A home-grown ecological goods and services program for Manitoba

GROW

Growing Outcomes in Watersheds

GUIDE 2026

THE CONSERVATION & GROW TRUSTS

Manitoba Climate and Green Plan Initiatives
delivered by The Manitoba Habitat Heritage Corporation

Manitoba

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GROWING OUTCOMES IN WATERSHEDS

With a focus on watershed health, management and resiliency, Growing Outcomes in Watersheds (GROW) projects will help reduce flooding and drought vulnerability, and improve water quality and nutrient management in Manitoba. GROW supports ecological goods and services (EG&S) on agricultural lands through the conservation of natural areas and changes to land use practices.

GROW is a made-in-Manitoba program on working lands that focuses on *farming the best, conserving the rest*. The program supports farmers to implement projects that align with their operations and maintain or improve local watershed health.

Watershed Districts deliver GROW

GROW is delivered by watershed districts in partnership with landowners, non-government organizations, and all levels of government. These partnerships are formalized as ***Local GROW Committees (LGC)*** and are guided by the provincial GROW framework (GROW Guide).

This document describes GROW program fundamentals and provides guidance to watershed districts on their delivery of GROW. Long-term funding has been available for GROW delivery since 2020/21 through the GROW, Wetlands GROW, and Conservation Trusts. This new and unique funding approach provides stable annual funds that augment existing funding programs already in place, supporting the establishment and delivery of EG&S. These include the Manitoba Watershed Districts Program, as well as other provincial, federal, municipal, and non-government funding sources, where priorities align with the local GROW framework.

- ✔ Watershed-Based
- ✔ Locally-Driven
- ✔ Producer-Focused
- ✔ Measurable Outcomes
- ✔ 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 (ex: extreme weather events, drought and flooding)
- improved water quality (ex: improved nutrient management)

Co-Benefits

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

A Shared Governance Approach

Why GROW?

GROW is a targeted, watershed-based approach to ecological goods and services program delivery. Projects are implemented on a watershed basis, according to the principles, objectives and outcomes of GROW. Eligible projects are limited to working lands within Agro-Manitoba. Local GROW committees develop programs to delivery projects to support GROW priorities and co-benefits and actions in IWMPs.

GROW is Locally Driven, Locally Delivered by

- ✔ 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 and integrated decision-making
- ✔ using a locally-targeted approach to improving watershed health

Locally-delivered and producer-focused: GROW is delivered by Manitoba's Watershed Districts. Each district delivering GROW establishes a Local GROW Committee that includes representation from agricultural producers, watershed district members, as well as partners and technical experts, where necessary. GROW is aligned with the principles of the Environmental Farm Plan (EFP) program and participating producers should have an EFP Statement of Completion.

Balanced: GROW supports projects that conserve, restore or enhance EG&S on working lands. Support for sustaining existing EG&S must be limited to natural capital that is generally at high risk of conversion and has high public benefit, such as Class 1 and 2 wetlands, native grasslands, grassed and treed areas on erodible slopes, etc.

Sustainable: Projects must demonstrate that EG&S will continue beyond the establishment of the project, through the use of term agreements with landowners that may include annual payments for those services.

Measurable: GROW demonstrates evidence-based environmental improvements. Project monitoring and reporting on GROW metrics is required.

Partnership-focused: Collaboration with landowners, municipal governments, Indigenous communities, and other organizations enhances positive outcomes for watershed health, and may also bring in additional funding, guidance, expertise, etc.

GUIDING PRINCIPLES

GROW is:

1 Watershed-Based

- The Local GROW Program meets the principles, objectives and expected outcomes of GROW – projects must meet one or more desired outcomes.
- Addresses the priorities and targets identified in an IWMP, or other watershed-based planning initiatives, if an IWMP is not completed.
- Established by a watershed district.

2 Locally-Driven

- Establishes a Local GROW Committee through the watershed district, consisting of at least 50 per cent local producers, watershed district manager and board, and other organizations.

3 Producer-Focused

- Agricultural producers use their knowledge of the land and expertise as growers to complete projects on their working lands within agro-Manitoba.
- Is aligned with the principles of the Environmental Farm Plan (EFP) program. Delivery agents will emphasize EFP participation and report on Watershed EFP statistics.

4 Measurable

- Demonstrates evidence-based outcomes of the proposed activities that provide measurable environmental improvements.
- Will support the strategic objectives of Manitoba's Water Manageement Strategy.
- Supported by technical expertise.
- Requires project monitoring and reporting on GROW metrics.
- Local GROW delivery may be subject to third party auditing for project compliance.

5 Sustainable

- Landowners sign term agreements, ensuring that EG&S will continue to be provided beyond the establishment of the project.
- If annual incentive payments are to be awarded to landowners, payment structure must follow guidelines within this document.

6 A way to support both Incremental and Existing EG&S

- GROW projects provide incremental EG&S ("additionality") through construction, restoration or enhancement of EG&S infrastructure.
- GROW projects can also provide support for existing EG&S. These projects must be limited to natural capital that is at high risk of conversion, has high public benefit, and/or limits agricultural activities. This includes the conservation of shallow wetlands within crop fields.

7 Collaborative

- Producers cost-share establishment costs and maintain projects over time.
- Establishes new partnerships or enhances existing partnerships with landowners, municipal governments, Indigenous communities or external funders to deliver projects that support positive outcomes for watershed health.

ADMINISTRATION AND FINANCIAL BACKGROUND

GROW and Conservation Trusts

The Manitoba government has endowed $204 million with The Winnipeg Foundation, made up of $102 million in The Conservation Trust (2018-19), $52 million in The GROW Trust (2019-20), and $50 million in The Wetlands GROW Trust (2019-20). Annual interest generated from the three Trusts funds Local GROW Programs that provide EG&S to Manitobans. This unique approach provides a continued source of funding that is expected to keep up with inflation, thereby maintaining its relevance into the future.

Manitoba Habitat Conservancy (MHC) administers and disburses revenues from the Trusts through a proposal-based granting process. Watershed Districts are eligible to apply for funding from the Trusts to implement a local GROW program.

Local GROW Programs

As GROW's delivery agents, Watershed Districts work with their provincial watershed planner to develop and refine a Local GROW Program before applying to the Trusts. Watershed Districts develop local GROW programs to support targeted improvements to watershed health by focusing on priority outcomes and co-benefits of GROW to support IWMPs. Local GROW programs provide the flexibility to address local watershed issues by providing financial incentives and technical support for projects on working lands. Staff from Watershed Planning and Programs (Environment and Climate Change) assist districts in developing their LGP and funding proposals.

Watershed districts submit a letter of interest (LOI) during a scheduled intake to MHC with their intent to apply for funding from the Trusts. Once the letter of interest has been approved by MHC, watershed districts work with their watershed planner to complete a full funding application to the Trusts.

Local GROW Committees

Each watershed district establishes a Local GROW Committee, consisting of representatives of the following groups:

- Producers – at least 50 per cent (current or retired). Can include watershed district board members.
- Watershed District – board member(s) and manager or designated staff
- Ex-officio (non-voting members) representatives of provincial departments – watershed planner, and Manitoba Agriculture staff, such as a farm production extension specialist
- Other optional members could include technical experts, non-government organizations, Indigenous communities, etc.

Local GROW Committees

- Establish local priorities and target areas within the watershed to implement GROW activities.
- Identify new funding sources for the Local GROW Program.
- Establish payment rates for eligible activities and project cost-shares based on GROW criteria and established provincial guidelines.
- Determine term lengths within the GROW program framework, based on GROW eligible activity criteria.
- Promote the Local GROW Program and help to identify landowners in target areas that may be interested in participating in GROW.
- Prioritize and approve local GROW projects brought forward by watershed district staff.
- Approve agreements with landowners.

ELIGIBLE GROW ACTIVITIES

GROW provides incentives for the delivery of EG&S on working lands in Agro-Manitoba. Incentives to landowners include cost-shared support for project establishment (i.e., implementation) costs, and/or annual incentive payments for land enrolled in the program.

GROW is locally led and managed by watershed districts and their Local GROW Committees, delivered in partnership with producers. It focuses on watershed health, management and resiliency. In addition to the seven guiding principles (found on page 7), GROW is:

- **Producer-delivered** – farmers will cost-share project establishment costs, and support the implementation and maintenance of projects on their land.
- **Voluntary** – producer participation in the GROW program is voluntary. Participating producers must sign an agreement with their local watershed district.
- **Farming the best, conserving the rest** – sustainable production on the best farmland while conserving and enhancing the EG&S largely on marginal lands within the working agricultural landscape.
- **Market-driven** – if annual incentive payments are warranted, payment rates are based on local land values, and factor in both the economic costs and environmental benefits, thereby creating a positive market signal for the provision of EG&S.

Targeted Improvements to Watershed Health

In order to achieve targeted improvements to watershed health, Local GROW Committees focus on priority outcomes and co-benefits that are consistent with IWMPs. Activities that are eligible for inclusion in a Local GROW Program include:

- ✔ water retention
- ✔ wetland conservation, restoration or enhancement
- ✔ riparian area conservation, restoration or enhancement
- ✔ buffer establishment (ex: shelterbelts and multi-species buffer strips)
- ✔ upland area conservation, restoration, or enhancement (ex: rotational grazing, conversion of marginal cropland or sensitive soils to grassland, soil health improvement crops, etc.)
- ✔ innovative approaches - local GROW programs (such as innovative beneficial management practices) that provide innovative ideas to conserving or enhancing EG&S in Agro-Manitoba will also be considered

GROW: Outcomes and Co-Benefits for Watershed Health

Priority Outcomes

- ✔ improved watershed resilience to the impacts of a changing climate (ex: extreme weather events, drought and flooding)
- ✔ improved water quality (ex: improved nutrient management)

Co-Benefits

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

GROW Program Priorities

Local GROW committees should consider the following activities high priority when developing local GROW programs:

- **Water Retention:** Areas suitable for permanent or temporary water storage should be targeted and verified using technical data.
- **Wetland Conservation:** Conservation of Class 1 and 2 wetlands (ephemeral and temporary). These wetlands are not protected by legislation, regulation or provincial policy, and therefore vulnerable to drainage.
- **Wetland Enhancement and Restoration:** All classes of wetlands.
- **Riparian Area Enhancement and Restoration**
- **Upland Enhancement**
- **Upland Restoration:** re-establishment of perennial native/tame cover on sensitive marginal lands; reforestation of previously wooded areas

Local GROW committees should demonstrate a targeted approach and prioritization ensuring strong links to GROW priority outcomes and co-benefits, IWMPs, and/or local watershed issues.

Local GROW programs that support conservation of existing natural areas must ensure that projects demonstrate a high risk of loss, strong links to GROW priority outcomes of improved watershed resilience and improved water quality, and links to IWMPs and/or local watershed issues. Projects should be targeted based on watershed features and issues, as identified in IWMPs, where possible. If IWMPs do not include specific geographic target zones, local GROW committees should target areas based on technical and working knowledge of the watershed.

Innovative Approaches provides an opportunity for local GROW committees to adapt quickly to incorporate new beneficial management practices into their local GROW programs. Activities considered through innovative approaches must be reviewed by Watershed Planning and Programs and included in the program application process in the LOI stage if funding from the Trusts will be used. For innovative approaches that do not follow the GROW program framework or are very specific in terms of activity or project site, applicants should consider other funding sources.

Innovative approaches that support GROW priority outcomes and meet one or more of the following criteria may be considered for inclusion in a local GROW program:

- Address chronic watershed management issue(s) that have created local economic, social, or environmental challenges.
- Enables landowners to adopt innovative practices, supported by scientific research, to improve watershed resilience and water quality.

GROW Project Prioritization

Local GROW committees will rate and rank individual projects based on GROW priority outcomes and local watershed priorities to determine the best local use of trust funding for project establishment. Watershed Planning and Programs can assist with the development of project prioritization templates. As local GROW committees review and prioritize projects, they should consider:

- **Working Landscapes** – eligible projects are limited to working lands within Agri-Manitoba. Local GROW committees should consider prioritization of projects that support environmental stewardship efforts of private landowners.
- **Additionality** – GROW projects support incremental ecological goods and services through construction, restoration or enhancement activities. Projects that include more than one activity may be prioritized higher.
- **Landowner cost-sharing** – local GROW committees should consider varying levels of landowner cost-shares, that could include cash contribution, in-kind contributions to project implementation and/or on-going maintenance. Considerations for cost-sharing should include private/economic benefits to the landowner – projects that have high private benefit in addition to watershed benefits should consider cost-sharing with landowners that reflect private benefits.
- **Cost-benefit** – the GROW guide provides local GROW committees the flexibility to determine project costs dependent upon watershed priorities within the GROW program framework and approved funding applications. As the GROW program is publicly funded, project costs must be reasonable, fiscally responsible, and reflective of local economic conditions. Project costs must be defendable in an audit.

Landowner Agreements

In order to secure the delivery of EG&S and outcomes for watershed health over time, landowner agreements are required for GROW projects. Agreements set out terms and conditions, including project details, maps, establishment costs, associated incentive payments (if required), maintenance requirements, and other duties and responsibilities of both the participating producer and local watershed district.

Local GROW Committees approve proposed term lengths, within activity guidelines as outlined in the GROW activity catalogue. Local GROW Committees should consider the level of investment, the timeline for benefits to accrue and the nature of EG&S being provided. Ideally, projects will be retained over the long term. The agreement must include the minimum length of time the project must be maintained as outlined in this framework. Longer term lengths are encouraged for projects that are expensive to establish (ex: native prairie) or require a longer period of time before the intended benefit is achieved (ex: shelterbelts or wetland restoration).

GROW Activity	Landowner Agreement Lengths
Water Retention	10 year
Wetland Conservation, Enhancement, or Restoration	10 year
Riparian Area Management	5 to 10 year
Buffer Establishment	10 year
Upland Area Conservation, Enhancement, or Restoration	5 to 10 year*

**Soil health crop agreement could be shorter (three years) to encourage initial establishment of trial cover crops.*

Incentives

Local GROW committees consider landowner incentives for each GROW activity delivered as part of the Watershed Districts local GROW program. There are two types of landowner incentives:

1. Establishment costs (implementation): This is 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. Landowner cost-shares may vary, depending on watershed district, Local GROW Program priorities, project type and local conditions.

2. Annual payments (not eligible for all project types): Annual incentive payments for acres enrolled in Local GROW Programs are available for producers. Local GROW Committees set annual payment rates for participating landowners (for eligible project types), based on the following guiding principle:

   Incentive payments should not exceed land rental rates for similar lands in the watershed district.

   Local GROW Committees must consider the following in the development of maximum incentive payment rates (see Appendix I for additional guidance):

   i. **Assessed Land Value** – What is the assessed value of land in the area or watershed?

   ii. **Agricultural Capability (i.e., soil classes defined in the Canada Land Inventory)** – 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 (ex: influence of urban areas on land assessment value, competition for available land to rent, etc.)?

   In addition to the above factors, impacts on agricultural production also influence the final incentive payment. For example, projects that result in significant impacts to agricultural production potential may receive a higher payment than projects where agricultural production proceeds without impact. Justification for incentive payments should be documented, as noted in Appendix I.

   Note that provincial Crown Lands and municipally-owned lands are not eligible for annual incentive payments.

GROW ACTIVITY CATALOGUE

CONSIDERATIONS FOR LOCAL GROW COMMITTEES

Since every situation is unique across Manitoba's diverse landscape, Local GROW Committees should carefully consider their options to maximize provision of EG&S in Manitoba watersheds.

GROW Activity: Water Retention

Water retention projects increase adaptive capacity for climate change, and add to landscape and ecosystem resiliency, including reducing peak flows and enhancing water supply opportunities for agricultural use. Water retention projects should enhance water management capabilities at various scales, including on-farm and watershed scales. Projects including small dams, temporary backfloods, 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
- other structures and activities for permanent or temporary water retention (ex: berms and gated culverts)

Ineligible Practices:

- water retention activities designed to consolidate wetlands
- irrigation infrastructure (although it could be integrated into an approved GROW-funded project at the landowner's expense)
- dugout construction
- surface and sub-surface drainage excavation and tile installation (although it could be integrated into an approved GROW-funded project at the landowner's expense)

Landowner Agreements:

Landowner agreements will adhere to guidelines established on page 12, and should be 10 year term lengths.

Project Considerations:

- Preference should be given to projects that provide multiple benefits and a favourable benefit/cost ratio.
- Proponents will be required to obtain all necessary licenses, permits and approvals prior to construction.

GROW Activity: Wetland Conservation, Enhancement, or Restoration

A wetland is a permanently or temporarily water-saturated area characterized by distinct plant and soil types. Wetlands in Agri-Manitoba have been lost and degraded at an alarming rate because of human activities such as drainage. 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 Water Rights Act, regulation, and policies govern drainage practices in Manitoba. Under this regime, Class 4 and 5 wetlands are protected outright from drainage. Class 3 wetland loss requires compensation if licensed for drainage. Drainage of Class 1 and 2 wetlands can proceed through a registration approach. As a result, valuable Class 1 and 2 wetlands across Agro-Manitoba are vulnerable to drainage.

In the Prairie Pothole Region of Manitoba, Class 1 and 2 wetlands as defined in The Water Rights Act regulations - Schedule C are at high risk of loss. An estimated 40 to 75 per cent of Agro-Manitoba's original wetlands have been lost, and Manitoba continues to lose wetlands annually. The Aspen Parkland Ecoregion, which includes most of the prairie pothole region in Manitoba, is particularly vulnerable to wetland loss.

Terminal (closed) basins are drainage basins that under normal circumstances retain and allow no outflow to other external bodies of water, such as rivers or other tributaries. For the purposes of GROW, these defined basins have a significant contributing area that converges into a lake that equilibrates through evaporation. Basins with subsurface outflows which eventually lead to another source are not considered terminal basins. For the purposes of GROW, basins that have a relatively small, localized drainage area are not considered Terminal Basins.

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, and contaminants;
- Protection to aquifers and enhancement of recharge;
- Improved wildlife habitat and biodiversity; and
- Increased carbon sequestration.

Eligible Practices:

- **Conservation** of **existing** Class 1 and 2 wetlands on private working lands with priority for:
    - Class 1 and 2 wetlands on annual croplands due to a higher risk of loss. Continued cropping of these wetlands is permitted as long as wetlands are not drained or filled. Class 1 and 2 wetlands in seeded forages on Canada Land Inventory Class 1-3 soils are eligible, but those in Canada Land Inventory Class 4, 5 or 6 soils are of low priority.

CONSIDERATIONS FOR LOCAL GROW COMMITTEES

Since every situation is unique across Manitoba's diverse landscape, Local GROW Committees must consider ways to prioritize projects that provide additional EG&S when developing projects that conserve high value, at-risk natural capital.

- Class 1 and 2 wetlands less than 5 acres in size should be prioritized due to higher risk of loss and greater biodiversity benefits per area.
- Local areas of the watershed with greater densities of wetlands (for example: a minimum of 20 basins of all classes or 20 per cent of wetland area per quarter section).

- **Enhancement** of existing wetlands (all classes) on working lands to provide measurable incremental increases in wetland benefits. For example, establishing a perennial upland buffer (inter-pothole seeding on less productive soils or to square off a field) around a wetland, fencing, off-site watering, grazing management to limit grazing disturbance, or other types of projects that would improve wetland health and benefits. Annual incentive payments can be considered for areas adjacent to Class 3, 4 or 5 wetlands where land has been converted to permanent cover or where land use has changed. Annual incentive payments must be carefully considered and reflective of economic benefits to the producer.
- **Restoration** of drained or degraded wetlands on working lands. For example, this may include plugging surface drains or re-establishing natural topographic contours. Annual incentive payments can be considered for restoration projects, if required.
- **Terminal basins** as defined above, may be considered in a Local GROW Program; however, efforts must focus only on extreme or chronic situations tied to a significant basin (ex: Lake). Local GROW committees should consult with their watershed planner prior to initiating a terminal basin program. Annual incentive payments must be associated with a commitment by the landowner to convert land use from annual cropland to permanent cover (when available), and could be offered for five- to 10 year term lengths for flooded acres above the natural, average historic range of water levels.
    - Specific annual incentive rates for terminal basin programming should be established and approved as part of GROW funding applications to take into account fluctuating land values with chronic flooding.

Ineligible Practices:

- Projects that are part of a compensation requirement under The Water Rights Act.
- Conservation of Class 3, 4 or 5 wetlands.
- Conservation of peatlands
- Wetlands that have been drained, including subsurface (tile) drainage.
- Agreements that pay incentives for flooded acres that:
    - Are not in an approved terminal basin program, as defined above,
    - Do not have an associated land use conversion commitment to permanent cover from the landowner,
    - Were not previously annual croplands prior to the extreme situation (ex: permanent cover lands that were flooded as a result of higher water levels of a terminal basin).
- Aquatic invasive species management

Landowner Agreements

- Landowner agreements will adhere to guidelines established on page 12.
- Landowner agreements for wetland activities should be 10 year term lengths. Terminal basins agreements should be 5 to 10 year term lengths – a new agreement can be negotiated if extreme situations recede during the initial term and additional ecological goods and services are added to the project.
- Maintenance requirements and agricultural use will be outlined in detail within landowner agreements.

Project Considerations:

- Proponents 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.
- Decommissioning of projects secured under GROW are subject to future legislation, regulation and policies. If a landowner wishes to decommission a project after the agreement has expired, they will be required to obtain all the necessary licences, permits and approvals that are in existence at the time of decommissioning.
- Since continued cropping of Class 1 and 2 wetlands will not affect eligibility, as long as wetlands are not drained or filled, incentive payments are recommended to be no more than 75 per cent of the maximum incentive rate established by the Local GROW Committee (as described on page 12 and in Appendix I).
- Since terminal basin programs can provide annual incentive payments for annual cropland flooded acres, incentive payments should be designed to offset annual costs associated with the land (ex. taxes). If extreme conditions (i.e., high water levels) subside, a new agreement can be negotiated for any additional practices and the incentive payment could be increased to reflect those additional practices as a new project.

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 waterbody 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 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:

- **Enhancement** of existing riparian areas on working 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, bank stabilization projects that reduce and prevent erosion, re-establishing important riparian vegetation (ex: native trees or shrubs) or other types of projects that would improve riparian health and function.
- **Conservation** of existing healthy riparian areas on working lands.

CONSIDERATIONS FOR LOCAL GROW COMMITTEES

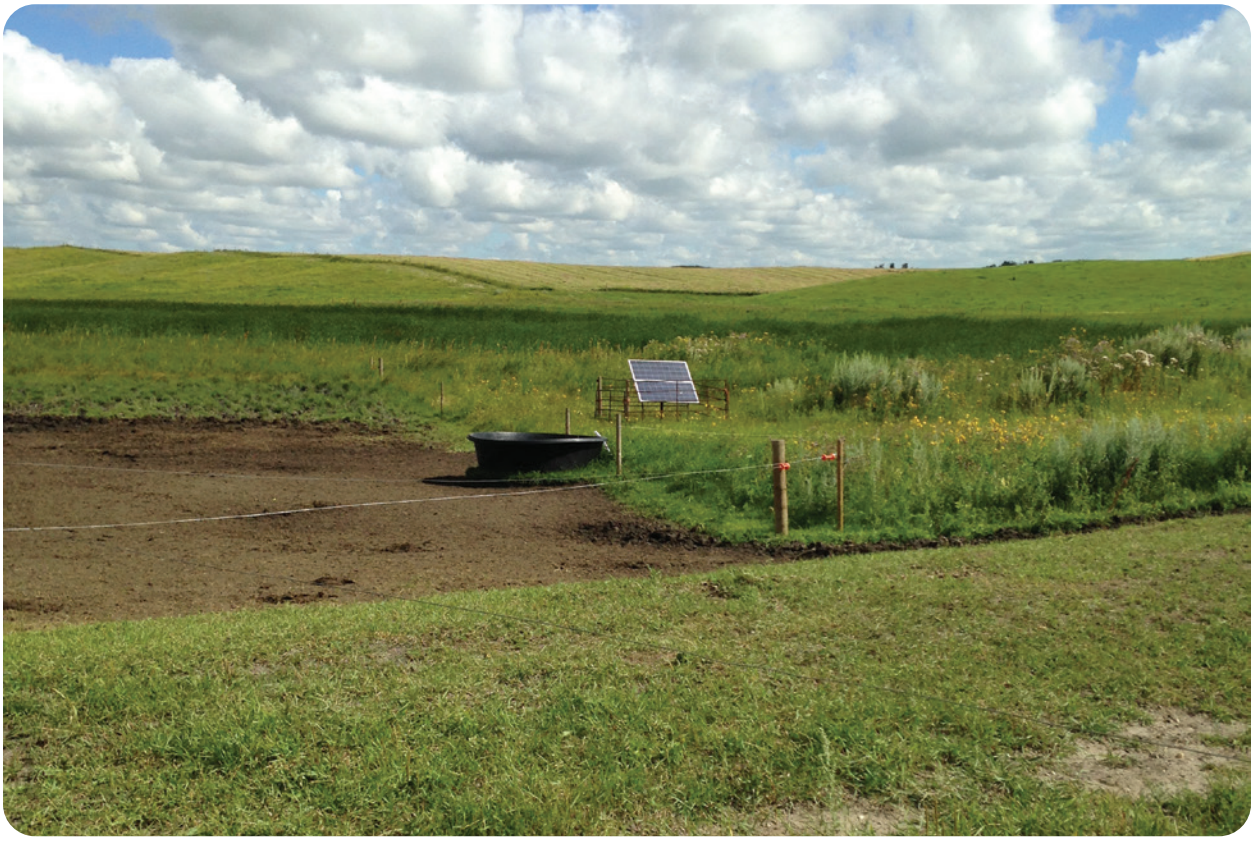
While riparian conservation is important, enhancement and restoration of riparian areas may be prioritized. Since every situation is unique across Manitoba's diverse landscape, Local GROW Committees should consider their options to maximize provision of EG&S in Manitoba watersheds.

Landowner Agreements:

- Landowner agreements will adhere to guidelines established on page 12, and should be 5 to 10 year term lengths.
- Maintenance requirements and agricultural use will be outlined in detail within landowner agreements.

Project Considerations:

- Only riparian areas are eligible under this category. Works that are part of a maintenance program for established drainage infrastructure are not an eligible GROW activity.
- Pipelines must provide a direct riparian benefit and cannot extend significantly beyond the riparian area (typically less than 300 m in total length). Pipelines extending from wet well or water source to a nearby trough are eligible.
- Well establishment is eligible as a component of riparian enhancement.
- Improved stream crossings are not intended to supplement access points to fields or pastures for convenience of farming operations and field access. They must display strong riparian benefits.
- Bank stabilization projects must demonstrate strong watershed benefits (water quality improvements) and consideration for landowner cost-share if there is private benefit. Local GROW committees should also consider targeting water retention projects upstream of areas that require bank stabilization.



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 associated with annual cropland to reduce wind-based soil erosion
- perennial cover buffers between field edges and riparian areas to provide protection from nutrients, chemicals and mechanical disturbance

Planting shelterbelts in fields, around livestock facilities, and near dugouts offers many benefits, from minimizing the impacts of wind, to creating habitat, and providing shelter to 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.

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 or highly sloped 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 nutrients and pesticides to waterways and waterbodies.

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

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

Eligible Practices:

- **Establishment or Creation** of new buffers (shelterbelts, perennial cover buffers, or grassed waterways) on working lands. This could also include a period of required maintenance to support activities such as weeding, mulching, and watering. In addition, incentive payments may be considered for shelterbelt establishment where cultivated land is taken out of production, and must demonstrate links to improving watershed resilience (such as areas of light soil that are prone to wind erosion).

CONSIDERATIONS FOR LOCAL GROW COMMITTEES

While buffer establishment is important, restoration and enhancement of existing buffers may also serve to provide valuable ecological services. Since every situation is unique across Manitoba's diverse landscape, Local GROW Committees should consider their options to maximize provision of EG&S in Manitoba watersheds.

- **Enhancement** of existing buffers on working 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 (ex: Christmas trees and fruit orchards).
- Purchase and relocation of ornamental trees.
- Purchase and relocation of established trees from non-nursery areas.
- Species that are extremely vulnerable to disease [ex. American Elm, Ash (varieties that are not resistant to emerald ash borer), Birch (susceptible to drought)] or deemed to be invasive.

Landowner Agreements:

- Landowner agreements will adhere to guidelines established on page 12, and should be 10 year term lengths.
- Maintenance requirements, including landowner responsibilities for shelterbelt maintenance, will be outlined in detail within the landowner agreement. Maintenance expectations will be clearly defined and considered as part of project establishment costs.

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. Enhancement of grassland areas may require changes in grazing management practices and other activities. 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 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
- reduce soil erosion

Eligible Practices:

- **Conservation** of existing native prairie and woodlands or highly erodible upland areas on private working lands. Conservation should be focused on sites that are deemed to be of high conservation value, identified through IWMPs or other recognized conservation plans.
- **Enhancement** of existing natural and managed areas on working lands that result in measurable incremental benefits. For example, improved wooded and native range management practices (i.e., invasive species management on native prairie, rotational grazing in association with alternative watering systems) that enhance carbon sequestration and biodiversity.
- **Restoration** of soils, former natural areas or severely degraded existing natural areas. For example, this may include re-establishment of perennial native/tame cover on sensitive or marginal lands, soil health crops or reforestation of previously wooded areas. This could also include a period of required maintenance (ex: 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 and marginal areas.
- Targetted establishment of soil health crops could include cover crops, and polycropping:

CONSIDERATIONS FOR LOCAL GROW COMMITTEES

While natural upland area restoration is important, the conservation and enhancement of existing natural areas may also serve to secure valuable ecological services. Since every situation is unique across Manitoba's diverse landscape, Local GROW Committees should consider their options to maximize provision of EG&S in Manitoba watersheds.

- Cover crops are defined as low-growing understory crops that often grow outside the main-crop growing period, and are not harvested for economic benefit. Cover crops provide EG&S such as reducing wind and water erosion while supporting cropping systems by adding soil nitrogen, increasing soil quality and suppressing weeds.
- 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 operations (ex: zero tillage, green manure for organic crops, forage rejuvenation for livestock producers).
- Ongoing control of alien invasive aquatic or wildlife species.

Landowner Agreements:

- Landowner agreements will adhere to guidelines established on page 12, and should be 5 to 10 year term lengths. Soil health crop establishment contracts could be shorter (three years) to encourage initial establishment of trial cover crops.

Project Considerations:

- *Brassica* species are not recommended in cover crop mixtures where the current crop rotation includes other *Brassica* species (ex: canola or mustard) as the main crop due to disease carry-over risk.

APPENDIX I
Guidance for Local GROW Committees: Determining Incentive Payment Rates

Principle:
ANNUAL INCENTIVE PAYMENTS SHOULD NOT EXCEED LAND RENTAL RATES FOR SIMILAR LANDS IN THE WATERSHED DISTRICT.

In development of *maximum* annual incentive payment rates, watershed districts must consider the following:

1. **Assessed Land Value** – What is the assessed value of land in the project area or watershed?
2. **Agricultural Capability (i.e., soil classes defined in the Canada Land Inventory)** – What is the capability of the soil to sustain agricultural crops, based on limitations due to soil properties, landscape features and climate?
3. **Local demand/price factors** – Are there any external factors that are contributing to higher or lower land values or local land rental rates (ex: influence of urban areas on land assessment value, competition for available land to rent)?

NOTE:

- Payment rates can vary depending on the subwatershed, local land assessment values, production value, and other price factors determined by the LGC. In most cases, incentive payments for projects should be lower than established maximum payments.
- A maximum payment value would be used in cases where projects are resulting in 100 per cent loss of production value on the land (for example, cropland whereby the land is converted to grass, trees, etc., with no agricultural use).
- The *final* incentive payment to a landowner should be pro-rated, based on any economic gain or loss on the enrolled acres (ex: hay and grazing income). 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. Annual payments would therefore be reduced by 50 per cent (or another agreed-upon amount) in years in which haying or grazing occurs.

EXCEPTIONS (must be documented):

- areas where land values are depressed or elevated by other pressures (ex: demand for manure application, urban development pressures, etc.)
- where Local Grow Committee (LGC) has identified a strong linkage to IWMP priority actions
- areas deemed to be at risk that are of significant provincial importance (ex: very high EG&S value)

OUTCOMES:
Applications to the Conservation and GROW Trusts will identify standard incentive payment rates and will be evaluated against each other through a competitive funding application process.

Standard incentive payment rates will be defensible in an audit, due to the documentation of the above considerations.

ASSISTANCE:
Watershed Planning and Programs Section staff are available to support districts in the development of a standard incentive payment and pro-rated payment scheme, based on the guidance above. Please contact your watershed planner to assist the district and the Local GROW Committee.