



# South Sask River Watershed Agri-Environmental Group Plan

Spring 2017

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**CONTACT US TODAY!**

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## What's the Big Deal with Winter Spreading of Manure?

Adapted from article by Randy Pepin with University of Minnesota

Manure provides an excellent source of many nutrients essential for crop growth. There are two major considerations with winter spreading of manure: environment and economics. Phosphorus and nitrogen are two major nutrients in manure that can have negative effects in the environment when in excess.

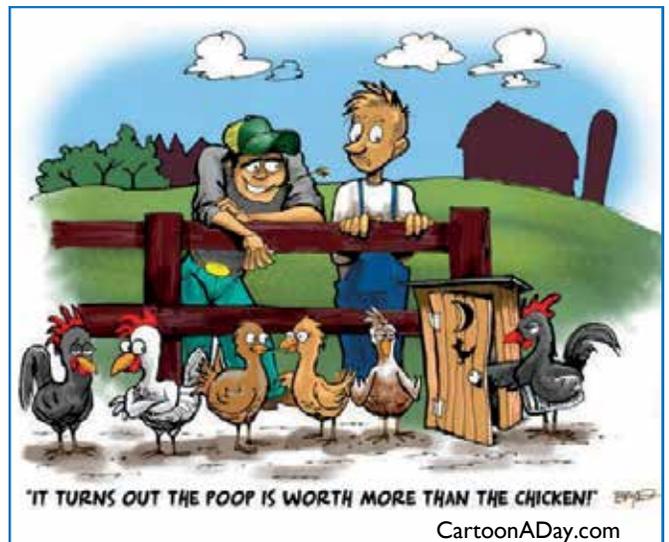
Excess phosphorus entering lakes, rivers and streams contributes toward rapid growth of plant life (algae bloom). This excess plant life eventually dies, and the decaying material causes an oxygen shortage for desirable fish and plant life. A high percentage of the phosphorus in manure is soluble, and when quickly incorporated into the soil this phosphorus rapidly attaches to the soil. Once attached, it will essentially only leave the field by plant uptake or with the soil through erosion. When soluble phosphorus is allowed to remain on top of the soil, a snowmelt or rain event allows this phosphorus to dissolve with the water and potentially run-off into the environment. Frozen ground, ice and deep hard packed snow increase the runoff risk.

When manure is left on the soil surface, most of the nitrogen in ammonia form is lost. Many of the organic nitrogen compounds are soluble in water and are subject to spring runoff or a rain event. In general, faster and better manure incorporation means higher

nitrogen availability for crops. Studies show up to 40% of total N maybe lost when incorporation does not occur. It comes down to the tradeoff between applying manure in winter to possibly save time in the spring or save construction expenses of a long term manure storage structure. Incorporating manure into the soil immediately upon applying or within 12 hours produces maximum economic return from the manure nutrients and protects the environment.

Increases in fertilizer prices make the nutrients in manure very valuable; application of manure on frozen ground almost guarantees economic loss on the value of manure while also jeopardizing the environment.

Under the **Farm Stewardship Program** there is 30% cost shared funding for **Manure Storage Enhancements** and **Manure Application Equipment and Technologies**. Contact your local AEGP technician for details.



## Wetlands: Part of the Carbon Solution - Greenhouse Gas Storage and More

Michael Champion, PAg Head of Industry and Government Relations, Sk, Ducks Unlimited Canada

In the current round of discussion regarding carbon taxes, caps and credits, carbon storage, greenhouse gas (GHG) emissions and GHG storage or sinks, there has been little to no mention of the role that wetlands play in the fight against climate change. Although the calculations are complex, and research is ongoing with respect to carbon sequestration and storage in prairie wetlands, there is agreement that wetland drainage results in the loss of significant amounts of carbon that had been accumulating in wetlands for centuries, if not millennia. Preserving existing wetlands keeps carbon out of the atmosphere in the amount of up to 89 tonnes per hectare. The unmitigated loss of 4,000 hectares of wetlands each year is not sustainable.

In addition to carbon storage, wetlands provide several other environmental advantages such as flood mitigation and regulation of water flows. Wetlands also have a cooling and humidifying effect on regional climate and therefore help moderate the impact of climate change. They are equally important in ensuring that non-point source pollution does not end up downstream. Wetlands offer habitat for species of wildlife, including many rare and endangered animals. Livestock producers can benefit as well from the water resources wetlands supply. Lastly, wetlands provide numerous recreational opportunities for outdoor enthusiasts.

Wetlands are critical to the future health and sustainability of our province's environment and economy. When you consider all the advantages of wetlands, including the recreational and aesthetic values to the public, you have a very impressive list of reasons why the retention and restoration of wetlands makes sense.

Under the **Farm Stewardship Program** there is 50% cost shared funding to help protect riparian areas under the **Riparian Area Grazing Management and Fencing BMP** and **Seeding High Risk Erodible and Saline Soils** (including buffer strips) **BMP**. There is 75% cost shared funding for **Natural Waterway Erosion Control**. For information contact your local AEGP technician.



Photo Credit: Tara Mulhern Davidson

### Farm and Ranch Water Infrastructure Program

To develop sustainable non-potable water supplies for agriculture use on farm

#### Eligible Projects:

Small and large diameter on-farm wells	Shallow buried pasture pipelines
Deep buried pipelines	Dugouts and dugout expansions
Protecting existing wells	Decommissioning wells
Relocation of existing livestock water systems for environmental purpose	
Up to 50% cost-shared funding (90% for well decommissioning)	
is available for eligible producers and projects	

**Growing Forward 2** will be ending in **2018!**

**Farm and Ranch Water Infrastructure Program applications must be in by August 1, 2017 and all claims must be in by February 15, 2018.**

## Upcoming Events

### Ministry of Ag Events

[www.Saskatchewan.ca](http://www.Saskatchewan.ca)  
Search  
*agriculture events calendar*

## AEGP Events

**Interested in water well decommissioning? We can put on a field day to explain the process.**

**Interested in pasture management? We can do a health assessment and pasture tour.**

**Are invasive weeds a problem in your area? We can do a weed ID and management tour.**

**Saline soils becoming more of a problem? Would you be interested in a workshop?**

## Webinars

**Prairie's Got the Goods**  
[youtube.com/user/skpcap](https://youtube.com/user/skpcap)

**Beef Cattle Research Council**  
[beefresearch.ca/resources/webinars.cfm](http://beefresearch.ca/resources/webinars.cfm)

**Ministry of Agriculture**  
[www.Saskatchewan.ca](http://www.Saskatchewan.ca)  
Search *agriculture webinars*

## Water Security Agency: When Do I Need Approval?

Adapted from information found on Water Security Agency website

The *Water Security Agency Act* requires that a Water Rights Licence be obtained for the right to use surface or ground water. Approvals are also required to construct and operate works which convey water. Approvals must be obtained **prior** to construction. Some **domestic purpose** water use projects may be exempt from requiring an approval.

**Domestic Purpose:** Household and sanitary purposes, the watering of stock, the spraying of crops, the watering of non-commercial lawns and gardens adjoining private residences. Domestic use does not include the sale or barter of water for any purpose.

### **Domestic uses that are exempt from Approvals/Licence:**

A person owning or occupying land that adjoins a surface water body may use water for domestic purposes providing there are no constructed diversion works (taking, removal, or impoundment of water).

A dugout combined with a pump or other apparatus to fill storage vessels constructed for domestic purposes is not considered to be a work requiring approval, providing diversion will not be greater than 5000 cubic metres/yr.

A person owning or occupying land may use up to 5000 cubic metres per year of ground water beneath the land for domestic use.

### **Approval/Licence will be required for projects which:**

Contain works (dams, dykes, ditches, etc.)

Consist of a dugout with a capacity greater than 5000 cubic metres

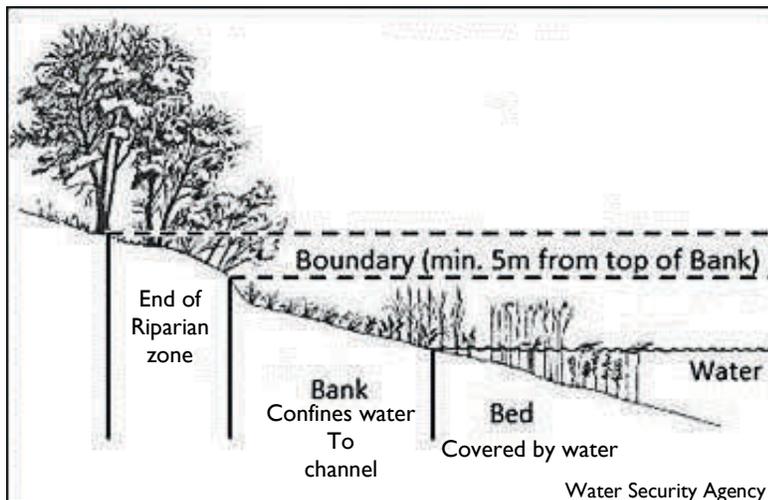
Consist of a dugout with a capacity less than 5000 m<sup>3</sup> containing works

Include pipelines that cross road allowances, property, quarter section lines

Water use exceeds 5000 cubic metres per year

### **Aquatic Habitat Protection Permit:**

The primary goal of the Aquatic Habitat Protection Program is to ensure aquatic habitat is preserved and maintained at the productive level which existed prior to the development. Any work that occurs in the bed, bank or boundary of a water body or watercourse, or any discharge with adverse effects on water requires that an **Aquatic Habitat Protection Permit** is obtained **prior** to beginning work.



Your regional Water Security Agency office can help you with questions regarding water projects you may be considering. Before you start work call the Swift Current office at 306-778-8257, the North Battleford office at 306-446-7450 or visit [www.wsask.ca](http://www.wsask.ca).

The **South Saskatchewan River Agri-Environmental Group Plan** is a producer based group dedicated to raising watershed awareness among local area farmers and ranchers. Producers within the boundaries of the South Sask River Watershed are able to access the **Canada-Saskatchewan Farm Stewardship Program**.

The CSFSP provides **cost-shared funding** to encourage the implementation of **Beneficial Management Practices**. The BMPs help address issues of water quality, nutrient management and soil erosion within the watershed.



## Website Links

**SouthSask River Watershed Stewards**

[www.southsaskriverstewards.ca](http://www.southsaskriverstewards.ca)

**Sask Ministry of Agriculture**

[www.saskatchewan.ca](http://www.saskatchewan.ca)

Search *Ministry of Agriculture*

**Water Security Agency**

[www.wsask.ca](http://www.wsask.ca)

**Sask Forage Council**

[www.saskforage.ca](http://www.saskforage.ca)

**Sask Invasive Species Council**

[www.saskinvasives.ca](http://www.saskinvasives.ca)

**Prairie Conservation Action Plan**

(PCAP) [www.pcap-sk.org](http://www.pcap-sk.org)

**iMapInvasives**

<http://imapinvasives.org/skimi>

**Growing Forward 2  
will be ending in 2018!**

### **Farm Stewardship Program**

**Pre-approval applications  
must be in by June 30, 2017**  
and all claims must be in by  
January 31, 2018.

### **Premise ID**

The provincial Government announced changes to the Premises Identification (PID) program, a key traceability tool to plan for, control and prevent the spread of animal diseases and to respond to other emergencies.

Participation in the PID program will now be a requirement for Saskatchewan producers.

Over the coming months, Sask Ministry of Agriculture livestock programs will begin requiring applicants have a PID number to participate.

**Ducks Unlimited** has funding available for **forage seeding** and for **perimeter fencing**.

Land must be within DUC's critical waterfowl nesting areas. Contact your regional DU office or AEGP technician for details.

## **Farm Stewardship Program**

<b>Beneficial Management</b>	<b>Funding Level</b>	<b>Pre-Approval/</b>
<b>Livestock Site Management</b>		
Relocation of Livestock Confinement*	60% to \$50,000	Pre-Approval
Fencing to Protect Surface Water*	50% to \$10,000	Rebate
Farmyard Runoff Control*	50% to \$30,000	Pre-Approval
Riparian Area Grazing Management and Fencing*	50% to \$10,000	Pre-Approval
Native Rangeland Grazing Management*	50% to \$10,000	Pre-Approval
Carcass Disposal Plans	75% to \$30,000	Pre-Approval
<b>Manure Management</b>		
Manure Storage Enhancements	30% to \$50,000	Pre-Approval
Manure Application Equipment and Technologies	30% to \$30,000	Rebate
<b>Land Management</b>		
Natural Waterway Erosion Control*	75% to \$30,000	Pre-Approval
Creek and Stream Crossing*	50% to \$20,000	Pre-Approval
Native Plant Establishment*	75% to \$10,000	Pre-Approval
Protecting High Risk Erodible and Saline Soils*	50% to \$10,000	Rebate
Shelterbelt Establishment	\$1200/mile to \$5,000	Rebate
Water Flow and Erosion Control*	50% to \$20,000	Pre-Approval
Weather Data Collection & Monitoring	50% to \$1,000	Rebate
<b>Irrigation Management</b>		
Irrigation Management Planning	50% to \$2,000	Rebate
Irrigation Equipment Modification	30% to \$50,000	Pre-Approval
Variable Rate Irrigation Technology	30% to \$15,000	Pre-Approval
Irrigation Efficiency	40% to \$25,000	Pre-Approval
<b>Precision Farming</b>		
Variable Fertilizer Equipment	30% to \$5,000	Rebate
Variable Rate Mapping	30% to \$2,000	Rebate
<b>Agricultural Wastes</b>		
Used Oil Storage	50% to \$2,000	Rebate
Plastic Grain Bag Roller	50% to \$5,000	Rebate
<b>Environmental Solutions</b>		
Environmental Solutions	20-50% of \$50,000	Pre-Approval

**\*Available through AEGP without EFP, all BMPs available with EFP**  
There is a Multi-Producer Erosion Control BMP. Contact AEGP tech for details.