



# Growing Forward

## Beneficial Management Practices 2010/2011

### The Canada – British Columbia Environmental Farm Plan Program

Canada – British Columbia Environmental Farm Plan (EFP) Program complements and enhances the current stewardship practices of producers. The EFP program applies to all types and sizes of farm operations throughout the province. As a participant in this program, producers are able to identify their farm's environmental strengths, prioritize any potential risks to the environment, and take advantage of tools and techniques available to manage those risks.

### Beneficial Management Practices Program

Producers who develop and have an approved and valid EFP are eligible to apply for cost-shared incentives through the Growing Forward Agreement on-farm action Beneficial Management Practices (BMP) Program to implement actions identified in their on farm environmental action plans. The following document lists the BMP categories and practices eligible for cost-shared funding in British Columbia. For each category there are limits on the percentage of the project costs payable from the program and the maximum amount of funds that the program will provide.

#### Application Steps

- 1. Complete an EFP for your farm and receive a 'Statement of Completion' from the BC ARDCORP recognized Planning Advisor**
- 2. Fill out a BMP application form (providing all requested identification and details of your project)**
- 3. Have the application form signed by both the applicant and a Planning Advisor**
- 4. Submit the application form to the ARDCORP office.**

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## General Policy Statements and Conditions for BMP Program.

The following lists of Beneficial Management Practices are for the Program Year April 1, 2010 to March 31, 2011 and are subject to annual revision during the life of the Growing Forward Agreement. Previous BMP Category codes established under the Agriculture Policy Framework Agreement have been maintained. They remain on the list as place holders in the event other organizations are able to fund these BMPs or there are policy changes which would allow them to be funded in at a future time.

The following BMP policy is derived from the previous BMP Program (National Farm Stewardship, Green Cover Canada) and the BC Environment Chapter Working Group (WG) Policy established over the duration of the Agriculture Policy Framework Agreement.

1. **Access to the BMP program:** Access will be based on an EFP that is less than 5 years old and reflects the current farm or ranch operation. If the EFP is more than 5 years old or there have been significant changes on the farm or ranch operation – the EFP must be renewed however this does not imply the farm operation will be able to access On-Farm Action program dollars nor does it imply the farm cap will be reset.
2. **Date:** January 1, 2004 is to be the date for all BMP's where relevant – (WG ratification June 16, 2005) Under Growing Forward this will not change – Farm operations must have been in existence on or before January 1, 2004. Funding is not designed to incent a change in enterprise type. The On-Farm Action funding is designated to make necessary changes to existing operations or practices that are impacting water quality, quantity or climate change.
3. **Farm Cap:** Overall farm Cap for BMP Program under NFSP/GC during APF was \$70K - \$50 K from NFSP and \$20K from AEI. The overall farm cap will remain at \$70K for any farm that has or is participating in the Canada-BC Environmental Farm plan Program. Those operations that participated in the BMP program under APF or the Continuity Year Agreements which have not reached the \$70K farm cap can continue to access the program until such time as their farm cap has been met.
4. **Funding of partial projects:** Funding for partial projects are eligible only when the partial projects, on their own, achieve significant environmental risk reduction - (WG ratification June 16, 2005). This will continue under Growing Forward.
5. **New equipment:** Provide funding for the environmental enhancing components of new equipment. This should be based on a technical review and cost estimates by appropriate experts. (WG ratification December 14, 04). This will continue under Growing Forward.
6. **Stacking:** Previous program policy set a percentage maximum amount of government funds which could be used towards the total project costs. For Growing Forward environmental programming this has been set at 75%. Where funding is provided by a government agency and the agency deems that the funding is not from a Canadian government (e.g. DFO use of funds originating in the United States), a letter from the agency confirming the source of funds must accompany the request for payment. (origin AAFC September, 2005) - (WG ratification October, 2005).
7. **In-kind:** One of the purposes of allowing in-kind contributions to cover a portion of the project costs is to reduce the cash costs for the applicant and the cost to the program. Wherever possible, projects should comply with this principle. - (WG ratification October, 2005). This will continue under Growing Forward.

8. **Project initiation:** Projects will be considered ineligible for funding if any portion has been initiated prior to approval.
9. **Project completion:** All projects must be completed prior to December 31<sup>st</sup> of the year they are approved. Approval of projects will be based on the assumption they will be complete by the end of the calendar year unless clearly specified in the BMP program category (i.e., a preapproved 3 year span for an approved riparian or shelterbelt planting). Work and invoices must be completed and dated December 31<sup>st</sup> unless written consent by the program administration is given to carry on with project work beyond that date. Carrying on will only be considered in extenuating circumstances (i.e., delays as a result of regulatory approval)
10. **Caps and Cost Shares for BMP Categories:** These have been set as of March 5, 2010 and are valid for the 2010/2011 BMP, however, are subject to revision.

As a result of the Beneficial Management Program Administrative Review Committee meeting April 9, 2009

11. **Materials on Hand:** The provision to pay for materials on hand for fencing (or anything else) has been dropped. Only eligible costs will be for those services and materials purchased after project approval.
12. **Evidence of payment:** The program requires a paid invoice, cancelled cheque with invoice, or credit card transaction as evidence of payment.
13. **Cancelled Projects:** Any projects cancelled by applicant or time deadline are considered cancelled. Any materials or services obtained for a cancelled project are not eligible for payment if a new application is received at a later date. By previously starting a project, it does not mean it is ineligible for further consideration under a new application. However, all costs incurred for materials or services under the previous application will be ineligible for funding under the new application.

Note:

- A. CEAA = Canadian Environmental Assessment Act – CEAA or CEAA equivalency may be required for any construction for many Categories (in most cases applicants can use construction mitigation Standard Operating Procedures)
- B. engineering design work may be an eligible cost as a standalone item if a project does not proceed for economic, technical or environmental reasons such as CEAA
- C. Engineering costs should be included as part of the BMP costs for and structures that require engineering approval (i.e., manure pits, roofs, etc.)
- D. All projects must abide by all applicable Federal, Provincial and Municipal laws and regulations, including, but not limited to, the Federal and Provincial environmental assessment and protection acts, trade agreements and legislation acts, and zoning bylaws.

Category Code / Cost Share / Funding Cap	BMP Category	Practice Code (individual Cost Share & Funding Cap)	Eligible BMPs and Costs	Ineligible BMPs and Costs	Benefits	Linkages to other plans or actions e.g., need for Nutrient Management Plan
01 30% \$30K	Improved Manure Storage and Handling  <b>Category 01 will only be offered in 2010/2011</b> <b>Entire Category is to be capped as follows:</b> <b>Total of \$300,000</b>	0101	<b>Increased storage to meet winter spreading restrictions:</b> (may include satellite storage) A. Engineering: Manure storage structures are to be designed by a Professional Engineer. Exemptions for low risk projects are at the discretion of the approval process. - (WG ratification June 16, 2005) B. Structures below barns: For structures built below barns; a portion of the cost of the roof is eligible if a roof is deemed necessary to meet the minimum storage requirement for the program. The maximum eligible cost for the roof will be the equivalent of the cost of a roof over a similar sized storage structure that is not below the barn. (WG ratification June 16, 2005)		<b>Water Quality/ Air Quality</b> <ul style="list-style-type: none"> <li>Reduced risk of runoff of manure nutrients from overflowing manure storage structures</li> <li>Reduced risk of leaks and spills of manure</li> <li>Reduced risk of leaching of manure nutrients to groundwater</li> <li>Reduced need to spread manure during high risk/rainfall periods, reducing soil compaction and risks to surface water quality from manure nutrients</li> <li>Facilitates manure spreading when crops can benefit from the fertilizer value of manure</li> </ul>	Nutrient Management Plan (NMP) before access.  Previous Working Group Policy had suggested no link to Nutrient Management Plan.  This is a policy change.
		0102	<b>Improved features to prevent risks of water contamination</b> (leaks, spills)			
		0104	<b>Containment systems for solid manure</b> (includes covers)			
		0105	<b>Assessment and monitoring of existing manure storage infrastructure</b>			
		0106	<b>Engineering design work.</b> This practice code will stand alone if project does not proceed for economic, technical or environmental reasons (e.g., CEAA)			
02 30% 30K	Manure Treatment	0201	<b>Dewatering systems,</b> nutrient recovery systems for manure	<ul style="list-style-type: none"> <li>anaerobic digestors (former practice code 0203)</li> <li>Composting of manure can be covered elsewhere (former practice code 0202)</li> </ul>	<b>Air Quality/ Water Quality/ Climate Change Mitigation</b> <ul style="list-style-type: none"> <li>Reduced liquid manure volume reduces the risks of water contamination by facilitating land application of appropriate rates</li> <li>Reduced manure volume facilitates export of excess manure nutrients off the farm</li> <li>Nutrient recovery improves quality of the</li> </ul>	NMP prior to access.
		0204	<b>Engineering design work.</b> This practice code will stand alone if project does not proceed for economic, technical or environmental reasons (e.g., CEAA)			

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					<p>water that is discharged into drainage systems or recycled in the barn</p> <ul style="list-style-type: none"> <li>Nutrient recovery add nutrients back into the solid phase of manure</li> </ul>	
03 30% \$10K	Manure Land Application	0301	<p><b>Specific equipment for land application of manure</b> i.e., low trajectory, sleighfoot, band spread</p> <p>A. Solid manure spreaders: funding may be provided for the additional costs of cyclone spreading attachments. Other types of spreaders will be reviewed, on a case by case basis, to determine components that can be funded from the program.</p>		<p><b>Air Quality/ Water Quality/ Climate Change Mitigation</b></p> <ul style="list-style-type: none"> <li>Increased retention of nitrogen in soil and crop that could otherwise be lost to air or water</li> <li>Equipment such as a sleighfoot or low trajectory boom reduce emissions and can improve nutrient management efficiency</li> <li>Minimized nitrous oxide (N<sub>2</sub>O) release</li> <li>Reduced runoff of manure nutrients</li> <li>Low ammonia loss and odour</li> <li>Low nitrous oxide (N<sub>2</sub>O) release</li> <li>Low soil compaction, decreasing runoff risks</li> </ul>	NMP prior to access.
04	In Barn Improvements		No identified eligible items available in this category for 2010/2011			
05 50% \$20K	Farmyard Runoff Control	0501	<b>Upstream diversion around farmyards; downstream protection</b> (e.g., catch basins, retention ponds, constructed wetlands)	<ul style="list-style-type: none"> <li>Gutters and downspouts for farm buildings are not eligible for funding. These are considered to be conventional building components that are the responsibility of producers.</li> </ul>	<p><b>Water Quality</b></p> <ul style="list-style-type: none"> <li>Reduced risk of contaminated runoff water moving into groundwater and surrounding surface waters; increased protection of water quality for human and animal health</li> </ul>	
		0502	<b>Construction of impermeable base</b> and roof for minimizing runoff from livestock pen areas and confinement areas (feed bunks, water infrastructure, walls and electrical costs are not eligible)			
		0503	<b>Engineering design work.</b> This practice code will stand alone if project does not proceed for economic, technical or environmental reasons (e.g., CEAA)			
06 50%	Relocation of Livestock Confinement and	0601	<b>Relocation of livestock facilities</b> such as corrals, paddocks and wintering sites away from riparian areas	<ul style="list-style-type: none"> <li>Groundwater protection: Proximity to sensitive</li> </ul>	<p><b>Water Quality/ Biodiversity</b></p> <ul style="list-style-type: none"> <li>Limit direct animal access and duration of cattle in a riparian area or near</li> </ul>	

Category Code / Cost Share / Funding Cap	BMP Category	Practice Code (individual Cost Share & Funding Cap)	Eligible BMPs and Costs	Ineligible BMPs and Costs	Benefits	Linkages to other plans or actions e.g., need for Nutrient Management Plan
\$15K	Horticultural Facilities  <b>Category - 06 will only be offered in up to 2010/2011 program year</b>	0602	<b>Relocation of horticultural facilities</b> such as greenhouses and container nurseries from riparian areas	groundwater is not a rationale for use of this BMP. Funding is to be used to move operations away from sensitive surface water, riparian areas, critical wildlife habitat and areas of severe erosion potential.	water bodies <ul style="list-style-type: none"> <li>Enhanced riparian health</li> <li>Reduced impacts on water quality</li> </ul>	
		0603	<b>Engineering design work</b> This practice code will stand alone if project does not proceed for economic, technical or environmental reasons (e.g., CEAA)			
07  50%  \$15K	Wintering Site Management	0704	<b>Field access improvements: alleyway/access lane upgrades</b> All other practice codes deleted as they are available in other categories		<b>Water Quality</b> <ul style="list-style-type: none"> <li>Reduced soil erosion</li> </ul>	
08  30%  \$3K	Product and Waste Management	0801	<b>Improved on-farm storage and handling of agricultural products</b> (e.g. fertilizer, silage, petroleum products, and pesticides) A. Fertilizer storage: All types of structures are eligible for funding assistance with a limit being placed on the area of the structure based on the type(s) of crop and area being farmed. The maximum area of the structure is the lesser of 1.86 m <sup>2</sup> (20 ft <sup>2</sup> ) per pallet or 0.93 m <sup>2</sup> (10 ft <sup>2</sup> ) per hectare of land receiving the fertilizer B. Fuel storage: The program supports the cost of providing a roof and containment for a single walled tank or the cost of a double walled tank. The program will not provide a roof and containment of a double walled tank. The cost of a concrete slab and bollards for double walled tanks are eligible items. Spill kits and fire extinguishers are eligible items. Fuel storage structures should be designed with sufficient roof overhang and partial walls to minimize water collecting in the containment structure	<ul style="list-style-type: none"> <li>Worker sanitation facilities: These facilities are not eligible for funding assistance under the program. (WG ratification June 16, 2005)</li> </ul>	<b>Water Quality</b> <ul style="list-style-type: none"> <li>Protection of water, air and soil quality</li> </ul>	

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		0802	<p><b>Improved on-farm storage, handling, and disposal of agricultural waste</b> (e.g., livestock mortalities, fruit and vegetable cull piles, wood waste)</p> <p>A. Poultry mortality incinerators: These are eligible as long as the incinerator uses Best Available Technology and meets appropriate air emission standards.</p> <p>B. Mulching mowers: Heavy duty mulching mowers for dealing with orchard prunings are eligible for incremental assistance. This is based on the difference between a conventional mower and a mulching mower.</p> <p>C. Silage storage: Funding assistance can be provided to modify an existing facility or build a new facility where the existing facility (in place on or before January 1, 2004) is not adequate from an environmental protection perspective. Existing facilities include pit silos and free standing bunkers silos in addition to other types of constructed silos.</p> <p>D. On-farm processing and marketing: These are considered farm operations where the majority of the material being processed or marketed is produced on the farm or the majority of the output of the processing operation is used on the farm. Waste management from these activities is eligible for funding. Where wastes are not agricultural wastes, the farm must ensure that appropriate authorizations for disposal have been obtained.</p>			
		0803	<p><b>Composting of agricultural waste</b> (e.g., livestock mortalities, manure, fruit, vegetable, wood, straw residue)</p>			
		30%				
		\$10K				

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		0804	<b>Engineering design work</b> This practice code will stand alone if project does not proceed for economic, technical or environmental reasons (e.g., CEAA)			
09 50% 3K	Water Well Management	0901	<b>Sealing &amp; capping old water wells</b>	<ul style="list-style-type: none"> <li>replacement wells</li> </ul>	<b>Water Quality</b> <ul style="list-style-type: none"> <li>Reduced risk of groundwater contamination by contaminants like fuel or pesticides</li> <li>Reduced health risk to people and animals</li> </ul>	
		0902	<b>Protecting existing water wells from surface contamination</b>			
10	Riparian Area Management  <b>Overall Cap for Category 10 is \$20 K at 60% for any projects that fall within Practices Codes 1001 through 1006. For projects which fall into Practice Code 1007 the cost share is 70%</b>	1001 60% \$20K	<b>Alternative Watering Systems To Manage Livestock:</b> solar, gravity-fed, wind, grid or alternative power <ul style="list-style-type: none"> <li>Pumps</li> <li>Storage</li> <li>Power setup from existing power line</li> <li>Waterlines</li> <li>Construction</li> <li>Protective fencing or portable panels</li> </ul> <p>Note: Approval of projects will be contingent upon adherence to all federal, provincial, and municipal guidelines and regulations for project design and implementation.</p>	<ul style="list-style-type: none"> <li>Repair and maintenance of existing riparian pasture management systems and equipment</li> <li>On-going maintenance costs of existing equipment.</li> <li>Opportunity costs associated with payments for land taken out of production.</li> <li>Installation costs of main electrical service.</li> </ul>	<b>Water Quality/ Biodiversity/ Climate Change Mitigation</b> <ul style="list-style-type: none"> <li>Limit direct animal access and duration of cattle in a riparian area or near water bodies</li> <li>Enhance riparian health</li> <li>Reduce impacts on water quality</li> <li>Livestock health</li> <li>Year round reliable water source for livestock</li> </ul>	Riparian Management Plans prior to access to funding.
		1002 60% \$20K	<b>Riparian Buffer Establishment:</b> establishment / planting of adaptable, hardy, permanent native and/or non-invasive introduced species of grasses, forbes, trees and shrubs <ul style="list-style-type: none"> <li>Pre-planting site preparation and plant purchase costs prior to the year of planting if needed.</li> <li>Establishment year site preparation</li> <li>Weed control</li> <li>Irrigation (trickle or drip)</li> <li>Temporary fencing</li> <li>Purchase / planting / establishment costs for grasses from certified seed, forbes, trees and shrubs for the year of</li> </ul>	<ul style="list-style-type: none"> <li>On-going maintenance costs beyond first year</li> <li>Costs associated with acquiring/planting invasive plant species</li> <li>Opportunity costs associated with payments for land taken out of production</li> <li>Landscape quality or landscaping type plantings</li> <li>Tree and shrub planting and establishment costs in excess of \$50 per tree/shrub, exclusive of all establishment costs, including in-</li> </ul>	<b>Water Quality/ Soil Quality/ Biodiversity/ Climate Change Mitigation</b> <ul style="list-style-type: none"> <li>A 'filtering' structure to capture nutrients, pesticides or sediments from a non-point pollution source</li> <li>Promote infiltration,</li> <li>Erosion control</li> <li>Increased biodiversity associated with habitat creation.</li> <li>Invasive plant management</li> <li>Sequester carbon</li> <li>Increases agricultural sequestration of ambient carbon dioxide (CO<sub>2</sub>) (as long as biomass in trees are kept constant)</li> <li>Protects waterways and wetlands from</li> </ul>	Riparian Management Plan with design (BMP 30) prior to access to funding.

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			<p>planting plus one year of maintenance after the planting year, or the termination of Growing Forward funding, whichever comes first.</p> <ul style="list-style-type: none"> <li>Consultative service for suitable species, composition and maintenance</li> </ul>	<p>kind</p> <ul style="list-style-type: none"> <li>Commercial fruit trees, Christmas trees, ornamentals, afforestation, woodlot establishment and reforestation.</li> <li>Purchase and relocation of established trees</li> </ul>	<p>eutrophication by retaining some of the nutrients escaping from agricultural fields and barn yards</p> <ul style="list-style-type: none"> <li>Provides wildlife habitat and biodiversity</li> <li>Could generate revenue if integrated with the concept of agro-forestry</li> </ul>	
		<p>1003 60% \$20K</p>	<p><b>Fencing to Manage Grazing and Improve Riparian Condition and Function:</b> To cover a portion of the costs for:</p> <ul style="list-style-type: none"> <li>Fencing parallel to water's edge to exclude livestock in order to maintain or improve riparian conditions and function. Eligible permanent fencing inclusive of all costs including in-kind labour.</li> <li>Protection of newly established or enhanced riparian buffers (BMP 1002)</li> <li>Temporary Cross fencing to implement rotational, seasonal, rest, swath and extended grazing systems in support of riparian management. Eligible cross fencing will be inclusive of all costs including in-kind labour.</li> </ul> <p>Note: Approval of projects will be contingent upon adherence to all federal, provincial, and municipal guidelines and regulations for project design and implementation</p> <p>A. Cross fencing: Eligibility for funding must be based on a plan (Riparian Management Plan, Grazing Management Plan or Biodiversity Enhancement Plan) that identifies the importance and value of cross fencing in dealing with identified environmental risks and achieving environmental benefits.</p> <p>B. Fencing costs: The maximum amount of</p>	<ul style="list-style-type: none"> <li>Repair and maintenance of existing riparian pasture management systems and equipment (e.g. can't be used to repair existing fence)</li> <li>On-going maintenance costs</li> <li>Opportunity costs associated with payments for land taken out of production.</li> </ul>	<p><b>Water Quality/ Soil Quality/ Biodiversity/ Climate Change Mitigation</b></p> <ul style="list-style-type: none"> <li>Protection of surface water from contamination</li> <li>Enhancement of biodiversity</li> <li>Protection of stream banks from destabilization.</li> <li>Protection of riparian vegetation</li> <li>Carbon sequestration</li> <li>Support livestock health.</li> </ul>	<p>Riparian Management Plans prior to access to funding.</p> <p>Grazing Management Plans may be required based on farm activities.</p>

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			eligible costs for materials, labour and equipment is \$20.00 (\$10.00 from the program) per metre or \$6.00 (\$3.00 from the program) per foot.			
		1004 60% \$20K	<p><b>Native Range and Restoration or Establishment:</b></p> <ul style="list-style-type: none"> <li>Seeding and planting of native plant material (grasses, legumes, forbes, shrubs, and trees) and on-going maintenance of an established or restored site.</li> </ul> <p>Note: Native vegetation refers to plant species indigenous to the area. Restoration refers to improving the ecological integrity of disturbed or degraded sites. 'Establishment' refers to an area under different land use and the native species must be planted.</p>	<ul style="list-style-type: none"> <li>Pasture seeding and establishment costs</li> <li>Pasture renovation</li> <li>Forage management</li> <li>Costs associated with acquiring/planting invasive plant species</li> <li>Opportunity costs associated with payments for land taken out of production</li> <li>Establishing forages as part of the operation's normal crop rotation</li> </ul>	<p><b>Water Quality/ Soil Quality/ Biodiversity/ Climate Change Mitigation</b></p> <ul style="list-style-type: none"> <li>Riparian area may be best protected by enhancements to native vegetation in the surrounding upland</li> <li>Establishment of native species to enhance biodiversity</li> <li>Compliment management goals of adjoining native habitat land parcels managed by different agencies or individuals</li> <li>Restoration of disturbed sites with contiguous areas of healthy native riparian vegetation</li> </ul>	
		1005 60% \$20K	<p><b>Grazing Management in Surrounding Uplands:</b></p> <ul style="list-style-type: none"> <li>Cross fencing to implement rotational, seasonal, rest, swath, and extended grazing systems</li> </ul>	<ul style="list-style-type: none"> <li>Perimeter fencing</li> <li>Pasture seeding and establishment costs</li> <li>Pasture renovation</li> <li>Repair and maintenance of existing riparian erosion control or riparian pasture management systems and equipment (e.g. can't be used to repair existing fence)</li> <li>On-going maintenance costs</li> <li>Opportunity costs associated with payments for land taken out of production.</li> </ul>	<p><b>Water Quality/ Biodiversity/ Climate Change Mitigation</b></p> <ul style="list-style-type: none"> <li>Supports diverse plant communities and sensitive species</li> <li>Protect water and soil quality</li> <li>Maintenance or improvement of vegetation and animal production parameters</li> <li>Improved range condition</li> <li>Increased animal production</li> <li>Increased length of the grazing season</li> <li>Improved wildlife habitats</li> </ul>	Grazing Management Plans may be required based on farm activities
		1006 60% \$20K	<p><b>Improved Stream Crossings:</b></p> <p>costs associated with structures that demonstrate improved riparian conditions</p> <ul style="list-style-type: none"> <li>new structures</li> <li>improvements and/or repairs to existing structures</li> </ul>	<ul style="list-style-type: none"> <li>On-going maintenance costs</li> <li>Stream crossing projects that are associated with a new or expanded agricultural activity—where no crossing</li> </ul>	<p><b>Water Quality/Biodiversity</b></p> <ul style="list-style-type: none"> <li>Reduced streambank erosion</li> <li>Improve water quality</li> <li>Enhance biodiversity</li> </ul>	Riparian Management Plans prior to access to funding.

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			<ul style="list-style-type: none"> <li>removal or re-location of existing structures</li> </ul> <p>Eligible expenses will include site assessment, engineering design, and materials, labour, and equipment rental associated with earthwork, installation of structures, and re-vegetation work in addition to the constructed works.</p> <p>Note: All projects must be properly designed by an accredited engineering consultant or a qualified professional in accordance with federal, provincial and local government regulations and specifications</p>	has existed previously		
		1007 70% \$20K	<p><b>Landscape-based group farm riparian management plan project and related on-farm action BMPs (1001-1006):</b></p> <p>Approval of projects will be contingent upon:</p> <ul style="list-style-type: none"> <li>Project design</li> <li>60% or more of the linear coverage of the waterbody available to the project.</li> <li>Approval from federal, provincial and municipal agencies as to the merits of a joint project.</li> <li>Preference will be given to project areas considered critical or important habitat.</li> </ul>	<ul style="list-style-type: none"> <li>On-going maintenance costs</li> <li>Costs associated with acquiring/planting invasive plant species</li> <li>Opportunity costs associated with payments for land taken out of production</li> <li>Landscape quality or landscaping type plantings</li> <li>Tree and shrub planting and establishment costs in excess of \$50 per tree/shrub, exclusive of all establishment costs, including in-kind</li> <li>Commercial fruit trees, Christmas trees, ornamentals, afforestation, woodlot establishment and reforestation.</li> <li>Purchase and relocation of established trees</li> </ul>	<p><b>Water Quality/ Biodiversity/ Climate Change Mitigation</b></p> <ul style="list-style-type: none"> <li>Reduce erosion</li> <li>Improve water quality</li> <li>Improve water infiltration</li> <li>Support regional riparian priorities</li> <li>Reduce impact of invasive plants</li> <li>Maintain or enhance habitat connections across the landscape</li> <li>Improve habitat integrity and biodiversity.</li> <li>Provide critical movement corridors</li> <li>Enhance carbon sequestration</li> </ul>	<p>Riparian Management Plans prior to access to funding.</p> <p>Grazing Management Plans may be required based on farm activities</p>

Category Code / Cost Share / Funding Cap	BMP Category	Practice Code (Individual Cost Share & Funding Cap)	Eligible BMPs and Costs	Ineligible BMPs and Costs	Benefits	Linkages to other plans or actions e.g., need for Nutrient Management Plan
11	Erosion Control Structures (Riparian)	1101  60%  \$20K	<p><b>Constructed Works:</b></p> <ul style="list-style-type: none"> <li>• <b>Contour Terraces</b> (earthwork, seedbed preparation, seed)</li> <li>• <b>Gully Stabilization/Grassed Waterways</b> (earthwork, erosion control matting, silt fencing, seedbed preparation, seed, outlet structure)</li> <li>• <b>Bank Stabilization</b> (bank shaping, revetment, gabions, riprap, crib walls, re-vegetation, blanketing and combinations)</li> <li>• <b>Drop Inlet Structures and In Channel Control</b> (drop structures)</li> <li>• <b>Improved Infiltration of Concentrated Water Flow</b> (filter trenches, filter wells, diffusing wells, etc.)</li> <li>• <b>Retention Ponds and Erosion Control Dams.</b></li> </ul> <p>Eligible expenses will include site assessment, engineering design, and materials, labour, and equipment rental associated with earthwork, installation of structures, and re-vegetation work in addition to the constructed works.</p> <p>Note: All projects must be properly designed by an accredited engineering consultant or a qualified professional in accordance with federal, provincial and local government regulations and specifications</p>	<ul style="list-style-type: none"> <li>• Systematic tile and other subsurface drainage systems that are not an integral part of erosion control structure</li> <li>• Activities related to constructing or repairing drainage systems, where the purpose is to remove ponded water or draining saturated soils, are not eligible for funding</li> <li>• Converting open channels to closed drainage systems</li> <li>• Construction of new drainage channels or repair of existing drainage systems (e.g. drainage ditch clean-outs)</li> <li>• Costs of tile and installation that exceeds 30 metres for riparian drop inlet structure projects</li> <li>• Installation of drop inlets for drainage of ponded surface water (e.g. not associated with an erosion control structure)</li> <li>• Header tile systems</li> <li>• Tile outlet structures associated with new tile drainage installations</li> <li>• Retrieving topsoil from areas of deposition and transporting it upslope to eroded hillsides</li> <li>• Construction and land improvement activities not associated with soil erosion control</li> </ul>	<p><b>Water Quality/ Soil Quality</b></p> <ul style="list-style-type: none"> <li>• reduce soil erosion by water</li> <li>• to remove surface water at a non-erosive velocity</li> <li>• to reduce sediment content in runoff water</li> <li>• to reduce peak runoff rates to installations downstream</li> <li>• to improve water quality</li> <li>• diversity and cover for wildlife</li> <li>• restore a natural channel form</li> <li>• reduce velocity and the erosive force of runoff water</li> <li>• improved infiltration of concentrated water flow through waterways</li> <li>• reduce storm runoff flow rates</li> <li>• trap sediments</li> </ul>	

Category Code / Cost Share / Funding Cap	BMP Category	Practice Code (Individual Cost Share & Funding Cap)	Eligible BMPs and Costs	Ineligible BMPs and Costs	Benefits	Linkages to other plans or actions e.g., need for Nutrient Management Plan
		1102 60% \$20K	<b>Engineering design work.</b> This practice code will stand alone if project does not proceed for economic, technical or environmental reasons (e.g., CEAA)			
12	Erosion Control Structures (Non Riparian)		Category Dropped			
13	Erosion Control Land Management (soils at risk)		Category Dropped			
14	Improved Cropping Systems		Category Dropped		<ul style="list-style-type: none"> <li>All items available in other categories mainly covered by Cat. 33</li> </ul>	
15	Winter Cover Crops		Category Dropped			
16 30% \$2.5K	Improved Pest Management	1601	<b>Equipment modification for improved application</b> A. Tower sprayers: Funding may can be provided for the additional incremental costs of converting an existing sprayer into a tower sprayer or of purchasing a new tower sprayer B. Tillage equipment: The incremental costs to modify conventional tillage equipment for the purposes for reducing pesticide are eligible for funding. C. Orchard tillage equipment: 50% of the value of a "Weed Badger" or like piece of equipment is eligible for funding to a maximum of \$1200 from the program.	<ul style="list-style-type: none"> <li>Common pest management practices: Pest management practices common to the industry and well understood will not be funded.</li> <li>Non-wildlife pests: Funding will not be provided to assist with the control of non-wildlife, pest species that are commonly found on farms and ranches in British Columbia.</li> <li>P. ramorum: Any projects related to control of P. Ramorum must be based on a revised or new Integrated Pest Management Plan that deals with all pest issues on the farm.</li> <li>Implementing practices from a revised IPM plan: One year of funding can be provided to assist producers to become familiar with new IPM practices identified in a revised IPM plan.</li> </ul>	<b>Water Quality/ Biodiversity</b> <ul style="list-style-type: none"> <li>Minimize human exposure to chemical pesticides in food and the environment</li> <li>Reduced risk of contamination of water, soil, air, and habitat</li> <li>Reduced risk of increasing pest resistance to chemical pesticides</li> <li>Reduced risk of chemical pesticides harming non-target or beneficial organisms</li> </ul>	Integrated Pest Management plan will be required
		1602	<b>Information collection and monitoring</b>			
		1603	<b>Biological control agents</b> <ul style="list-style-type: none"> <li>IPM practices: Where uses of IPM practices are new to the producer, one year of funding can be provided to assist producers to become familiar with these techniques in accordance with an IPM plan.</li> <li>IPM Plan must be in place.</li> </ul>			
		1604	<b>Cultural control practices</b>			

Category Code / Cost Share / Funding Cap	BMP Category	Practice Code (individual Cost Share & Funding Cap)	Eligible BMPs and Costs	Ineligible BMPs and Costs	Benefits	Linkages to other plans or actions e.g., need for Nutrient Management Plan
17 30% \$20K	Nutrient Recovery from Waste Water	1701	<b>Recycling of waste water</b> streams from milkhouses, fruit and vegetable washing facilities, and greenhouses in order to recover nutrients		<b>Water Quality/ Water Amount</b> <ul style="list-style-type: none"> <li>Reduced risk of contamination of surface and groundwater from the effluent from agricultural production facilities</li> </ul>	NMP required for selected sectors
		1702	<b>Engineering design work.</b> This practice code will stand alone if project does not proceed for economic, technical or environmental reasons (e.g., CEAA)			
18	Irrigation Management  <b>Entire Category is to be capped as follows: Total of \$500,000 to be allocated – \$150,000 for Lower Mainland and Vancouver Island and \$350,000 for BC Interior</b>	1801  30%  Cap - \$5K	<b>Irrigation equipment modification/ improvement to increase water and nutrient use efficiency.</b> <ul style="list-style-type: none"> <li>Drip Irrigation lateral lines, emitters and filters</li> <li>Controllers, electric valves and low voltage wiring to valves</li> <li>Injection equipment for system treatment or fertilizer injection</li> <li>Conversion of existing systems to high efficiency low pressure center pivot systems.</li> <li>Irrigation scheduling equipment such as soil moisture sensors.</li> <li>System must be replacing an existing irrigation system, new systems are not eligible.</li> <li>An efficiency increase of 15% must be identified in the certified plan.</li> <li>Injection and irrigation scheduling equipment are eligible only if part of a system efficiency upgrade funded by the program.</li> </ul>	<ul style="list-style-type: none"> <li>Mainlines and sub main piping</li> <li>Pumps, electrical panels and supply unless eligible under practice code 1803.</li> <li>Installation costs of equipment</li> <li>In kind services by applicant</li> <li>Wires and posts for hanging drip irrigation lines</li> </ul>	<b>Water Amount/ Water Quality/ Climate Change Mitigation/ Climate Change Adaption</b> <ul style="list-style-type: none"> <li>Increasing irrigation system efficiency and implementing irrigation scheduling and climate monitoring will support the commitment made by the province's Living Water Smart plan for the agriculture industry to become more efficient</li> <li>Reducing water use will reduce impacts on streams</li> <li>Fertilizer injectors improve efficiency and reduce loss of nutrients into groundwater and streams</li> </ul>	Certified irrigation plan required for all applications under this category. Cost of plan is eligible under category 29
		1802  50%  Cap - \$2K	<b>Climate stations or improved irrigation management</b> <ul style="list-style-type: none"> <li>Weather station</li> <li>Data transmission unit by either cell or satellite</li> <li>Climate station must be connected to the Farmwest web site</li> <li>Funding for 50% of annual data transmission costs is eligible for farmers from the BCAC irrigation management escrow funds</li> <li>Preference will be given to areas not currently serviced</li> </ul>	<ul style="list-style-type: none"> <li>Labour is not eligible.</li> </ul>	<b>Water Amount/ Climate Change Adaption</b> <ul style="list-style-type: none"> <li>Providing climate data for regions that currently do not have adequate climate data available will be useful to all producers in the region</li> <li>Posting data on Farmwest website will allow irrigation scheduling calculator to access data</li> </ul>	

Category Code / Cost Share / Funding Cap	BMP Category	Practice Code (Individual Cost Share & Funding Cap)	Eligible BMPs and Costs	Ineligible BMPs and Costs	Benefits	Linkages to other plans or actions e.g., need for Nutrient Management Plan
			by weather stations connected to the Farmwest website			
19	Buffer, Hedgerow and Shelterbelt Establishment  Applicants can choose to do either Practice Code 1901 or 1902 with cost share and cap being:  60%  \$15K	1901	<p><b>Establishment of shelterbelts:</b></p> <ul style="list-style-type: none"> <li>The desired outcome of the shelterbelt establishment must be identified in the plan and reflected in the proposed design and species mix.</li> <li>Shelterbelts must be multi-row (2 rows minimum).</li> <li>Three consecutive years of establishment costs for multi-row planting of tree and shrub shelterbelts may be eligible for approved projects. These costs could include pre-establishment site preparation, planting and up to two years of maintenance of the plantings. Project funds would end at the end of three years or the termination of the Growing Forward funding whichever comes first.</li> <li><b>In-kind valuation for establishing shelterbelts to be 100% of materials cost to a maximum of \$5.00 per metre (\$1.50 per foot) of shelterbelt.</b></li> </ul>	<ul style="list-style-type: none"> <li>Establishment of trees or shrubs that are intended for harvesting for economic benefit within 15 years such as fruit orchards, Christmas trees, ornamental nursery stock</li> <li>Block or plantation style plantings</li> <li>Buffer, hedgerow and shelterbelt renovations costs incurred after establishment, or the purchase and relocation of established trees</li> <li>Buffer, hedgerow and shelterbelt rejuvenation</li> <li>Landscaping type plantings</li> <li>Tree and shrub planting and establishment costs in excess of \$50 per tree exclusive of establishment costs, including in-kind</li> <li>Consultative service for suitable species, composition and maintenance not covered in 1901</li> </ul>	<p><b>Soil Quality/ Water Quality/ Air Quality/ Climate Change Mitigation/ Climate Change Adaption</b></p> <ul style="list-style-type: none"> <li>Improve water quality</li> <li>Capture run-off</li> <li>Protection soil from wind erosion</li> <li>Enhance snow trapping</li> <li>Micro climate enhancement,</li> <li>Odour, noise and dust mitigation</li> <li>Enhance biodiversity</li> <li>Improve habitat diversity and connectivity</li> <li>Protect structures</li> <li>Shelter livestock and crops</li> <li>Improve irrigation efficiencies</li> <li>Carbon sequestration</li> <li>Increases agricultural sequestration of ambient carbon dioxide (CO<sub>2</sub>) (as long as biomass in trees are kept constant)</li> <li>Reduces wind erosion</li> <li>Reduce dust and odour</li> <li>Reduce unsightliness (out-of-site-out-of-mind)</li> <li>Provides wildlife habitat and biodiversity</li> <li>Could generate revenue if integrated with the concept of agro-forestry</li> </ul>	
		1902	<p><b>Tree and shrub materials required for shelterbelt establishment</b></p> <ul style="list-style-type: none"> <li>Tree materials only for planting around fields and buildings</li> </ul>			
	Applicants can choose to do either Practice Code 1903 or 1904 with cost share and cap being:  60%	1903	<p><b>Establishment of buffers, and hedgerows:</b></p> <ul style="list-style-type: none"> <li>The desired outcome of the buffer or hedgerow establishment must be identified and reflected in the proposed design and species mix.</li> <li>Buffers and hedgerows can be single or multi-row.</li> <li>Three consecutive years of</li> </ul>			

Category Code / Cost Share / Funding Cap	BMP Category	Practice Code (individual Cost Share & Funding Cap)	Eligible BMPs and Costs	Ineligible BMPs and Costs	Benefits	Linkages to other plans or actions e.g., need for Nutrient Management Plan
	\$10K		<p>establishment costs for multi-row planting of tree and shrub buffer and hedgerow materials may be eligible for approved projects. These could include pre-establishment site preparation, planting and up to two years of maintenance of the plantings. Project funds would end at the end of three years or the termination of the Growing Forward funding whichever comes first.</p> <ul style="list-style-type: none"> <li><b>In-kind valuation for establishing buffers and hedgerows to be 100% of materials cost to a maximum of \$5.00 per metre (\$1.50 per foot) of buffer or hedgerow.</b></li> </ul>			
		1904	<p><b>Tree and shrub materials required for buffer, and hedgerow establishment</b></p> <ul style="list-style-type: none"> <li>Tree materials only for plantings.</li> </ul>			
20	Alien Invasive Species Control		Category Dropped			
21	Enhancing Wildlife Habitat and Biodiversity		Category Dropped			
22	Species at Risk		Category Dropped			
23	Preventing Wildlife Damage		Category Dropped			
24	Nutrient Management Planning (NMP)	<p>2401 100% for first \$1K</p> <p>50% to remainder to a maximum of \$1.5K from the program</p>	<p><b>Consultative services to develop nutrient management plans, planning and decision support tools</b></p> <ul style="list-style-type: none"> <li>maximum of \$250 can be used for one time manure, soil or compost analysis as part of the eligible costs of the nutrient management plan (on the condition that raw nutrient data – free of farm identification – will be collected for environmental health indicators reporting purposes)</li> <li>producers may be eligible for a second nutrient management plan at 50% of the original BMP funding</li> </ul>		<p><b>Water Quality/ Soil Quality/ Climate Change Mitigation</b></p> <ul style="list-style-type: none"> <li>Minimized risk of water pollution by loss of nitrogen or phosphorus via runoff or leaching</li> <li>Minimized risk of air pollution by loss nitrogen as ammonia or N<sub>2</sub>O</li> <li>Advice to supply crops with nutrients at the appropriate rate, timing and with appropriate methods for optimal crop yield and quality</li> </ul>	Linked to BMPs for soil/manure

Category Code / Cost Share / Funding Cap	BMP Category	Practice Code (Individual Cost Share & Funding Cap)	Eligible BMPs and Costs	Ineligible BMPs and Costs	Benefits	Linkages to other plans or actions e.g., need for Nutrient Management Plan
			in a subsequent year, subject to sign-off of adequate record keeping on the original plan and availability of funds			
25	Integrated Pest Management Planning	2501 50% \$2K	<b>Consultative services to develop integrated pest management plans, planning and decision support tools</b>		<b>Water Quality/ Biodiversity</b> <ul style="list-style-type: none"> <li>Minimize human exposure to chemical pesticides in food and the environment</li> <li>Reduced risk of contamination of water, soil, air, and habitat</li> <li>Reduced risk of increasing pest resistance to chemical pesticides</li> <li>Reduced risk of chemical pesticides harming non-target or beneficial organisms</li> </ul>	
26	Grazing Management Planning	2601 100% for first \$1K 50% to remainder to a maximum of \$1.5K from the program	<b>Consultative services to develop range and grazing management plans, planning and decision support tools</b>		<b>Water Quality/ Climate Change Mitigation/ Climate Change Adaption/ Biodiversity/ Soil Quality</b> <ul style="list-style-type: none"> <li>Supports diverse plant communities, sensitive species,</li> <li>Protect water and soil quality.</li> <li>Maintenance or improvement of vegetation and animal production parameters.</li> <li>Improved range condition,</li> <li>Increased animal production,</li> <li>Increased length of the grazing season</li> <li>Improved wildlife habitats.</li> </ul>	
27	Soil Erosion Control Planning		Category Dropped			
28	Biodiversity Enhancement Planning		Category Dropped			
29	Irrigation Management Planning	2901 100% for first \$500 50% to maximum of \$1K from the program	<b>Consultative services for preparing certified irrigation plans.</b> <ul style="list-style-type: none"> <li>Site investigation, plan and quote preparation</li> <li>Site inspection upon job completion</li> <li>Certified designer must sign and seal each plan for project to be eligible to program.</li> <li>Certified designer must inspect project after</li> </ul>		<b>Water Amount/ Water Quality/ Climate Change Adaption</b> <ul style="list-style-type: none"> <li>Developing a certified irrigation plan for all projects under Category 18 will help to ensure that systems are efficient and designed correctly</li> <li>A system for project inspection and completion can be initiated using certified designers</li> </ul>	Linked to Category 18. All projects except 1802 require certified plans.

Category Code / Cost Share / Funding Cap	BMP Category	Practice Code (Individual Cost Share & Funding Cap)	Eligible BMPs and Costs	Ineligible BMPs and Costs	Benefits	Linkages to other plans or actions e.g., need for Nutrient Management Plan
			<p>completion and send a signed completion form to program before payment for plan preparation and project costs are made.</p> <ul style="list-style-type: none"> <li>An invoice from Certified Irrigation Designer must be submitted to producer outlining services.</li> </ul>			
		2902  50%  \$2K	<p><b>Water Management Planning</b></p> <ul style="list-style-type: none"> <li>consultative services for water management planning to deal with issues arising from excess water (including mapping of existing subsurface drainage systems).</li> </ul>		<ul style="list-style-type: none"> <li>Guidance for this BMP can be derived from the EFP Drainage Management Guide</li> </ul>	
30	Riparian Health Assessment / Riparian Management Plan	3001  100% for first \$1K  50% of the remainder to a maximum of \$1.5K from the program	<p><b>Consultant fees to conduct riparian health assessment &amp; produce report for farmer with BMP recommendations that include a design layout, species list and maintenance protocols.</b></p> <ul style="list-style-type: none"> <li>Planning and decision support tools (e.g. computer software, aerial photos).</li> <li>Maps and land resource information costs.</li> <li>Data collection, materials and sampling and analysis costs by consultant.</li> <li>Design work by consultant for water course and wetland areas and riparian buffer strip projects</li> <li>Report preparation by consultant.</li> <li>Plan review with producer</li> </ul>	<ul style="list-style-type: none"> <li>Time, effort and travel by the Producer</li> <li>Professional services not directly related to riparian health assessment and buffer strip planning</li> <li>Field-specific agronomic practices (e.g. variable rate application of crop inputs)</li> <li>Costs associated with developing engineer reports for drainage projects.</li> </ul>	<p><b>Water Quality/ Soil Quality/ Biodiversity/Climate Change Mitigation/ Climate Change Adaption</b></p> <ul style="list-style-type: none"> <li>Ecological measuring stick to assess the impact of past and current riparian management practices</li> <li>Baseline from which recommendations for new BMPs to improve riparian health can be developed</li> <li>Evaluate the effectiveness of riparian BMPs in improving riparian health and water quality</li> </ul>	Linked to BMP 10 and 11
31	Methane (CH <sub>4</sub> ) Emission Reduction  Projects must reduce methane emissions from agricultural operations by prevention, suppression or combustion of carbon dioxide.	3101-1  30%  \$30K	<p><b>Covered manure storage</b></p> <ul style="list-style-type: none"> <li>Floating contact cover (whole sheet)</li> <li>Floating contact cover (aggregated sections – rain water cannot be collected)</li> <li>Water collection system and pumps</li> <li>Assessment, design and construction costs are eligible</li> </ul>	<ul style="list-style-type: none"> <li>Roof structures that do not ensure a sealed headspace above the manure or direct contact between the cover and the manure</li> <li>Storage structures for manure and other agricultural wastes</li> <li>Rain water collection systems or pumps or parts of a larger system that are not directly associated with the manure storage</li> </ul>	<p><b>Climate Change Mitigation</b></p> <ul style="list-style-type: none"> <li>Suppresses methane production (by limiting exchange with free air and thereby moving biochemical equilibrium towards less methane generation)</li> </ul> <p><b>Air Quality</b></p> <ul style="list-style-type: none"> <li>Reduces ammonia emission from storage of manure (still need to follow through with improved application technique to realize full ammonia reduction).</li> <li>Reduces odour from</li> </ul>	

Category Code / Cost Share / Funding Cap	BMP Category	Practice Code (Individual Cost Share & Funding Cap)	Eligible BMPs and Costs	Ineligible BMPs and Costs	Benefits	Linkages to other plans or actions e.g., need for Nutrient Management Plan
				cover	storage of manure (odour reduction is approximately equal to % surface area covered)	
		3101-2 30% \$70K  <b>The total funding available for this entire sub-category is to be capped at \$280K for 2010/2011</b>	<b>Covered manure storage in combination with methane collection and renewable energy production from collected methane</b> <ul style="list-style-type: none"> <li>Sealed cover (tent-like structure or self inflated dome or lid) for anaerobic reactors</li> <li>Floating contact cover (whole sheet) for liquid digester effluent storage</li> <li>Infrastructure related to pasteurization of applicable imported non-agricultural feedstock</li> <li>Methane utilization infrastructure such as biogas boilers, co-gen/micro turbine or biogas clean-up and upgrading equipment</li> <li>Heat exchange system to utilize heat radiated by methane utilization equipment</li> <li>Assessment, design and construction costs are eligible</li> <li>Consultant work related to acquisition of discharge permit under EMA and carbon offset verification and validation</li> </ul>	<ul style="list-style-type: none"> <li>Open flares</li> <li>Gas collection and conveyance systems or part of a system that is not directly associated with methane collection from the manure storage or anaerobic reactor tanks</li> <li>Any infrastructure on a legal property which is not assessed as a farm for tax purposes</li> <li>Practice code 3101-1 and 3101-2 are not stackable, meaning that applicants may only apply for one or the other</li> </ul>	<b>Climate Change Mitigation</b> <ul style="list-style-type: none"> <li>Prevents produced methane from escaping to atmosphere and moves the carbon from methane form to carbon dioxide form on a 1:1 basis through combustion (by creating a sealed headspace over the manure from which methane is collected for subsequent combustion through boilers, engines etc.. The conversion from methane to carbon dioxide represents a 23 fold reduction in greenhouse gas emissions)</li> </ul> <b>Air Quality</b> <ul style="list-style-type: none"> <li>Reduces ammonia emission from storage of manure (still need to follow through with improved application technique to realize full ammonia emission reduction)</li> <li>Reduces odour from storage of manure (odour reduction is approximately equal to % surface area covered). Increases storage capacity (if water is pumped off the cover or if the cover is built to shed rain water, e.g. a dome or "tent-like" structure)</li> </ul>	
		3102 30% \$20K	<b>Engineering design work.</b> This practice code will stand alone if project does not proceed for economic, technical or environmental reasons (e.g., CEAA)			
		3103	<b>Improved ruminant feed utilization</b> <ul style="list-style-type: none"> <li>No identified eligible items available in this category for 2010/2011</li> </ul>			

Category Code / Cost Share / Funding Cap	BMP Category	Practice Code (Individual Cost Share & Funding Cap)	Eligible BMPs and Costs	Ineligible BMPs and Costs	Benefits	Linkages to other plans or actions e.g., need for Nutrient Management Plan
32	Nitrous Oxide (N <sub>2</sub> O) Emission Reduction  Projects must reduce nitrous oxide emissions from agricultural operations by prevention or suppression	3201  50%  \$5K	<b>Improved drainage in corn and forage fields as proposed by a water management plan</b> <ul style="list-style-type: none"> <li>Additions to existing drainage systems</li> <li>Cleaning or repair of existing drainage systems</li> </ul>	<ul style="list-style-type: none"> <li>Drainage work on parcels not currently in intensive forage or corn production</li> </ul>	<b>Climate Change Mitigation</b> <ul style="list-style-type: none"> <li>Prevention of nitrous oxide (N<sub>2</sub>O) emissions (by avoiding nitrification conditions through reduction of time and/or area of water logged soils)</li> <li>Improved crop production conditions</li> </ul>	Water management plan (not an irrigation plan) refer to EFP Drainage Management Guide
		3202  30%  \$30K	<b>Precision farming applications that reduce input application and overlap</b> <ul style="list-style-type: none"> <li>GPS guidance systems</li> <li>On-line field mapping equipment</li> <li>On-line input application control systems guided by high resolution electronic field maps and GPS</li> </ul>	<ul style="list-style-type: none"> <li>Any precision farming applications in areas where field size and distribution, ditch layout and/or lay of land prevent significant utility form using GPS-guided equipment.</li> </ul>	<b>Climate Change Mitigation</b> <ul style="list-style-type: none"> <li>Reduces nitrous oxide (N<sub>2</sub>O) emissions as a result of reduced overlap and higher dosing precision when applying inputs such as fertilizer</li> <li>Reduces agricultural carbon dioxide (CO<sub>2</sub>) emissions (by reducing the use of fossil fuel)</li> <li>Decreased operating costs and less dependence on highly volatile input prices</li> </ul>	
33	Carbon Dioxide (CO <sub>2</sub> ) Emission Reduction  Projects must either reduce agricultural carbon dioxide emissions or reduce the concentration of CO <sub>2</sub> in the atmosphere or offset carbon dioxide emissions from other sectors	3301	<b>Consultative services for energy efficiency</b> <ul style="list-style-type: none"> <li>No identified eligible items available in this category for 2010/2011</li> </ul>			
		3302 - 1  30%  \$10,000	<b>Replacement of fossil-fuel-driven motors with electrical motors</b> <ul style="list-style-type: none"> <li>High efficiency electrical motors</li> <li>Motors must be rated as energy efficient following "Canada's Energy Efficiency Regulations for Electric Motors"</li> <li>Electrical motors to drive existing PTO equipment and other farm machinery</li> <li>Starters, switch gear and equipment required for connection to electrical grid</li> </ul> <b>Additional eligible items for irrigation motors:</b> <ul style="list-style-type: none"> <li>High efficient pumping systems</li> <li>Certified designer has to sign off on pump efficiency.</li> <li>Higher efficiency pump is only applicable if a high efficiency electric motor is also purchased. Pump must be matched to irrigation system</li> </ul>	<ul style="list-style-type: none"> <li>Replacement or upgrading of already existing electrical motors</li> <li>Motors not rated as energy efficient following Canada's Energy Efficiency Regulations for Electric Motors</li> <li>Motor supports and shed not eligible</li> <li>Labour for pumps and motor are not eligible</li> </ul>	<b>Climate Change Mitigation</b> <ul style="list-style-type: none"> <li>Reduces agricultural carbon dioxide emissions by reducing the use of fossil fuel and replacing with electricity</li> <li>Decreases operating costs and dependence on highly volatile diesel prices</li> <li>High efficiency motors will reduce energy consumption</li> </ul>	For 2010/2011, a project energy worksheet will be required.  An energy assessment (3301) will be required after March 31, 2011.  A certified irrigation plan will be required for irrigation motors under this category. Cost of plan is eligible under Category 29

Category Code / Cost Share / Funding Cap	BMP Category	Practice Code (Individual Cost Share & Funding Cap)	Eligible BMPs and Costs	Ineligible BMPs and Costs	Benefits	Linkages to other plans or actions e.g., need for Nutrient Management Plan
			specifications as outlined in the certified irrigation plan.			
		3302-2 30% \$10,000	<b>Power line extension for replacement of fossil-fuel driven motors with electrical motors</b> <ul style="list-style-type: none"> <li>On farm power line extension to supply high efficient electric motors.</li> <li>Projects eligible only if linked to an eligible project under Practice Code 3302-1</li> </ul>	<ul style="list-style-type: none"> <li>Funding of power line is only eligible as part of costs to convert to electric from a fossil fuel motor</li> </ul>		
		3303 30% \$30,000	<b>Alternative energy technology (Wind, Solar, &amp; On Farm Hydro) for powering previously fossil-fuel dependant farm equipment and replacement of diesel generators</b> <ul style="list-style-type: none"> <li>Wind turbines</li> <li>Photovoltaic solar panels</li> <li>Batteries</li> <li>Electrical conveyance and connection infrastructure</li> <li>Assessment</li> <li>Design</li> <li>Construction</li> <li>On- farm hydro production</li> </ul>	<ul style="list-style-type: none"> <li>Projects that will not be replacing fossil-fuel dependant farm activities</li> </ul>	<b>Climate Change Mitigation</b> <ul style="list-style-type: none"> <li>Reduces agricultural carbon dioxide (CO<sub>2</sub>) emissions by reducing fossil fuel use through enabling electrical power in remote areas without grid access</li> <li>Decreases operating costs and dependence on highly volatile diesel prices</li> </ul>	<p>For 2010/2011, a project energy worksheet will be required.</p> <p>An energy assessment (3301) will be required after March 31, 2011</p>
		3304 30% \$50K	<b>Replacement of fossil-fuel dependant space heating with renewable heating</b> <ul style="list-style-type: none"> <li>Solarthermal infrastructure</li> <li>Geothermal infrastructure</li> <li>Heat pumps</li> <li>Biomass boilers</li> <li>Heat exchangers and heat conveyance infrastructure</li> <li>Warm water tanks</li> <li>Assessment, design and construction costs are eligible</li> </ul>	<ul style="list-style-type: none"> <li>Warm water tanks, heat exchange and heat conveyance infrastructure that will not be connected to a new renewable heat source</li> </ul>	<b>Climate Change Mitigation</b> <ul style="list-style-type: none"> <li>Reduces agricultural carbon dioxide (CO<sub>2</sub>) emissions by reducing fossil fuel use</li> <li>Decreased operating costs and less dependence on highly volatile diesel prices</li> </ul>	<p>For 2010/2011, a project energy worksheet will be required.</p> <p>An energy assessment (3301) will be required after March 31, 2011</p>
		3305 30% \$30K	<b>Equipment for no-till/reduced tillage</b> <ul style="list-style-type: none"> <li>Direct seeding equipment</li> <li>Seed drills</li> <li>No-till retrofit kits</li> <li>Consultation for efficient no-till management</li> <li>Zero-till equipment: 50% of the value of a zero-till drill is eligible for funding assistance. Program policy is that 50% of the cost of a zero-till drill is eligible for</li> </ul>	<ul style="list-style-type: none"> <li>Equipment for no-till/reduced tillage in regions that already have significant uptake or where significant sequestration is unlikely</li> <li>Larger tractors to pull high draught implements</li> <li>Replacing or renewing already existing direct</li> </ul>	<b>Climate Change Mitigation</b> <ul style="list-style-type: none"> <li>Reduces agricultural carbon dioxide (CO<sub>2</sub>) emissions by conserving soil organic matter</li> <li>Increases agricultural sequestration of ambient carbon dioxide (CO<sub>2</sub>) (if maintained under no-till regime)</li> </ul>	

Category Code / Cost Share / Funding Cap	BMP Category	Practice Code (individual Cost Share & Funding Cap)	Eligible BMPs and Costs	Ineligible BMPs and Costs	Benefits	Linkages to other plans or actions e.g., need for Nutrient Management Plan
			assistance. Of that amount, the program can provide a maximum of 30% of the funding.	<ul style="list-style-type: none"> <li>seeding equipment</li> <li>chaff collectors and chaff spreaders installed on combines</li> </ul>		
		3307 30% \$30K	<b>Thermal energy efficiency improvements that increase insulation</b> <ul style="list-style-type: none"> <li>Thermal curtains and other dividers</li> <li>Improved insulation</li> <li>Management optimization systems</li> <li>High priority items as specified in an energy conservation plan developed under Category 3301</li> </ul>	<ul style="list-style-type: none"> <li>Thermal dividers and insulation for structures that are not directly related to agricultural production</li> </ul>	<b>Climate Change Mitigation</b> <ul style="list-style-type: none"> <li>Reduces agricultural carbon dioxide (CO<sub>2</sub>) emissions by reducing fossil fuel use</li> <li>Decreased operating costs</li> </ul>	<p>For 2010/2011, a project energy worksheet will be required.</p> <p>An energy assessment (3301) will be required after March 31, 2011</p>
		3308 30% \$10K	<b>Lighting efficiency improvements</b> <ul style="list-style-type: none"> <li>Low energy lighting equipment</li> <li>High priority items as specified in an energy conservation plan developed under BMP 3301</li> </ul>	<ul style="list-style-type: none"> <li>Low energy lighting equipment for structures that are not directly related to agricultural production</li> </ul>	<b>Climate Change Mitigation</b> <ul style="list-style-type: none"> <li>Reduces agricultural carbon dioxide (CO<sub>2</sub>) emissions by reducing the use of electricity (BC is about 90% carbon neutral but with the increased need for more electricity in the future, it is possible that the proportion of carbon dioxide (CO<sub>2</sub>) emitting electricity production will go up)</li> </ul>	<p>For 2010/2011, a lighting worksheet will be required.</p> <p>An energy assessment (3301) will be required after March 31, 2011.</p>
		3309 30% \$30K	<b>Engineering design work.</b> This practice code will stand alone if project does not proceed for economic, technical or environmental reasons (e.g., CEAA)			