



Soil and Water Sustainability Program Guidelines

2019-2020

FOR MORE INFORMATION PLEASE CONTACT:

Programs and Business Risk Management (PBRM)

74 Research Drive

Bible Hill, Nova Scotia B6L 2R2

Tel: 902-893-6377 Toll free: 1-866-844-4276

Fax: 902-893-7579

Email: prm@novascotia.ca Website: <http://novascotia.ca/programs>

CANADIAN AGRICULTURAL PARTNERSHIP (CAP)

The governments of Canada and Nova Scotia are committed to ensuring farmers and processors have the tools they need to innovate, grow and prosper. The *Canadian Agricultural Partnership* agreement is part of a commitment by federal, provincial and territorial governments to promote productivity and profitability for the sector. The programs are designed to help the industry position itself to respond to future opportunities and to realize its full potential as a significant contributor to the economy. Programs are also tailored with the flexibility to meet diverse regional requirements.

The partnership is a five-year, \$3-billion investment by federal, provincial and territorial governments that aims to strengthen the agriculture and agri-food sector and ensure continued innovation, growth and prosperity. The partnership includes \$1 billion for federal activities and programs, and \$2 billion in cost-shared programs delivered by provinces and territories on a 60-40 basis. In Nova Scotia, \$37 million will be invested through provincially delivered programs focusing on Markets and Trade; Science, Research and Innovation; Environmental Sustainability and Climate Change; Risk Management; Value Added Agriculture and Agri-Food Processing; and Public Trust.

In addition to cost-shared strategic initiatives, the partnership includes several business risk-management programs to help farmers manage risks that threaten the viability of their farms.

PROGRAM OBJECTIVES

Canada and Nova Scotia recognize that agriculture relies on healthy soil, water, and biodiversity profiles for its long term sustainable productivity. They also value the important role the industry plays in sustaining and replenishing our natural environment. The projects eligible in this program assist farmers to mitigate on-farm environmental risk for soil and water as identified in their individual Environmental Farm Plans that accelerate environmental farm stewardship in Nova Scotia. The Nova Scotia Environmental Farm Plan website at <http://www.nsfa-fane.ca/efp/> contains a number of tools, factsheets and other resources to assist producers in incorporating these and other environmental considerations into their everyday business decisions.

ELIGIBILITY

An eligible applicant is a farm that:

- is currently and properly registered in the correct income category under the *Farm Registration Act*;
- is at least 19 years of age and actively farming in the program year; and
- has generated an annual eligible gross commodity income of \$30,000. The eligible commodity income will be based on the Statement of Farming Activities (T2042, T1273 or Schedule 125 - Farm Revenue: **detailing sales by commodity revenue code**).
- Livestock Producers must have a Premise ID. To obtain a Nova Scotia Premise ID, please visit: <http://www.novascotia.ca/agri/pid>

General information regarding the Soil and Water Sustainability projects

- Applicant requires a completed and current (within five years) Environmental Farm Plan (EFP).
- Applicant must submit Schedule A and Schedule B of the Environmental Farm Plan. Any project applied for must be listed on Schedule A and Schedule B for eligibility.
- All projects require the Parcel Identification Number (PID) for your project location. For help with finding your PID, you can contact your regional office or visit: <http://www.nsfa-fane.ca/efp/resources/factsheets/>

FINANCIAL ASSISTANCE

- Applicants can apply for a maximum of 25% assistance to the lesser of 10% of their gross commodity revenue, or \$15,000 per year for all projects listed within this program. For example, a farm with gross apple sales of \$150,000 would be eligible for a maximum of \$15,000 per year.
- Funding for the program is limited. Projects will be assessed for their ability to minimize the environmental risk to soil and water. Preference will be given to projects that address the greatest environmental risk.

Note: No more than 75% funding can be received for any project cost incurred and paid by the applicant, regardless of source. Applicants are required to disclose their funding sources.

SUSTAINABLE AGRICULTURE WATER SUPPLY

The objectives of the Sustainable Agriculture Water Supply section include:

- improving the efficiency and quality of on-farm water
- decreasing risk of contamination to ground and surface water

Eligible Items	
Water Wells	
<i>W46</i>	Construction of water well (includes pump, power supply, monitoring devices and one test well, pump tests). Well system could include installation of cistern for water storage.
Hookup to Existing Pipeline for On-Farm Use	
<i>W64</i>	Installation and consultant costs for individual hook-up into an existing municipal pipeline (must be buried below the frost line).
Spring Development	
<i>W68</i>	Materials and contracted labour costs for the development of a spring to use as a water source for agricultural use (includes collection well, cutoff trench or cutoff walls that direct it into a gravity pipeline or pump). Project may require approval from the Nova Scotia Department of Environment.

WATER WELL MANAGEMENT

The objectives of the Water Well Management section include:

- reducing the risk of groundwater contamination
- preventing surface water from contaminating aquifers
- preventing cross-contamination between aquifers

Eligible Items	
Well Protection (existing wells only):	
<i>W7</i>	Earthwork at well head for run off diversion, extending well head above ground with pitless adapter, casing seals and connections to prevent seepage.
Well Abandonment:	
<i>W11</i>	Proper sealing of abandoned well to prevent groundwater contamination (must be completed by a licensed well professional).
	Note: Nova Scotia Department of Environment regulations apply

IMPROVED WATER PRACTICES AND EFFICIENCIES

The objectives of the Improved Water Practices and Efficiencies section include:

- improving the efficiency and quality of on-farm water
- decreasing risk of contamination to ground and surface water

Eligible Items	
Remote Livestock Watering	
<i>W33</i>	Includes the purchase and installation of troughs, stock tanks, pumps, piping and single phase power supply as part of a long term remote water system. This section is to provide an alternative water source for livestock in remote locations, therefore, livestock must be fenced from existing water supply (i.e., pond or watercourse).
Water Treatment - water analysis from an accredited lab is required before installation to support application.	
<i>W38</i>	Water treatment system for agricultural activities that require potable water (e.g., water conditioner, UV light and filter, reverse osmosis system) and to remove hardness (>121mg/L) and other fouling agents. Systems for household use are not eligible.

FUEL AND CHEMICAL STORAGE

The objectives of the Fuel and Chemical Storage section include:

- decreasing the risks of contamination to nearby soil and water

Eligible Items	
Fuel Storage	
<i>P1</i>	Improvements to stationary gas/diesel storage for use of farm vehicles or barn/greenhouse heating. Includes all or any component of CSA tanks, cement pads, electric pumps with automatic shut off, installation and tank protection. All fuel storage must be constructed independently and not a component of any other structure. The design for listed projects should reflect Nova Scotia Environmental Farm Plan recommendations/factsheets at http://www.nsfa-fane.ca/efp/resources/factsheets/ . Enclosures are not eligible. Note: concrete pads for tanks can be no bigger than 1m from the perimeter of the tank(s).
Chemical Storage	
<i>P7</i>	Chemical storage is a one-time cost share only. Chemical storages are those that will contain pesticides or liquid fertilizer only. All chemical storage must be constructed independently and not a component of any other structure. The design for listed projects should reflect Nova Scotia Environmental Farm Plan recommendations/factsheets at http://www.nsfa-fane.ca/efp/resources/factsheets/ . Size must reflect the needs of the farm (e.g., facilities for short term storage not eligible).

IMPROVED MANURE STORAGE, COMPOSTING AND HANDLING

The objectives of the Improved Manure Storage, Composting and Handling section include:

- improving protection of ground and surface water
- allowing for proper storage of nutrients for land application
- decreasing runoff from handling manure

Eligible Items	
Manure Storage	
<i>M1</i>	Impermeable concrete base construction required for storage of liquid and solid manure, manure composting and livestock mortality composting. This can include all or any component of engineer design, permits, site preparation, concrete pads, concrete walls installed for containment and contracted labour. Professional engineer stamped assessment and detailed drawings based on current herd size are required for manure storage by claim deadline (details in Appendix A). Manure storage projects are for existing farm businesses only. New site development is not eligible for assistance. Solid manure storage facilities may have retaining walls up to a maximum of 1.25m in height. A completely enclosed solid manure storage is ineligible through this program. Storage must be used for its intended purpose for a minimum of 5 years.
Manure Transfer	
<i>M8</i>	Includes the costs for stationary transfer pump and pipe to move manure from limited storage to a location of increased storage on main farm.
Manure Monitoring	
<i>M9</i>	Installation of shallow observation wells or piezometers for existing or new manure storage as identified by a professional engineer's assessment.
Manure Application	
<i>M21</i>	Liquid manure injection system modifications for existing spreaders.

WINTER PASTURING MANAGEMENT

The objectives of the Winter Pasturing Management section include:

- increasing the length of time available for feeding animals that are located away from the barn yard (e.g., in pasture) to potentially improve herd health
- minimizing damage to soils in pasture

Eligible Items	
Concrete Pads in Pasture	
<i>S2</i>	Concrete pads in pasture to reduce damage to usable land where livestock feed and/or watering sites are located (includes costs associated with engineer design if desired).

FARMYARD RUNOFF

The objectives of the Farmyard Runoff section include:

- improvement to water quality by decreasing the amount of sediment, pathogens, and contaminants that threaten the surface water
- decreasing the amount of clean water entering a livestock facility or yard and redirect away from potential contaminants
- preventing soil erosion

Eligible Items	
Water Diversion	
W2	Project could include the installation of berms, culverts and eavestroughs on farm buildings used for the redirection of runoff water away from potential contaminants to a disposal system.
Wetlands	
W3	Construction of wetlands for the treatment of farmyard runoff (engineer design required).
Runoff Flow Controls	
W4	Installation of catch basins, channels/piping and vegetated filter strips to impede water velocity from runoff.
Farmyard Runoff Flow Management	
W5	Costs associated with earthwork and materials in the farmyard to direct water away from contaminants (e.g., fill, gravel, geotextiles required for drainage systems).
Livestock Feeding Areas	
W6	Construction of impermeable concrete base for minimizing runoff from livestock feeding areas only. Engineer design required. This project <u>cannot</u> be used for a future barn or storage facility. This project is a one-time cost share only.
Retention Structures	
W71	Installation of retention structures for controlled flow of farmyard runoff water. Structure must be designed by a qualified engineer to meet project objectives.

FIELD WATER MANAGEMENT

The objectives of the Field Water Management section include:

- preventing soil erosion;
- managing erosion on agricultural land

Eligible Items	
Ditching	
W39	Field surface ditching and leveling of ditch spoil. (Installation of culverts, gravel or French drains are not eligible).
Land Forming	
W40	Costs associated with land forming on incorporated dykeland for improved drainage. Project includes the shaping of the land only.
Dykeland Culvert	
W41	Purchase and installation of culverts for incorporated dykelands only.
Tile Drainage	
W42	Installation of a subsurface tile drainage system on farm fields yielding a crop. Tile drainage projects must be installed according to a tile drainage plan. The drainage plan must be submitted prior to claiming.

EROSION CONTROL STRUCTURES

Objective

The objective of the Erosion Control Structures section is:

- Minimizing erosion in critical areas associated with riparian* and non-riparian areas due to runoff from agricultural lands

*Riparian area pertains to the area along the edges of a river, stream, or other watercourse.

Eligible Items	
Contour Terraces	
S5	Construction of contour terraces to detain sediment that is susceptible to movement by water. Engineered assessment and design is required for contour terraces and grassed waterways.
Field Stabilization	
S7	Gully stabilization/grassed waterways for critical areas of erosion where agricultural production is present. (eligible expenses include earthwork, outlet structures, geotextiles, etc).
Bank Stabilization	
S8	Bank stabilization in riparian areas prone to soil erosion (bank shaping, gabions, riprap, crib walls, and blanketing). The design for listed projects should reflect Nova Scotia Environmental Farm Plan recommendations/factsheets at http://www.nsfa-fane.ca/efp/resources/factsheets/ .
Shelterbelt Establishment	
S19	Shelterbelt establishment along riparian areas and in fields for soil protection and biodiversity. The design for listed projects should reflect Nova Scotia Environmental Farm Plan recommendations/factsheets at http://www.nsfa-fane.ca/efp/resources/factsheets/ .

ENHANCING RIPARIAN* AND AGRO-ECOSYSTEM HEALTH

The objectives of Enhancing Riparian and Agro-Ecosystem Health section include:

- protection of aquatic life
- maintaining the quality of the surface water supply
- ensuring the riparian areas serve as islands and corridors for biodiversity
- providing extensive upland ecosystems

*Riparian area pertains to the area along the edges of a river, stream, or other watercourse.

Eligible Items	
Stream Crossing	
W13	Stream crossing (natural waterways only) for new structures and repair of existing ones. (e.g., rocking, riprap, culverts, bridges). Farm ditches are not eligible for crossing projects. Permits and approvals from the Department of Environment, Navigable Waters Protection Program, and / or Department of Fisheries and Oceans when applicable. Permits are deemed to be an eligible cost for projects.
Buffer Establishment	
W15	Includes the purchase and installation of trees, shrubs, and riparian fencing for livestock along a riparian zone (buffer must be a minimum of 5m from the watercourse). Permits and approvals from the Department of Environment, Navigable Waters Protection Program, and / or Department of Fisheries and Oceans when applicable. Permits are deemed to be an eligible cost for projects.

APPLICATION PROCESS

Two intake periods will be offered:

	Application Intake	Activity Period	Claim Deadline
Spring	February 1, 2019-March 15, 2019	April 1, 2019-July 31, 2019	August 31, 2019
Fall	July 1, 2019-August 1, 2019	August 1, 2019-December 31, 2019	February 1, 2020

To apply for the Soil and Water Sustainability program:

1. Complete the *Soil and Water Sustainability Application*.
2. Attach a copy of your CRA farming revenue and expenses identifying your primary agricultural commodity and a minimum of income of \$30,000 (unless previously submitted for 2018-19 programs).

Note:

- Clients new to programs since 2019 must complete the Program Funding Registration form.
- Returning clients, please refer to the Program Funding Registration form and update the form with any changes to:
 - contact information
 - business information including structure, commodities, environmental farm plan and Premise ID

Submit all documents to:
Programs and Business Risk Management (PBRM)
 74 Research Drive
 Bible Hill, Nova Scotia B6L 2R2
 Tel: 902-893-6377 Toll Free: 1-866-844-4276
 Fax: 902-893-7579
 Email: prm@novascotia.ca

APPROVAL PROCESS

1. Applications are assessed based on the information and supporting documentation. If an application requires further assessment or information, Programs staff will follow up with the applicant. Projects will be assessed for risk to the environment. Preference will be given to projects that address the greatest environmental risk.
2. If approved, applicants receive a Letter of Agreement (LOA) that identifies the eligible project activities, assistance offered, and the terms and conditions under which assistance is approved.
3. Sign and return the LOA to the Programs office within **60 days** of the date of the letter to secure your funding.

You must review and return the signed copy of the Letter of Agreement to the PBRM office within 60 days or you will forfeit the funding.

CLAIMING PROCESS

1. Claim deadline is noted in table above, in Application Process.
2. Complete and sign the **Program Claim Form** that you received with your LOA.
3. Attach copies of all invoices for eligible project costs incurred and paid for by the applicant.
4. Attach proof of payment for each invoice – debit slips, cancelled cheques, or credit card statements.

Note: receipted invoices marked paid and signed by the supplier are not accepted as a proof of payment. No payment will be made for claims under \$20.00.

5. Submit your claim with the required supporting documentation to the PBRM office by the claim deadline.

LEASED LAND

Eligible projects must be directly applicable to the registered farm qualifying for the assistance on agricultural land owned or leased. A copy of the long-term lease (10 years) or rental agreement must accompany the application form for all physical projects applicable to the leased/rented land. It is a condition of approval that the lease be of at least 10 years duration. You must advise us immediately, in writing, if the lease is terminated, if the term of the lease changes or if the identity of the lessor changes in any way (for example, if the lessor assigns the lease or if the lease changes in composition).

ARM'S LENGTH TRANSACTIONS

Financial assistance will only be offered on transactions (invoices) that involve a supplier/service provider with an arms-length relationship to the applicant for approved projects. For the purposes of Programs, Arm's Length is defined as individuals who are NOT connected by blood relationship, marriage, common-law partnership, or adoption.

PROJECT EVALUATION AND AUDIT

Review and evaluation of projects may be carried out by officials of the Nova Scotia Department of Agriculture (NSDA), Government of Canada or other parties chosen by the NSDA for the purpose of audit, analysis, evaluation, program development and determining assistance. This review and evaluation process may be conducted prior to project commencement, during work or upon project completion. Applicants may be asked to complete an evaluation survey statement related to their final claim.

CONFIDENTIALITY

Applicants consent to the release of their name and the amount of support received under the program as public information to be actively disseminated by the Department of Agriculture. Any other information provided, unless disclosed in the manner and for the purposes stated above, will be subject to the confidentiality and disclosure provisions to the Freedom of Information and Protection of Privacy (FOIPOP) Act.

CONTACT INFORMATION

To find out more information about the Soil and Water Sustainability program, please contact Programs at 902-893-6377, toll free 1-866-844-4276, or your regional office at the following locations:

Central Region	Truro office	902-893-6575
Valley Region	Kentville office	902-679-6021
Western Region	Cornwallis office	902-638-2395
Eastern Region	Antigonish office	902-863-7180
Cape Breton Region	Sydney office	902-563-2000

Appendix A

Professional Engineer Assessment

The following is required in the Professional Engineer Assessment for a manure storage:

- Farm business name, contact and address
- Date of visit, proposed project start and end dates
- Type and size (number of animal units) of current operation, type of existing manure storage facility and capacity, soil type
- Environmental risk
- Proposed work – type of storage, materials (use of recommended materials) and capacity. If it is to be an earthen manure storage, the assessment must include clay content, subsoil texture, average depth to groundwater, location of springs, and depth to shale or bedrock
- Separation distances based on existing construction guidelines (well, water courses, property lines, etc.)
- Recommendations / issues
- Land base available to utilize manure
- Stamped professional detailed drawings