



**Hamilton Watershed
Stewardship Program**



Water Quality and Habitat Improvement Financial Assistance Program Guidelines



**Hamilton
Conservation
Authority**

A Healthy Watershed for Everyone

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1.0 HAMILTON WATERSHED STEWARDSHIP PROGRAM'S WATER QUALITY AND HABITAT IMPROVEMENT PROGRAM BACKGROUND

The Hamilton Conservation Authority (HCA) acknowledges the important role that private property owners play in working towards our vision: 'a healthy watershed for everyone'.

In 1994, with representation from the Hamilton Conservation Authority, Conservation Halton and the Bay Area Restoration Council, the Hamilton Watershed Stewardship Program (HWSP) was developed. Since then, the HWSP has supported private property owners in their efforts to conserve, protect and enhance privately-owned natural areas, through free on-site consultations, technical assistance, and financial assistance via the delivery of the Water Quality and Habitat Improvement Program (WQHIP).

The main goal of the WQHIP is to provide technical assistance and financial cost-share incentives to support eligible projects that private landowners undertake on their properties to improve or restore surface and ground water quality, biodiversity, and fish and wildlife habitat through improved land management practices. The HWSP funds a wide variety of projects, including many Best Management Practices recommended by the Ontario Ministry of Agriculture, Food and Rural Affairs.



A true evolution. One of our first planting sites in 1995 to help stabilize the stream channel at the top left, this image was scanned from a slide. A digital photo of the site taken in 2006, and lastly (bottom) a screenshot of the same site in 2020.



2.0 WQHIP ELIGIBILITY REQUIREMENTS

To be eligible to apply for financial assistance:

2.1. The applicant must be:

- a resident of Ontario, and
- a registered owner of the property.

A partnership or corporation controlled by Ontario residents can be considered an applicant.

2.2. The project being proposed must achieve one or more of the following:

- the adoption of land management practices, or implementation of projects, that improve existing water quality impairments or enhance or create new fish and wildlife habitat, and/or
- the improvement of existing water quality impairment issues through the upgrading or removal of existing structures.

2.3. If applicable, a Farm Business Number is required. Completion of a 3rd or 4th edition Environmental Farm Plan is strongly encouraged and will be given priority in the ranking of applications.

2.4. The property where the proposed work is being completed must be recognized as being located within the geographic boundaries of the Hamilton Conservation Authority watershed, and an on-site review of the proposed project with HWSP staff must be completed in order to determine if the project is eligible to apply for financial assistance.

2.5. The applicant will:

- contact HWSP staff to arrange an on-site consultation so HWSP staff can verify the proposed project meets the eligibility requirements,
- complete and submit a WQHIP project application form prior to the works commencing (retroactive applications MAY be considered provided the proposed project meets eligibility requirements),
- complete all utility locates,
- obtain all necessary approvals or permits (including neighbouring properties if applicable),
- ensure that all proposed structures or land practices meet all zoning, technical, structural and legal requirements where applicable, including, but not limited to: Canada Farm Building Code, Ontario Building Code, Provincial Acts, Provincial and Regional highway setbacks, Municipal official plans and by-laws, and Conservation Authority regulations (facilitated by HWSP staff), and

- allow HWSP and other relevant agency staff on site to confirm project completion. The applicant must provide all relevant receipts or proof of payment for materials or items purchased and copies of supporting cancelled cheques or proof of financing in order to receive reimbursement.

2.6. Applicants may be eligible to access other funds for water quality improvement and habitat enhancement projects through other Federal, Provincial or Municipal programs. Our funds can be utilized as either the main source of funding or to compliment other funding sources. The total grants from all sources combined are not to exceed 100% of total expenses.

2.7. The proposed project must not have been ordered to be completed by a governing authority, including, but not limited to, the Hamilton Conservation Authority, Municipality, Ontario Ministry of Agriculture, Food and Rural Affairs, Ministry of Natural Resources and Forestry, Ministry of the Environment, Conservation and Parks.

NOTE: Although the Hamilton Conservation Authority (HCA) and the Hamilton Watershed Stewardship Program (HWSP) may provide technical information and recommendations, it is the responsibility of the applicant to ensure that the practices and structures undertaken are suitable to the applicant's operation, and technically and structurally adequate. Neither the members of the HCA, the HWSP or the Project Technical Advisory Committee (PTAC) are liable for any loss arising from the use of any advice or information provided as part of or under this program.



This site (captured on air photo in 1954 at left) with assistance from the HWSP, restricted livestock access to the tributary in 1995, creating a well-established riparian buffer (photo at right, 2019).

3.0 WATER QUALITY AND HABITAT IMPROVEMENT PROJECT FINANCIAL ASSISTANCE FRAMEWORK

Grant rates and caps vary between types of projects as outlined below. For specific project details, please refer to the individual project guidelines in the Appendix.

This list of projects is not all-inclusive and the HWSP welcomes hearing from applicants about management practices and restoration projects that align with goals of the WQHIP for funding consideration.

3.1. HWSP WQHIP Grant Rates and Caps

Habitat Improvement Projects		
Project Type	Description	Grant Rate and Cap
Terrestrial and Aquatic Habitat Enhancements	<p>To restore or enhance terrestrial and/or aquatic habitats.</p> <p>Eligible Project Types:</p> <ul style="list-style-type: none"> • Terrestrial or aquatic invasive species removal • Seeding, planting, or live staking of native species of flora • Habitat features (e.g. spawning substrate, turtle nesting bed, osprey platform, snake hibernaculum) • Prairie burns/controlled burns • Watercourse or stream channel restoration/enhancements • Streambank stabilization • Wetland creation 	75% up to \$5,000
In-Stream Barrier Mitigation	<p>To restore or enhance aquatic habitat through the remediation of an existing impairment to fisheries habitat. Impairments may include, but are not limited to, online ponds, dams, culverts, etc.</p> <p>Eligible Project Types:</p> <ul style="list-style-type: none"> • Bypass Channel • Dam Removal • Debris Removal • Culvert Retrofit • Online Pond Mitigation 	75% up to \$5,000

Water Quality Improvement Projects		
Project Type	Description	Grant Rate and Cap
Stormwater Low Impact Development	<p>To reduce the volume and improve the quality of stormwater runoff flowing into the municipal sewer system and/or to reduce the volume and improve the quality of stormwater runoff flowing directly into local watercourses or designated natural areas.</p> <p>Eligible Project Types:</p> <ul style="list-style-type: none"> • Downspout disconnection • Bioswales • Infiltration trenches • Soakaway pits/Rain gardens • Water retention/storage systems • Detention basins • Permeable Pavement 	75% up to \$5,000
Well Decommissioning	Well must be located in City of Hamilton. For further information, please contact an HWSP staff member.	\$1,000 per well, maximum of 2 wells per property.
Alternative Watering Systems	<p>To improve water quality by restricting livestock access to watercourses and surface waters.</p> <p>Eligible Project Types: Nose Pumps, Solar Pumps, Troughs, Gravity Systems</p>	75% up to \$5,000
Rural Runoff Diversion	<p>To reduce the amount of contaminated runoff from manure storages and Outdoor Confinement Areas (as defined by OMAFRA) by diverting stormwater away from sources of contamination to a satisfactory outlet.</p> <p>Eligible Project Types: Eavestroughs, Berms/Ditches, Permanently Vegetated Areas/Vegetated Filter Strip, Roofed Outdoor Confinement Areas</p>	75% up to \$5,000
Watercourse Access Restriction	<p>To prevent humans, livestock and/machinery from crossing/accessing watercourses that are in environmentally sensitive areas.</p> <p>Eligible Project Types: Improved/replaced/new creek crossings for livestock and/or machinery, Exclusion Fencing, Clear Span Bridges, Culverts or Bed Level Crossings</p>	75% up to \$5,000

Water Quality Improvement Projects		
Project Type	Description	Grant Rate and Cap
Erosion Control	<p>To control or remediate existing soil erosion impairments that impact surface water quality, air or soil quality and/or fish and wildlife habitat.</p> <p>Eligible Project Types:</p> <ul style="list-style-type: none"> • Conservation tillage – including residue management, no-till and mulch tillage • Contour cropping • New cover crops • Grassed waterways • Residue Management • Water and sediment control basins (WASCoBs) • Riparian buffer strips 	<p>75% up to \$5,000</p> <p>Cover Crops: Approved fields paid an incentive of \$100 per acre up to 30 acres.</p>
Hazardous Storage	<p>To prevent contamination of ground and/or surface water by hazardous products by upgrading existing facilities.</p> <p>Eligible Project Types: Chemical, Fertilizer, Fuel or Pesticide Storages.</p>	<p>75% up to \$5,000</p>
Manure, Milkhouse and Wastewater Management	<p>To prevent contamination of surface and groundwater during the storage and composting of manure, milkhouse wastewater and/or raw organic materials (e.g. fruit and vegetable waste, deadstock) and to encourage manure handling and spreading best management practices.</p> <p>Eligible Project Types:</p> <ul style="list-style-type: none"> • Roofed solid manure storages with runoff containment • Unroofed solid manure storages with runoff containment or treatment • Concrete/steel liquid manure storage tanks with/without covers 	<p>Please contact HWSP staff for further information.</p>

- 3.2.** Once the project has been deemed eligible to apply for financial assistance by HWSP staff, applicants can begin the grant application process as outlined below in Section 4.0 WQHIP Grant Application Process. Applicants are eligible to apply for financial assistance towards the costs associated with the design and implementation of the discussed project. Generally, applicants are eligible to apply for financial support for the following project costs:
- purchased materials and supplies (including but not limited to, plant material, soil, mulch, landscape fabric, tree shelters, etc.)
 - equipment rentals
 - professional design, consulting and construction fees
 - fees for supervision and inspection
- 3.3.** The following costs are not considered eligible to apply for financial assistance, including, but not limited to:
- tools
 - farm equipment
 - mileage
 - in-kind contributions such as time, labour and/or machinery use of the applicant, family dependent's or the applicant's business
 - NEW agricultural/business operations, new buildings, additions to homes, or building expansions to increase herd capacity are not eligible, and
 - grants will not be paid on HST if the applicant is entitled to an HST rebate

4.0 WQHIP GRANT APPLICATION PROCESS

- 4.1.** The applicant, after an on-site consultation with a HWSP Technician to confirm project eligibility and to acquire before photos of the project site location, will submit their project application to the HWSP to review.
- 4.2.** HWSP staff will present grant applications (except for well decommissioning applications) anonymously to the Project Technical Advisory Committee (PTAC) to determine a project's merit to receive financial assistance.
- 4.3.** Some proposals may require additional review by one of more of the following: Ontario Ministry of Natural Resources and Forestry, Ontario Ministry of the Environment, Conservation and Parks, Ontario Ministry of Agriculture, Food and Rural Affairs, Ontario Soil and Crop Improvement Association, Conservation Authority, Fisheries and Oceans Canada, the respective Municipality.

4.4. Funding is allocated on a merit basis. Project merit is assessed based on the following attributes:

- Does the project directly address, or contribute to improving a water quality or stormwater impairment?
- Does the project directly address, or contribute to improving a habitat impairment?
- Does the property owner demonstrate environmentally conscious land management practices, and/or have an active resource management plan for the property (e.g. Environmental Farm Plan, Managed Forest Plan, etc.)?
- Is the project located adjacent to, or in close proximity to a designated natural area or does it support a Species at Risk?
- Does the project raise public awareness of water quality and habitat issues or opportunities?
- The applicant's in-kind or financial contribution towards the project and their commitment to the maintenance of the project.

Note: It is possible that a project is evaluated as having merit, but that based on its rank, is not funded as available funding has been fully allocated to higher ranked projects.

4.5. Applicants will be notified by HWSP staff of the PTAC decision shortly following the committee meeting.

4.6. Grant approval is based on the design and project costs submitted in the original application. Any design changes to the project post funding approval must be submitted to the HWSP for review to determine if the proposed project will still be eligible for the grant.

4.7. Once the project has been completed, and copies of all relevant invoices, paid receipts, cancelled cheques, certificates and permits have been received by the Hamilton Watershed Stewardship Program, and after photographs have been taken by stewardship staff, the project will be processed for grant payment.

4.8. Limitations of Funding:

- any applicant who proceeds with a project before it has been accepted by the PTAC and HWSP has no assurance that financial assistance will be provided
- an applicant must specify the program year in which the project will be completed. If the project cannot be completed within the specified year the grant may not be available. However, the applicant may request a deferral in writing to HWSP staff who will then direct the request to the PTAC for consideration of an extension
- if the final project costs submitted for reimbursement by the applicant exceeds the proposed project budget, the grant rate and cap noted in the formal acceptance of the project stands. If the final project costs submitted by applicant are less than the proposed costs, the grant rate applied in the formal acceptance of the project will be applied to the lower cost

- the PTAC may restrict the number of grants available to meet local priorities and budgets
- once the annual Water Quality/Habitat Improvement Program budget has been committed, no further approvals will be given

5.0 RESPONSIBILITIES OF PROGRAM PARTICIPANTS

5.1. The Hamilton Watershed Stewardship Program (HWSP):

- provides information to landowners regarding conservation practices, structures, and stewardship practices that may qualify for grants
- conducts site visits to evaluate the potential sources, pathways, and magnitude of water quality impairment or potential for habitat creation
- provides management choices and remedial options to reduce pollution potential from identified sources
- establishes the WQHIP Project Guidelines with assistance from PTAC and partners and regularly reviews and evaluates the financial assistance framework to ensure the program is properly administered and the financial assistance available aligns with the goals of the WQHIP
- ensures that information on the administration of the program is available to all potential applicants
- ensures the anonymity of project applicants when funding applications/project proposals are presented to PTAC
- verifies that projects have been completed
- ensures that payment is issued to the landowner upon project and administrative completion
- undertakes monitoring of the completed project where applicable

5.2. The Project Technical Advisory Committee (PTAC):

- ensures that the program is administered in accordance with the program guidelines
- evaluates each project on its potential to improve and protect water quality on recommendations of HWSP and other Hamilton Conservation Authority staff
- evaluates project merit and identifies projects to be funded

5.3. The Applicant:

- contacts Hamilton Watershed Stewardship Staff (HWSP) to verify that the proposed project meets the WQHIP eligibility requirements
- contacts HWSP staff to arrange an on-site consultation. HWSP will be available to help plan the project and assist the applicant in applying for the WQHIP grants
- ensures that the information on the application is complete and correct

- ensures that the project meets all relevant local, provincial and federal laws and regulations
- ensures that appropriate approval/permits are obtained prior to construction and that all utility locates have been completed
- ensures that any changes to the project as proposed, either before works commence or during construction, notify HWSP as soon as possible
- contacts HWSP staff promptly once projects have been completed so that field verification of the projects can be made
- acknowledges, via the signing and submission of their WQHIP application, their commitment to maintain restored/enhanced areas and/or use new structures, or implement the proposed project in accordance with their WQHIP application for a period of not less than 10 years or the life of the structures
- provides all relevant receipts or proof of payment for materials or items purchased and copies of supporting cancelled cheques or proof of financing in order to receive the grant
- agrees to provide, if the property is sold, a copy of the approved WQHIP application and associated documents to the new landowner
- agrees to allow the HWSP and the HCA to promote the project to demonstrate the positive actions that are being taken by private property owners within the HCA watershed

APPENDIX: PROJECT SPECIFIC GUIDELINES



**Hamilton Watershed
Stewardship Program**

WATER QUALITY IMPROVEMENT PROJECTS

ALTERNATIVE WATERING SYSTEMS

Grant Rate and Cap: 75% up to \$5,000

Purpose: To improve water quality by restricting livestock access to watercourses and surface waters.

Eligible Project Types: Nose Pumps, Solar Pumps, Troughs, Gravity Systems

Eligibility Requirements:

- alternative watering systems/devices are eligible for funding only where the livestock are restricted from the watercourse and the project improves an existing environmental impairment and evidence of the impairment is present
- livestock must be on the farm and have been present in the watercourse in the last year
- a perimeter fence must currently be in place
- wherever practical, livestock are being restricted from watercourses and other natural areas
- consideration should be given to install tanks away from surface water or sensitive areas and on well drained ground
- overflow devices should be installed and runoff from the watering site should be managed to prevent soil erosion and runoff into surface water



Insulated water trough with solar panels at right.
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Eligible Costs:

- materials, labour, equipment rentals, professional services, permits and engineering fees
- alternative watering systems may be eligible for further funding if runoff diversion projects also being undertaken

Ineligible Costs:

- costs associated with a project that would encourage land, pasture, or environmentally sensitive areas to be put at risk or impairment
- tools or machinery
- primary hydro lines
- drilling new water wells
- labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents and the applicant's business



**Hamilton Watershed
Stewardship Program**

WATER QUALITY IMPROVEMENT PROJECTS

RURAL RUNOFF DIVERSION

Grant Rate and Cap: 75% up to \$5,000

Purpose: To reduce the amount of contaminated runoff from manure storages and Outdoor Confinement Areas (as defined by OMAFRA) by diverting stormwater away from sources of contamination to a satisfactory outlet.

Eligible Project Types:

- preventative measures to prevent stormwater from coming into contact with manure, including, but not limited to eavestrough, berms or ditches that direct stormwater away from outdoor confinement areas or manure storage areas
- runoff diversion structures such as berms and ditches that direct stormwater away from an outdoor confinement area or manure storage
- roofed permanent outdoor confinement areas
- vegetated filter strip system
- permanently vegetated area

Eligibility Requirements:

- projects must address an existing water quality impairment
- runoff must be managed in compliance with the Nutrient Management Regulation, O. Reg. 267/03
- if the operation is required to have a Nutrient Management Strategy, all nutrients and runoff must be managed according to the NMS and the applicant must provide a copy of the Nutrient Management Strategy to the HWSP for review with the submitted application
- the applicant agrees to allow the HWSP to consult with the Ontario Ministry of Agriculture, Food and Rural Affairs during the application process
- runoff containment facilities must meet siting requirements as per Municipal by-laws and as outlined in Section 63 of the Nutrient Management Regulation, O. Reg. 267/03
- vegetated filter strip systems should meet the standards as outlined in the Nutrient Management Regulation, O. Reg. 267/03, and if the standards cannot be met a Certificate of Approval for a sewage works under the Ontario Water Resources Act must be obtained

- permanently vegetated areas can be utilized where the risk of contamination is low and manure is comprised of at minimum 30% dry matter, and must meet all of the following criteria:
 - have at least 0.5m soil depth,
 - be a minimum of 3m from field tile drains, and
 - be a minimum of:
 - 100m from municipal wells,
 - 15m from drilled wells,
 - and 30m from any other well
- downspouts located where livestock can access them must be made of schedule 40 PVC (or stronger materials) and be well secured to prevent dislodging and prevent ice damage
- eavestrough directed into a tile must also include debris traps to ensure that tiles do not become plugged
- all project types must discharge or divert stormwater away from any source of contamination and not pose any other hazards such as soil erosion
- stormwater must not be discharged or diverted directly to a watercourse or wetland
- berms, tile outlets and ditches must be permanent structures, require little maintenance, and be properly protected to prevent erosion, scouring or rodent damage
- the Review Committee may require an applicant to install an emergency shutoff valve if there is concern for conveyance of a spilled contaminant

Eligible Costs:

- materials, labour, equipment rentals, professional services, permits and engineering fees
- professional assessment of surface and groundwater properties to verify the project meets required structural and environmental criteria

Ineligible Costs:

- costs associated with a project that would encourage new land, pasture, or environmentally sensitive areas to be put at risk or impairment
- tools or machinery
- paving of exercise yards or outdoor confinement areas where no permanent feeding/watering stations are present
- labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents and the applicant's business
- vegetation that is not native to Ontario
- when roofing an exercise yard, the Clean Water Diversion grant cannot be combined with the funds available under Manure Storage



**Hamilton Watershed
Stewardship Program**

WATER QUALITY IMPROVEMENT PROJECTS

WATERCOURSE ACCESS RESTRICTION

Grant Rate and Cap: 75% up to \$5,000

Purpose: To prevent humans, livestock and/machinery from crossing/accessing watercourses that are environmentally sensitive areas.



New property owners looking to improve the grazing and natural areas utilized a grant from the Hamilton Watershed Stewardship Program to install fencing to restrict livestock from accessing the watercourse (before, above photo). Further tree and shrub plantings alongside this watercourse will help to stabilize the banks and enhance biodiversity. Less than one year later and vegetation is re-establishing at the site and the watercourse is becoming more defined (below).



Eligible Project Types:

- improved/replaced creek crossing for livestock and/or machinery
- new watercourse crossing for livestock and/or machinery
- livestock/human access restriction from watercourses, sensitive areas or species at risk habitats
- exclusion fencing for livestock
- clear span bridges for livestock or machinery
- culvert crossings for livestock or machinery
- bed level crossings for livestock or machinery

Eligibility Requirements:

- projects must obtain approval from appropriate agencies (e.g. Conservation Authority, OMAFRA, Municipality, Drainage Superintendent etc.)
- project must remediate an existing water quality or terrestrial or aquatic habitat impairment

- for bed-level crossings, gates must be installed at each streambank to allow livestock to be restricted out of the crossing. Gates shall be opened only for the purposes of moving livestock to the other side for pasture rotation purposes
- watering facilities must be available on both sides of the stream
- to be eligible for cost-share on a livestock crossing or livestock access restriction:
 - fencing along the watercourse must either be undertaken concurrently or currently in existence and in good repair,
 - the applicant must currently have livestock on the pasture or field, or present within the last year,
 - the field must be seeded to pasture,
 - evidence of the environmental impairment must be present, and
 - whenever practical livestock has been restricted from all areas at risk
- for fencing projects:
 - replacement fence may be considered, if the new fence is installed to provide significant environmental gain such as a wider buffer on a stream or wetland,
 - new fencing installed on existing farms, to create a new pasture area, may be eligible for funding if the project clearly demonstrates protection of an environmentally sensitive feature,
 - fencing will be funded to a maximum rate of \$12.00 per metre,
 - funding will only be provided for the portion of fencing that protects an environmentally sensitive feature, natural area, watercourse, wetland or significant woodlot,
 - the proposed fence should restrict livestock access over the entire length of the natural feature and access should be discouraged by locating salt and mineral feeders away from the natural area,
 - temporary or alternative fencing may be considered in areas where permanent fencing is prone to damage due to ice floes/spring freshet flows
- if the project is on a municipal drain, the applicant (or HWSP staff on behalf of the applicant) must consult with the local drainage superintendent
- all bridge crossings must be engineered and the applicant and the contractor/engineer will be responsible for the structural integrity of the crossing
- during construction all field erosion control measures shall be implemented

Eligible Costs:

- materials, labour, equipment rentals, professional services, permits and engineering fees
- permanent and temporary fencing
- livestock crossings as outlined above

Ineligible Costs:

- costs associated with a project that would encourage new land, pasture, or environmentally sensitive areas to be put at risk or impairment
- tools or machinery
- primary hydro lines
- drilling new water wells
- temporary fencing
- labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents and the applicant's business



**Hamilton Watershed
Stewardship Program**

WATER QUALITY IMPROVEMENT PROJECTS

EROSION CONTROL

Grant Rate and Cap: 75% up to \$5,000

Purpose: To control or remediate existing soil erosion impairments that impact surface water quality, air or soil quality and/or fish and wildlife habitat.

Eligible Project Types:

- conservation tillage – including residue management, no-till and mulch tillage
- contour cropping
- cover crops
- grassed waterways
- residue management
- water and sediment control basins (WASCoBs)
- riparian buffer strips

Eligibility Requirements:

- projects must obtain approval from appropriate agencies (e.g. Conservation Authority, OMAFRA, Municipality, etc.)
- projects on Municipal Drains must be approved by the applicable Drainage Superintendent
- preference will be given to erosion control projects where conservation tillage practices are utilized on adjacent fields
- projects must be planned and designed based upon the best management practices as outlined in the OMAFRA BMP Guide: Controlling Soil Erosion on the Farm
- projects must be constructed to standards as outlined in the Agricultural Erosion Control Structures: A Design and Construction Manual - Publication 832 and works must be supervised or completed by a qualified contractor
- for larger or more complex projects, engineered designs may be advised
- all collected water must be taken to a sufficient and legal outlet.
- for Tile Drain Control Structures:
 - where applicable, drainage headers should be utilized to reduce the number of required control structures



A well-designed grassed waterway allows water to flow without eroding the channel and importantly allows farm machinery to cross safely.
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- only commercial tile drain control structures will be funded
- the retro-fitting of tile drain control structures into existing tile drainage and the addition of tile drain control structures to new tile drainage installations is eligible
- For Cover Crops:
 - priority will be given to areas directly adjacent to watercourses or environmentally significant areas
 - applicant should register all potential fields and provide a crop rotation plan
 - crops may be tilled no sooner than the spring of the year following planting (may be chemically killed the previous fall) and cover crops must be destroyed before June 1
 - only cover crops used exclusively for cover are eligible for grants such as rye buckwheat and oilseed radish - this excludes crops that are harvested or grazed such as winter cereals, winter canola, and forages
 - an applicant may apply for the cover crop incentive on the same field in different years where the applicant plants a different cover crop species or species mix in the second application year
 - the cover crop must be verified by Program staff and the applicants are responsible for contacting Program staff prior to being chemically destroyed, winter freeze, or before tillage to ensure that the cover crop is providing at least 50% ground cover

Eligible Costs:

- materials, labour, equipment rentals, professional services, permits and engineering fees

Ineligible Costs:

- costs associated with a project that would encourage new land, pasture, or environmentally sensitive areas to be put at risk or impairment
- tools or machinery
- systematic tile and subsurface drainage that is not an integral part of an erosion control structure
- catch-basins without adequate sediment control
- labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents and the applicant's business
- installation or repair of the tile drainage system
- maintenance of installed structures



**Hamilton Watershed
Stewardship Program**

HABITAT REHABILITATION TERRESTRIAL AND AQUATIC HABITAT ENHANCEMENT

Grant Rate and Cap: 75% up to \$5,000

Purpose: To restore or enhance terrestrial and/or aquatic habitats.

Eligible Project Types:

- terrestrial or aquatic invasive species removal
- seeding, planting, or live staking of native species of flora
- habitat features (e.g. spawning substrate, turtle nesting bed, osprey platform, snake hibernaculum)
- prairie burns
- watercourse or stream channel reconstruction/enhancements
- streambank stabilization
- wetland creation



A nesting structure was built for the provincially threatened Barn Swallow, left, with evidence of its success on one of its nesting ledges inside, right.

Eligibility Requirements:

- projects must obtain approval from appropriate agencies (e.g. Conservation Authority, OMAFRA, Municipality, etc.) and projects on Municipal Drains must be approved by the applicable Drainage Superintendent
- preference will be given to projects where best management practices are utilized on the property



A stand of *Phragmites australis* (Common Reed), pre and post treatment.

- HWSP grants may be combined with other funding sources, however grants are not to exceed 100% of total expenses
- applicants must inform HWSP staff of additional cost share funding
- a plan is required specifying species, planting density, location, site preparation and maintenance; to promote approval, the plan should be developed in conjunction with Conservation Authority or HWSP staff or a private consultant
- trees must be planted in a manner that will not result in snow drift accumulation on the road (as a general rule, trees should be located 30m back from the edge of the road)
- proper site preparation is required for planting and seeding, including the removal of any invasive species
- the applicant is responsible for the care and maintenance of plantings - mowing may be needed during the establishment period to reduce competition from broadleaf annual weeds
- livestock must be excluded from the site; special consideration may be given for prairie restoration
- appropriate native species are mandatory, no cultivars or varieties, and invasive species are not eligible
- windbreaks should have 30-50% porosity during periods of highest risk for erosion and consideration should be given to utilizing plastic mulch to reduce competition
- if the plantings area is adjacent to leased agricultural lands, a copy of the planting plan must be provided to the lease and the boundaries of the planting must be clearly marked at a height visible to farm equipment operators
- riparian zone and streambank stabilization plantings should be designed to establish a vigorous vegetative cover and be a minimum of 5 metres wide to provide proper filtering action
- seeding should only take place when sufficient moisture is present and the soil is rough enough to hold the seed

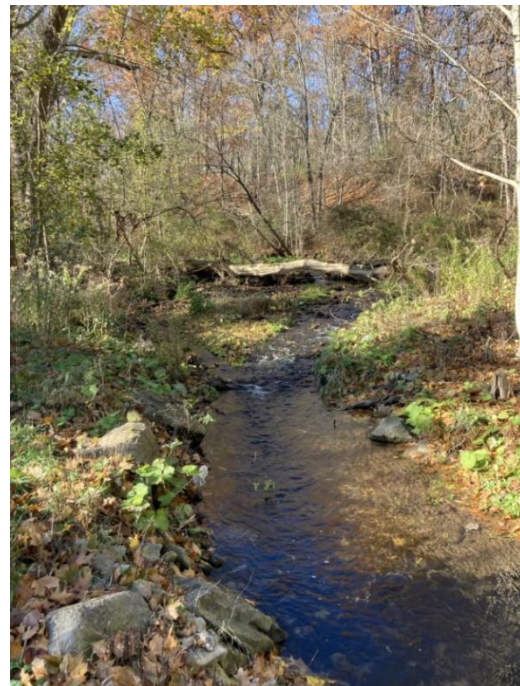
- for invasive species removal projects:
 - invasive species removal methods must be appropriate to species,
 - herbicides must be applied by an appropriately licensed contractor (if applicable), and
 - landowners must demonstrate a multi-year commitment to removal/eradication

Eligible Costs:

- materials, labour, equipment rentals, professional services, permits and engineering fees
- trees, shrubs and planting costs (costs for taller/larger stock may be considered where site conditions warrant its use)
- tree protection systems
- site preparation and establishment of cover crops on tilled land (in conjunction with tree planting)



Work was completed to remove a significant debris jam in 2019 (left photo prior to work), restoring fish passage to the creek as well as improving overall stream hydrology (right photo taken in 2020, a year after work completed).



Ineligible Costs:

- commercial stock, fruit trees or Christmas tree species which are commercially marketable in less than 15 years are not eligible
- farmstead landscaping
- labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents and the applicant's business
- irrigation ponds
- non-native species of flora



**Hamilton Watershed
Stewardship Program**

CHEMICAL, FERTILIZER, PESTICIDE AND FUEL HAZARDOUS STORAGE

Grant Rate and Cap: 75% up to \$5,000

Purpose: To prevent contamination of ground and/or surface water by hazardous products by upgrading existing facilities.

Eligible Project Types: chemical, fertilizer, fuel or pesticide storages

Eligibility Requirements:

- completion of an Environmental Farm Plan is encouraged
- storage structures must meet or exceed the necessary regulatory requirements, including, but not limited to; O. Reg. 63/09 Pesticides Act, R.S.O. 1990 (if applicable), the Technical Standards and Safety Authority (TSSA), the Highway Traffic Act, the Liquid Fuels Handling Code (LFHC), the Ontario Fire Code OFC), Municipal-by-laws, the Conservation Authorities Act, and the Ontario Building Code
- structures must be located an adequate distance away from water wells and surface water and obtain an EFP separation distance rating of 3 or better where reasonable
- a copy of an emergency plan for accidental exposure/spills must be submitted prior to grant payment

Eligible Costs:

- materials, labour, equipment rentals, professional services, permits and engineering fees
- labour and materials associated with the construction of storage upgrades

Ineligible Costs:

- labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents and the applicant's business
- pumps, nozzles or hoses
- primary hydro



**Hamilton Watershed
Stewardship Program**

IN-STREAM BARRIER MITIGATION

Grant Rate and Cap: 75% up to \$5,000

Purpose: To restore or enhance aquatic habitat through the remediation of an existing impairment to fisheries habitat. Impairments may include, but are not limited to, online ponds, dams, culverts, etc.

Eligible Project Types:

- bypass channel
- dam removal
- debris removal
- in-stream barrier mitigation
- culvert retrofit
- online pond mitigation

Eligibility Requirements:

- projects must obtain approval from appropriate agencies (e.g. Conservation Authority, OMAFRA, Department of Fisheries and Oceans, MNRF, Municipality, etc.) and projects on Municipal Drains must be approved by the applicable Drainage Superintendent
- for larger or more complex projects, engineered designs may be advised
- project must remediate an existing water quality impairment
- during construction all field erosion control measures shall be implemented
- structures should be properly engineered to withstand expected water volume and velocities, the applicant and their contractor/engineer will be responsible for the structural integrity of the project

Eligible Costs:

- materials, labour, equipment rentals, professional services, permits and engineering fees

Ineligible Costs:

- projects without adequate sediment control
- labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents and the applicant's business
- installation or repair of the tile drainage system
- maintenance of installed structures



The removal of an online pond on this property led to the resurrection of a previously decommissioned tributary of Ancaster Creek that had been filled in decades earlier. This project led to the creation of 420m of tributary, and improved and increased the amount of barrier free habitat available to local fish populations.



Hamilton Watershed
Stewardship Program

MANURE, MILKHOUSE AND WASTEWATER MANAGEMENT

Grant Rate and Cap: 75% up to \$5,000

Purpose: To prevent contamination of surface and groundwater during the storage and composting of manure and/or raw organic materials (e.g. fruit and vegetable waste, deadstock) and to encourage manure handling and spreading best management practices. To prevent water quality impairment from milkhouse wastewater discharges to surface and ground water, and to encourage milkhouse waste management best management practices.

Eligible Project Types:

- roofed solid manure storages with runoff containment
- unroofed solid manure storages with runoff containment or treatment
- concrete/steel liquid manure storage tanks with/without covers
- a 3 year Nutrient Management Plan (NMP) created using OMAFRA's NMAN software program. Milkhouse washwater storage within an existing or proposed manure storage system that meets the minimum storage requirements
- storage in a separate milkhouse washwater storage tank
- washwater treatment in a treatment trench system that meets the building permit standards
- innovative treatment systems will be considered on a case by case basis



A covered manure storage eliminates runoff.
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Eligibility Requirements:

- must have a certified Nutrient Management Strategy and Nutrient Management Plan unless:
 - if under the Nutrient Management Act and municipal by-laws, the manure storage facility does not require a certified Nutrient Management Strategy and the manure storage is less than 5 Nutrient Units, HWSP staff will work with technical advisors and the applicant to determine appropriate sizing

- manure is not spread on the applicant's farm. In this instance, Program staff will work with technical advisors and the applicant to determine appropriate BMPs to address disposal of manure
- all manure storages, regardless of operation size or status must meet the requirements of Regulation 267/03 under the Nutrient Management Act - this includes the Siting and Construction Standards which require manure storage facilities to be designed and inspected by a professional engineer
- applicants are responsible for determining the requirements for their proposed storage; contact OMAFRA for this service
- applicants must complete a nutrient management plan and it must be submitted to HWSP staff for review prior to works proceeding - this approval does not replace or supersede approval required through the Municipality, Conservation Authority, Building Permit process or the Nutrient Management Act
- a copy of the approved building permit must be submitted
- all manure and runoff storages must:
 - have a minimum of 250-day storage capacity. Adequate storage capacity must be provided for both solid and liquid fractions of manure, as well as contaminated precipitation and washwaters (where applicable). Facilities with greater than 400 days of storage will be cost-shared to the equivalent of 400 days
 - have runoff containment from exercise yards, and
 - permanent ladders must not be installed in manure storages
- for solid/liquid manure storages:
 - if a new barn is constructed, funding eligibility will be pro-rated to the volume of storage that was required for the existing/previous conditions (e.g. in cases where the structure has been sized and constructed for an expanded operation, a simple arithmetic formula will be used - a farmer currently has a herd of 50 dairy cows (including heifers and dry cows) and plans to expand to 75; the storage is sized and constructed for the 75 herd size and the eligible grant would be calculated based on 50/75 or 66% of the final cost of the project
 - where the herd size has not increased and/or in the event the structure completed is larger than the proposed structure in the approved WQHIP application, or the volume of the approved structure will be divided by the volume of the structure constructed to arrive at the pro-rating factor
- for roofed solid storages, three walls must be concrete at least 4 ft (1.2 m) above grade and the roof must provide adequate clearance for tractor and loader operation
- the floor of the storage must be sloped to contain any liquids within the storage and the storage entrance must be raised to prevent the entry of surface water from outside and to contain liquids inside
- livestock access to solid manure storage areas should be discouraged
- all open liquid and runoff storages must be protected by permanent barrier and gates designed to prevent child entry - suitable fencing would include chain link types, solid steel, wood fencing, etc. and the total barrier height (storage wall and fence) must be at least 5 ft (1.5 m) above the closest adjacent ground level
- safety fence design specifications shall meet the minimum standards as stated in the most recent version of the Ontario Ministry of Agriculture, Food and Rural Affairs' Agricultural Pollution Control Manual
- fences may be placed up to 15 ft (4.6 m) away from the storage where equipment access is necessary
- where flat covers, at or near ground level, are not designed for livestock or vehicle loads, a safety fence and a permanent warning sign must be installed

- access ports must have covers weighing at least 45 lb. (20.4 kg) and have a chain bolted to the storage top
- gates with secure childproof latches must be installed at access points and all fencing and safety requirements must be met
- manure hopper openings at or below floor level shall be fitted with a safety railing or floor grill spacing between rails of not more than 4 inches (10 cm)
- where a separate liquid manure storage tank is connected to a livestock building, traps or valves shall be installed to prevent gases from the manure storage from entering the building
- for milkhous facilities:
 - a sign indicating the danger due to toxic gases must be installed at every access to a liquid manure or milkhous/milking parlour washwater storage tank or under floor manure transfer chamber
 - systems proposing liquid storage of milkhous/milking parlour wastes must provide at least 250-day capacity for the washwater produced and the minimum storage volume is 5700 cubic feet (36,000 gallons or 160,000 liters)
- for deadstock composting facilities:
 - compost facilities must meet the most recent OMAFRA guidelines and Provincial regulations. Information on deadstock disposal options can be found on OMAFRA's website: www.omafra.gov.on.ca
 - where a deadstock composting facility is constructed as part of a roofed solid manure storage, it must have a separate entrance from outside the building and be separated from the manure storage by a concrete wall
- for other composting facilities:
 - green manure composting facilities (generated from vegetable and fruit waste) will be considered on a project by project basis
 - further details on green manure composting structures can be found on OMAFRA's website: www.omafra.gov.on.ca
 - the applicant is responsible for ensuring the technical adequacy of the project and that the structure is sized to contain 100% of the materials generated on-farm
 - green manure composting structures must prevent or contain or treat any runoff from the compost pile - to prevent, contain or treat compost runoff, the following design criteria should be considered: a roof or other method of cover, a holding tank and/or a permanently vegetated area to filter run-off
 - applicants are responsible for obtaining approvals from appropriate agencies prior to construction
- for Nutrient Management Plans (NMP):
 - a printout or electronic summary from the NMAN Program containing the following information must be submitted to HWSP staff for review;
 - for each farm property, a Farm Unit Summary
 - manure/nutrient source summary, manure/nutrient information (type, analysis, etc.)
 - If applicable, MSTORE manure storage sizing calculations & storage information (yearly amount, number of days of storage, amount remaining)
 - manure/nutrient application graph (tracks total (all types), amount remaining)
 - manure/nutrient application summary (for each field, the rate, source, amount, method, setback), and
 - field summary (field id, soil information, area, crop type, # of nutrient applications)

- to receive funding, the nutrient management plan must adequately supply the required crop nutrients without over applying and producing 'red flags' in the NMAN program

Eligible Costs:

- materials, labour, equipment rentals, professional services, permits and engineering fees
- professional fees for preparation of a nutrient management plan
- registration fees for nutrient management training sessions. Software is available at www.nutrientmanagement.ca
- transfer pumping equipment and piping
- walls around yards to direct contaminated precipitation into a runoff storage, regardless of height, only an equivalent 1 ft (0.3 m) concrete wall and the footing will be funded
- storage covers and roofs
- upgrading storages to increase the capacity of existing storages to a minimum 250 days and a maximum of 400 days
- temporary storage sumps for use prior to transfer to long term storage
- permanent transfer piping from the barn gutters or sumps to long term storage
- gas traps incorporated to prevent gases from entering the barn
- professional assessment of the surface and groundwater properties of the site and soil materials for the purpose of verifying that the project meets prescribed structural and environmental criteria
- constructing a permanent roof over an existing storage
- permanent transfer piping from the milkhouse or parlour to a suitable storage
- sump (when required) plus all associated electrical connections for milkhouse operations

Ineligible Costs:

- crop scouting fees
- fees associated with the completion of a NMP required by the Nutrient Management Act
- pumping equipment to empty long term storages
- manure spreading equipment
- slats or solid floors over in-barn storages including support posts, beams and roofs
- barn gutters with less than 60-day capacity
- labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents and the applicant's business
- equipment associated with moving manure to a permanent manure storage
- equipment associated with the land application of manure
- slats or solid floors over in-barn storage including support posts, beams and roofs
- barn gutters
- timbers that are treated with creosote, pentachlorophenol or other toxic substances
- compost barrels, open heaps on bare soil, plastic bag composting or prefabricated composting structures
- repair or maintenance of an existing compost structure
- tarps and associated items used to temporarily cover the compost structure
- cost of milkhouse and/or parlour structure



**Hamilton Watershed
Stewardship Program**

WATER QUALITY IMPROVEMENT PROJECTS STORMWATER LOW IMPACT DEVELOPMENT

Grant Rate and Cap: 75% up to \$5,000

Purpose: To reduce the volume and improve the quality of stormwater runoff flowing into the municipal sewer system and/or to reduce the volume and improve the quality of stormwater runoff flowing directly into local watercourses, waterbodies or designated natural areas through stormwater Low Impact Development (LID) projects.

Eligible Project Types:

- downspout disconnection
- bioswales
- infiltration galleries or trenches
- soakaway pits or rain gardens
- detention basins or water storage systems
- permeable pavement, including interlocking pavers, plastic/concrete grid systems, pervious concrete or porous asphalt
- projects that demonstrate the retention, infiltration or conservation of stormwater

Eligibility Requirements:

All stormwater LID projects must;

- be able to demonstrate that the proposed LID feature will result in either the diversion of stormwater runoff from the municipal stormwater system or the diversion of stormwater from directly out letting to a watercourse/waterbody,
- incorporate recommended LID design considerations and construction specifications (See https://sustainabletechnologies.ca/app/uploads/2013/02/LID-SWM-Guide-v1.0_2010_Appendix-A.pdf),
- ensure that any overflow from the installed LID feature must drain onto the applicant's property or outlet to a storm sewer with the capacity to convey stormwater flow,
- be a minimum of 4m downslope from buildings and foundations (with exceptions for permeable pavement as outlined below, and downspout disconnections which should outlet at minimum 2m from foundations)
- be a minimum of 4m from wells and septic beds, and if the LID feature is uphill of a septic a minimum setback of 15m is required

- avoid the installation of features on sites where the increased infiltration of stormwater would have the potential to result in erosion or to contaminate or negatively impact ground or surface water,
- avoid the installation of features that fall within 2-year time of travel wellhead protection areas in Greensville and Freelon, (See <https://www.protectingwater.ca/wp-content/uploads/sites/2/2023/02/swp03-Appendix-B-Hamilton-Vulnerability-Report-v32-final.pdf>, refer to pages 140,141), and
- outline a maintenance plan where applicable or recommended by the manufacturer.

Permeable pavement installation projects must;

- be located a minimum of 4m from the home, building or foundation if stormwater runoff from other surfaces (e.g. adjacent paved areas, overhanging roof without eaves) or downspouts will also drain to the installation,
- not have a drainage area that exceeds 1.2 times the area of the installation,
- not be installed in snow storage areas or areas where high pressure washers will be utilized, and
- conform to manufacturer specifications where applicable.

Bioretention projects, rain gardens, soakaway pits and infiltration trenches or galleries must be;

- located in a relatively flat area and out of areas where the water table is high,
- must be sized appropriately and ensure soils are amended where a soil infiltration test has indicated the soils are poorly drained,
- must install a drain or incorporate an overflow to accommodate large storm events, and
- must incorporate landscape cloth.

In light of the purpose of the stormwater low impact development grants, priority consideration will be given to project applications where:

- the property is serviced by combined sewers
- the application incorporates more than one project type to reduce stormwater runoff

Eligible Costs:

- materials, labour, equipment rentals, professional services, permits and engineering fees
- native plant species (no cultivars or varieties)

Ineligible Costs:

- tools or machinery

- labour, mileage, in-kind contributions and/or machinery use of the applicant, family dependents and the applicant's business
- weeping tile or other subsurface drainage to protect foundations
- soffits or fascia
- non-native species of flora
- disposal fees