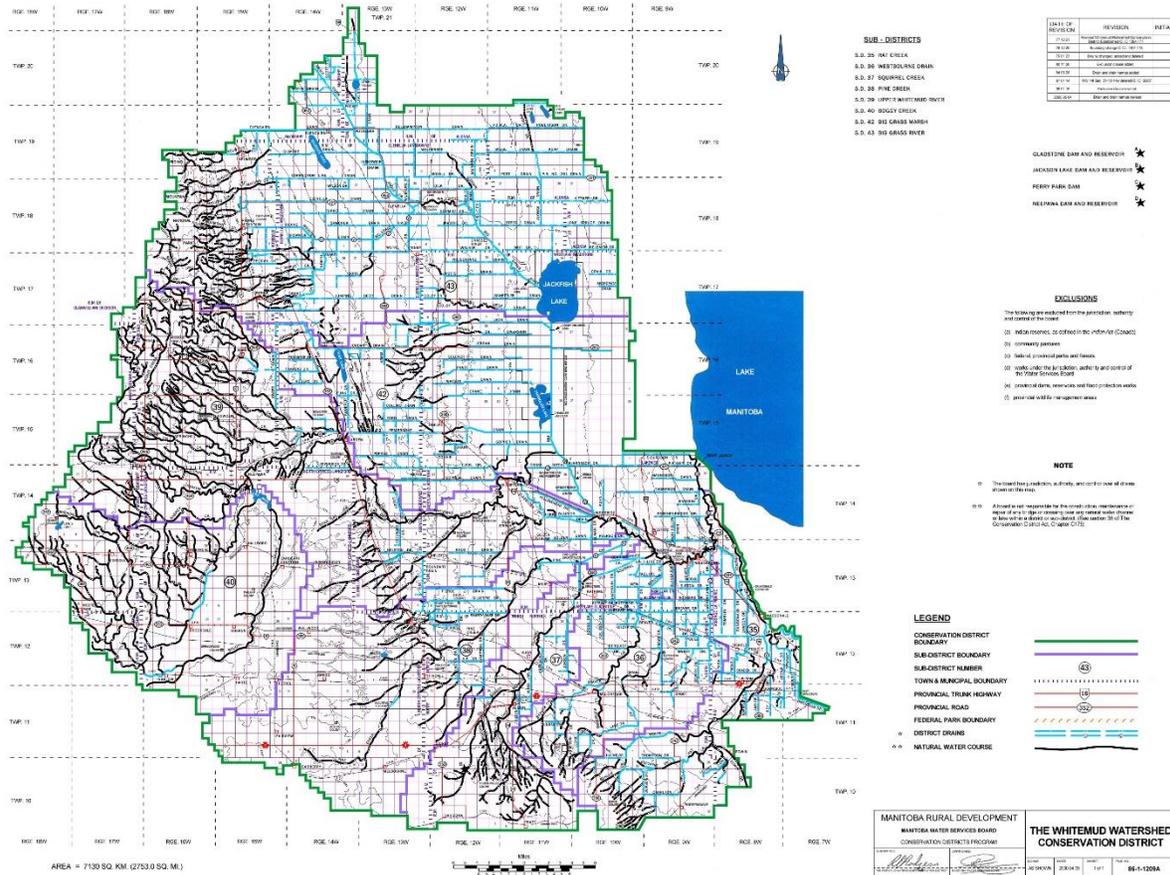
The final incentive payment to a landowner may be pro-rated based on economic gains on the enrolled acres. For example, a project in which upland areas are converted from cropland to permanent forage or

native grasses represents a “lost opportunity” for the producer (loss of annual crop production), but the producer may obtain economic benefit in years that are favourable for haying or grazing.

*Note that Provincial and Federal Crown Lands are not eligible for annual incentive payments*

## How do I submit an application?

Go online to [www.whitemudwatershed.ca](http://www.whitemudwatershed.ca) and click our programs tab where you'll find the GROW application. Fill out the application, then drop it off at our office, email to [wwdgrowcr@mymts.net](mailto:wwdgrowcr@mymts.net) or fax to (204) 476-7094. The GROW Coordinator will respond to your application within 2-3 business days.



## Who do I contact?

For more information please contact your local GROW Coordinator:  
[www.whitemudwatershed.ca](http://www.whitemudwatershed.ca)

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