## Farm stewardship program

The Farm Stewardship Program currently has 24 Beneficial application to be sent in before the producer can start their project. **I** Management Practices (BMP) to offer.

The beneficial management practices are broken down into 6 main categories such as; Irrigation Management, Land Management, Livestock Site Management, Manure Management, Agricultural Waste Management and Precision Farming. Each Beneficial Management Practices is designed to help the producer make the best management decisions for their operations.

Some of the Beneficial Management Practices require the producer to have and Environmental Farm Plan Certificate that has been endorsed within the past 10 years. Also some BMPs require a Pre-Approval

Each BMP has specific requirements that need to be followed so if you are thinking of completing a project that is one of the Beneficial Management Practices listed below please get in contact with on of the Upper Souris Watershed Associations (USWA) Technicians before you start to make sure that you are meeting all the requirements that are specific to each BMP.

Bruce Duncan: 306-421-9422 Brian Zohner: 306-421-6574 USWA Office: 306-634-7074

## Beneficial management practice available for funding through the farms stewardship program

Protecting High Risk Erodible and Saline Soils	
Plastic Grain Bag Roller BMP	
Fencing to Protect Surface Water	
Riparian Area Grazing Management and Fencing	
Native Rangeland Grazing Management and Fencing	
Creek and Stream Crossing	
Natural Waterway Erosion Control	
Variable Rate Fertilizer	

\* Equipment 2015 and newer granular air carts will not be eligible due to VR being a standard Feature

Variable Rate Mapping	
Shelterbelt Establishment	Maximum of \$1,200 per Mile
Multi-Producer Erosion Control	
Native Plant Establishment	75 per cent up to a maximum of \$10,000
Used Oil Storage	50 per cent up to a maximum of \$2,000
Manure Storage Enhancements	
Manure Application Equipment & Technologies	
Relocation of Livestock Confinement Facilities	60 per cent up to a maximum of \$50,000
Farmyard Run-Off Control	50 per cent up to a maximum of \$30,000
Carcass Disposal Planning	75 per cent up to a maximum of \$30,000
Environmental Solutions	20-50 per cent up to a maximum of \$50,000
Water Flow and Erosion Control	50 per cent up to a maximum of \$20,000
Weather Data Information Collection and Monitoring BMP	



Variable Rate Mapping



Plastic grain bag roller



Used oil storage tank



always.

### Mission statement

The Upper Souris Watershed Association, through collaborative planning and facilitating partnerships, will protect and improve water quality water quantity and the health of our watershed. To preserve the beauty, diversity and integrity of the watershed, we will raise awareness and understanding by promoting sustainable environmental, economic and cultural activities

### **Upper Souris** Watershed Association Box 1602 Estevan, SK

S4A 2L7 Phone: 306-634-7074 Fax: 306-634-7075 Email: d.pattyson@ sasktel.net









### **Upper Souris Watershed Association** WATER MATTER Fall 2016

## **Climate change and the Souris River basin**

rom a presentation to the Upper Souris Watershed Association at Oungre on November 16, 2015 Misunderstanding of the difference between weather and climate, or deliberate confusion about it, plagues the public discussion of climate change. How often have you heard someone say on a cold winter day, "well so much for global warming" or on a warm winter day, "how about this global warming"? While statements like this are usually meant to be funny, they make no logical sense because one day of weather tells us nothing about climate change. Climate is the weather we expect; not the weather we get. You can think of weather as someone's mood, and climate

as his or her personality, which is the mood they're in most often, but not

We shop for the climate and dress for the weather. Shopping for clothes in Saskatchewan requires more thought and effort than in a coastal or tropical climate where the weather is pretty much always the same. The southern Canadian Prairies has one of the most variable climates on earth. This variability is due to our location far from the oceans, which take heat from the air in summer and release it in winter. Besides extremes of temperature, we also get both excess and deficits of water, because we are far from the source of our water and sometimes the moist air masses that form over the ocean get to us and sometimes they don't. This variability from season to season and year to year makes it difficult for us to see climate change.



If climate is the weather we expect, then climate change is unexpected weather; but when get unusual weather how do know if it's climate change or just Saskatchewan's extremely variable climate? We'll know it's climate change if strange weather happens again and again and again - that is, if there's a trend. In other words, we need a lot of observations. Trends emerge if we collect data over large areas and long time intervals. Therefore, the strongest indication of climate change is weather data from all over the world since worldwide weather observation began in the 1880s. This information shows that average global temperatures have been rising. This past February was the 372nd consecutive month (more than 30 years) with temperatures above the 20th century average. Thus we call the current climate change global warming. But here in Saskatchewan, the large natural variabili-

ty in our climate obscures global warming trends; the strongest indication of climate change is a rise is our lowest temperatures. Our climate isn't becoming hotter warmer; it's mostly becoming a lot less cold. Below is a graph of minimum winter temperature at Regina from 1998 to 2013. There is a lot of difference between vears, but cold winters are much less common than they used to be (compare the two solid red lines).

This graph also shows that the winter we just had was the second warmest ever, with an average minimum of -12° C as compared to -17° in past 30 years, and -22° a hundred years ago. Was the winter 2016 the result of global warming? Probably, but only partly and we cannot say for sure because it was the weather of 2016 not the climate. However, we've had many warmer than average winters over the past 30 or 40 years and because a trend

> is developing we can say that it's an indication of climate change. You might wonder, if the planet is warming, then why was the warmest winter ever recorded at Regina in 1931 and not in the past 30-40 years? The answer is natural climatic variability. The circulation of the Pacific Ocean determines, to a large extent, the difference in our weather between years, especially in winter.

> The Pacific Ocean is 16 times larger than Canada (and 1/3 of the earth's surface) and the source of most of our water. As the ocean circulates, the warm and cold surface waters shift and thus so does the circulation of the overlying atmosphere. In 2015 a pool of water formed in the tropical Pacific off the coast of South America. This phase of the circulation of the Pacific Ocean is called El Niño. The cold phase is called La Niña. In western Canada we nearly always get warm dry winters in El Niño years like 1931 and

2016. Remember the long cold winter a few years ago and the flooding of 2011 (how could we forget?). That was during a La Niña.

### Long Creek, 1913-2013

The chart above of the annual spring flow of Long Creek over the past 100 years clearly show the hydrologic component of this large year-to-year climate variability. But also evident in this hydrograph are periods of one to several decades of consistently lower water levels (in pink) and intervening periods of higher flows. This decadal scale variability represents the influence of a longer cycle in the circulation of the Pacific Ocean. It is important that we recognize this Pacific Decadal Oscillation (PDO), because the chance of get too little or too much water is not random, it depends on the status of the PDO, and also whether or not there is an El Niño or La Niña.

Continued on Page 2 >



of –







## **STOP Aquatic Invasive Species**, such as Zebra Mussels

Every summer, many people come to enjoy Saskatchewan's out of water. Preferably let watercraft and equipment dry for at least 5 to 10 days in the hotter and dryer months. boating, or other water related activities, our provincial waters provide the province with many social, economic and environmental benefits.

Aquatic invasive species (AIS) represent an economic and ecological threat to aquatic habitats, fisheries, valuable recreational resources and water-related infrastructure. The confirmation of adult zebra mussels in Lake Winnipeg, Manitoba and its spread to other water bodies in that province has heightened concerns about the potential spread of aquatic invasive species across the western provinces and territories.

The primary method of AIS introduction and spread is the transport of watercraft and related gear over land. Once established, there is no viable method for eradicating or controlling invasive mussels. Prevention is the most cost-effective way to control their introduction and spread.

The Saskatchewan Ministry of Environment has adopted the Clean + Drain + Dry Your Boat message, one that is shared with other western provinces, territories and states. Before returning home from out of province, coming to visit, or moving between water within the province, make sure to:

1) CLEAN - your boat by removing all visible plants, animals and mud.

2) DRAIN – your boat of all water from the motor, livewells, bilge and ballast tanks and remove the boat plug while transporting your boat. Make sure the lowest point of the hull is raised above the bilge drain.

3) DRY - your watercraft, equipment, and all related gear. Many invasive species require only moist conditions to continue survival

To report suspected invasive species, please contact the nearest Ministry of Environment office or call the TIP Line 1-800-667-7561.

Jamie Bilash Ministry of Environment

### Continued from Page 1

Even a 100-year stream flow record will span only a few shifts in the status of the PDO. Therefore it is useful to have long proxy stream flow records. Jessica Vanstone, a graduate student at the U of R, determined annual water levels for four locations in the Souris River basin as far back as 1725. Her results shown below include repeated periods of higher (blue) and lower (pink) water levels in response to the PDO. Thus whether we look at instrumental or proxy records of streamflow in the Souris River basin, we see a lot of natural variability. The influence of anthropogenic global warming on water yield in the river basin is not apparent, at least not yet; it has yet to emerge from background of natural variability. It likely will, however, as winter continues to warm causing changes in the length of the frost-free season, the ratio of rain to snow, and the amount spring snow cover and the and the timing of the melt and runoff. Plus there is another, potentially very major, factor. We are warming the earth's oceans, modifying sea surface temperatures and the processes that deliver water to western Canada.

Water levels in Souris River Basin since 1725 from Burr Oak tree rings

David Sauchyn Ph. D., P. Geo. **Research Professor** Prairie Adaptation Research Collaborative

## **16th Annual Moose Mountain Ag Day**

Day Committee held their 16th annual Moose Mountain Ag Day at the Prairie Place Hall in Arcola. The with 103 people.

for the day. Throughout the day they had 5 speakers that spoke on of Agratactics Agronomy. R. Allan G. Mitchell spoke about the importance of a 1000 kernel weight, seeding rates, proper seeding depth, fertility and fertilizer placement. Jay Fuhrer from Natural Resources Conservation Service (NRCS) from Bismark North Dakota. Jay had two presentations throughout the day. The first presentation was about the foundation principles of building soils from the ground up; soil armour to keep the surface covered, minimum soil disturbance, be able to be a part of the event in maximum plant diversity in the

On Tuesday March 1, 2016 rotation, maintenance of living roots the Moose Mountain Ag and livestock integration with annual crops. In In Jays second presentation he presented some case studies of clients who have integrated livestock attendance for the day was excellent into their annual cropping systems. It also included the monitoring Once again the Committee results of soil biology and soil had an excellent line up of speakers carbon. David Pattyson, Watershed Co-ordinator for the Upper Souris Watershed Association (USWA) a variety of Agricultural topics. spoke about how wetlands provide The Speakers were; R. Allan G. an ecological service. Ken Evans Mitchell CCA, General Manager is a Farm Management Specialist with the Saskatchewan Ministry of Agriculture spoke about the five components to a complete transition plan, and Craig Klemmer, PAg Senior Economist from Farm Credit Canada spoke about the trends in the

years to come.



▲Above is the crowd listening to R. Allan G. Mitchell CCA General Manager of Agratactics Agronomy.

▼Below is Jay Fuhrer from the Natural Resources **Conservation Service (NRCS)** 



global economy for oil, GDP, interest rates, employment, agriculture, the dollar and how they affect your farm.

The Upper Souris Watershed Association is pleased to be a part of this excellent informational Ag Day and hope to

## **Seeding rate for** perennial forage

When seeding perennial forages, there is a common understanding that 10 lbs/ac is the standard correct seeding rate. Not necessarily. A sufficient seeding rate for a seed mix depends upon the plant species you have chosen and the amount of each you include in the mix. Ultimately you want to know the number of seeds per square foot of each species you are applying.

According to CFIA regulation, plant species in a forage seed mixture are listed as "percentage by weight". This is necessary to maintain consistency across the industry. However, the percentage by weight is not representative of the seed counts.

The approximate number of seeds/lb varies significantly from one species to another. A chart in the Ministry of Agriculture Forage Crop Production Guide lists the approximate number of seeds/lb of each of the forage species. The seed counts are based on bare, uncoated seed.

Comparing legumes, sainfoin has 30,000 seeds/lb and uncoated alfalfa has 200,000 seeds/lb. Comparing uncoated grasses, hybrid brome has 90,900 seeds/lb and crested wheatgrass (diploid) has 220,000 seeds/lb.

A seed mix including 30% alfalfa, 20% sainfoin and 50% hybrid bromegrass by weight would contain about 111,450 seeds/lb. For each pound per acre applied, you would be seeding about 2.6 seeds/ft<sup>2</sup>. A seed mix including 10% alfalfa, 40% sainfoin and 50% hybrid bromegrass by weight would contain about 77,450 seeds/lb. For each pound per acre applied, you would be seeding about  $1.8 \text{ seeds/ft}^2$ .

When over seeding across periodic wetland and riparian areas, a combination including 50% alsike clover and 50% reed canary by weight would be an option. This seed mixture would have about 937,500 seeds/lb. For each pound per acre applied, you would be seeding about 21.5 seeds/ft<sup>2</sup>.

The calculations above are based on bare seed. Ask your seed supplier if some or all of the seeds in your mix are coated, and the amount of coating. Typical coatings can reduce seed counts by 35% for alfalfa and 50% for grass.

The target number of seeds to apply per square foot varies across soil zones. Generally the range is from 20 seeds/ft<sup>2</sup> in the Brown Soil Zone to 30 seeds/ft<sup>2</sup> in the Black Soil Zone. These rates tend to be on the higher end of the scale. Rates 25-50% lower can be used if you are confident that your agronomic practices and establishment conditions result in a high percent of plants establishing. Seeding rhizomatous species such as cicer milkvetch, hybrid brome and smooth brome enable lower seeding rates as these species have the ability to spread and fill in a stand over time.

Adding to the seed mix decision is the amount of each species you are targeting for the stand, both in the short and long term. A seed mix with 10 seeds/ft<sup>2</sup> of both alfalfa and meadow bromegrass will normally be dominated by alfalfa for the first 3-4 years. As the stand gets older, depending upon fertility and having or grazing management, the normal progression is that the alfalfa declines and the grass becomes more dominant. For fields you intend to bale in the early years and graze in later years, you will want to start with a high percentage alfalfa stand, so you have sufficient alfalfa plants as the stand gets older.

Perennial forages are seeded only once every 5-55 years. Take the time to plan your seed mix and increase the chance of getting the stand you are targeting.

For more information on seeding rates for seed mixtures, contact me at 306-848-2382, or call the Agriculture Knowledge Centre at 1-866-457-2377, or visit our website at www.saskatchewan.ca.

Lorne Klein, PAg Regional Forage Specialist, Weyburn Saskatchewan Ministry of Agriculture



Hayfield seeded at 3lbs/acre alfalfa and 3lbs/acres smooth brome

### UPPER SOURIS WATERSHED ASSOCIATION

## WETLAND RESTORATION Landowner Incentive Program

### Do you have?

Drained wetlands that drain directly into an Upper Souris water system?



The Upper Souris Watershed Association is looking for producers who are willing to install plugs or blockages in man-made drains. The plugs are designed to hold water until the basin reaches full capacity then the water spills around the plug to follow the natural drainage. Wetlands slow runoff, the slowed runoff improves water guality by providing greater time for nutrients and sediments carried in the runoff to settle in the water basins

## You could receive up to \$2000/acre with a 10 year agreement

### For More information contact:

David Pattyson 306 634 7074 d.pattyson@sasktel.net







Environnement Environment Canada Canada

## Farm and Ranch Water **Infrastructure Program**

The Farm and Ranch Water Infrastructure Program (FRWIP) is a excellent program for producers who are wanting to develop non-potable water sources for agricultural purposes. Agricultural purposes that may require non-potable water are; crop spraying, livestock watering, greenhouses, market gardens and crop irrigation. There are eight programs offered to serve the agricultural community. These programs are; small & large diameter wells, shallow & deep buried pipelines, dugouts and dugout expansions (minimum of one third of existing size increase), relocating of existing livestock watering systems for environmental purposes, protecting existing wells & decommissioning water wells. FRWIP provides a cost sharing grant to cover up to 50 per cent of approved eligible costs. For decommissioning water wells the grant covers up to 90 per cent of eligible expenses.

For Individual program eligibility, criteria or general inquiries about a potential project please contact an Upper Souris Watershed Association Technician to make sure your project will be eligible for funding.

Bruce Duncan: 306-421-9422 Brian Zohner: 306-421-6574 USWA Office: 306-634-7074





### FALL 2016 3

## Water Quality & It's Impact on your Bottom Line

K nowledge of your water quality is essential to the health and productivity of your livestock herd as it is the most essential nutrient in your animal's diet. Water is sometimes referred to as the universal solvent due to the wide variety of substances that can be dissolved in it. For this reason, regular water testing of water sources is an important part of properly feeding animals.

A widespread issue seen in southern Saskatchewan's water sources is high sulfates. One of the most common deficiencies seen in cow herds with elevated sulfates is copper deficiency. Copper is especially important in reproduction and hair. Copper deficiency is often to blame when animals exhibit patches of lighter or dull hair. At lower levels (500-2,000 mg/litre), ensuring all of your animals have access to and are consuming a trace mineral could alleviate some of the physiological effects stemming from a deficiency. A more serious outcome of sulfates is their ability to cause a thiamine deficiency which can lead to nutritional polio, characterized by blindness, staggering and death.

Cyanobacteria, also known as blue-green algae, production are another major water quality factor that needs to be monitored especially during prolonged dry periods. Generally it will look like pea soup or grass clippings and when strained through your fingers (always wear gloves), rather than being stringy, there will only be a few bits stuck to your glove. Certain varieties can produce toxins that affect either the brain or liver and can lead to death within a matter of hours.

How does it impact your bottom line? In the best case scenario, the physiological effects will be limited to weight loss or a missed cycle. For example, if your cow misses a cycle because she's been on high sulfate water, her calf will be 50lbs lighter/missed cycle. Fifty pounds at \$2.00/lb. comes out to \$100/calf. This could certainly add up after a while. Worst case scenario, you are left with a dead animal. To determine how poor water quality affects your pocketbook in this circumstance, you need to take into consideration the replacement cost of the dead animal along with any lost income. A dead animal takes not only an economical toll on your operation but also an emotional one so it is always best to keep an eye on your water quality.

If you have questions about water quality or any other livestock-related questions, please don't hesitate to call me at (306)848-2380 or e-mail me at natasha.wilkie@gov.sk.ca.

Natasha Wilkie, PAg, Regional Livestock Specialist Saskatchewan Ministry of Agriculture, Weyburn

## **New Pain Control Measures for Dehorning and Castration**

A are as well, which is why they implement management practices such as dehorning and castration on their farms. These procedures contribute to improved animal welfare; however, they recognize these management practices are painful which is why ranchers and industry updated the National Farm Animal Care Council's requirements in the Code of Practice for the Care and Handling of Beef Cattle regarding both dehorning and castrating.

### Dehorning

animal welfare and human safety to remove the horns as they can cause injuries to both other animals and the people who work with them. When these animals are born, they have what is called a horn bud which attaches to the skull at approximately 2-3 months of age. Once the horn bud attaches, the horn begins to grow. If a producer is dehorning after this, the new requirement in the Beef Code of Practice is for farmers and ranchers to use pain control, in consultation with your veterinarian, to mitigate pain associated with dehorning calves after horn bud attachment.

### Castration

Castration is another management technique used on farms and

A reyou concerned about animal welfare? Ranchers and farmers ranches to improve animal welfare and human safety as it reduces aggression towards humans and other cattle and prevents unwanted reproduction. A third factor to consider is that it improves meat quality for consumers. In addition to the requirements already in place, the Beef Code of Practice now requires producers to use pain control, in consultation with your veterinarian, when castrating bulls older than nine months of age. Come January 1, 2018, the age in which pain control is required is reduced to six months of age.

Luckily organizations are prepared for the new requirements and Some cattle have the genetics to grow horns. It is important for have a wealth of information ready for producers and consumers to help them learn more about the new requirements. One such organization is the Beef Cattle Research Council - they have an entire webpage dedicated to pain management. The webpage, found at www.beefresearch.ca/ pain, contains all sorts of information, including a table of pain control products licensed for beef animals in Canada.

For more information, please contact:

Your Regional Livestock Specialist or Agriculture Knowledge Centre (1-866-457-2377)

Natasha Wilkie, PAg, Regional Livestock Specialist Saskatchewan Ministry of Agriculture, Weyburn

## **An update from Saskatchewan Association of Watersheds**

The Saskatchewan Association of Watersheds (SAW) is the agencies will be a key element in this process. **L** umbrella organization representing 11 watershed stewardship groups throughout the province whose mandate is the protection of both ground and surface water. SAW is the principal advocate that represents the watershed groups' interests and concerns before senior government. One board member from each member Watershed is a representative on the SAW Board of Directors. David Sloan from the Wascana-Upper Qu'Appelle Watersheds chairs the SAW Board of Directors.

Through the strategic planning process, SAW developed a vision, mission and goal statements to follow.

Vision: For the natural resource of water to be protected and Watershed. conserved in Saskatchewan.

Mission: To provide a unified voice to influence decision-making and policy development within the province and to balance the economic, environmental and social aspects of our Watershed members.

Goal: To ensure there will be a healthy source water supply of ground and surface water for future generations in Saskatchewan.

2016 is going to be a busy year for SAW and the watershed stewardship groups. SAW continues to engage the provincial government on the importance of protecting Saskatchewan's lakes and rivers from the introduction of Aquatic Invasive Mussels. SAW supports the Provincial Association of Resort Communities "AIM - Stop Them at the Border" Program. Working together with government and non-government

SAW and the watershed stewardship groups have been working closely with the Water Security Agency on the new drainage regulations and legislation. There has been many positive changes made by the provincial government. The drainage pilot projects located in the Assiniboine and Upper Souris Watersheds have been a great success. The lessons learned from the two pilot projects will be a significant asset to implementing the new drainage regulations in the next few years. December 2016, SAW will be hosting the 4th Annual Drainage/ Water Management Conference that will be held in the Lower Souris

Lastly, SAW's AGM and Provincial Watershed Conference was held April 20-22, 2016 at the Gallagher Centre, Yorkton, SK. The theme of the conference was Water...Growing Saskatchewan's Economy. Keynote speakers were Bernadette Conant, CEO of the Canada Water Network and Carl Neggers, SM Solutions headlined the event and are dynamic speakers. For more information on the conference visit www. saskwatersheds.ca.

Bridget Andrews PAg **Executive Director** Saskatchewan Association of Watersheds

### LIVESTOCK FACTS:

Water Requirements for Beef Cattle:

- Feedlot Backgrounder Beef (400-800lbs)require 15-40 liters a day
- Feedlot short keep beef 800-1400lbs 27-55 liters a day
- Lactating cows with calves 43-67 liters a day
- Dry cows, bred heifers & bulls 22-54 liters a day

Cows are red-green colour blind. In a bull fight, it's the waving of the cape that attracts the bull not the red colour.

The average cow chews at least 50 times per minute Cows actually do not bite grass; instead they curl their tongue around it.

The average dairy cow produces 70 lbs of milk or 8 gallons per day.

The average beef cow produces 1.5 gallons of milk per day. Approximately 60-75% of the total milk produced will be in the first 60 days after calving.

Cows can smell up to 6 miles away.

A Holsteins spots are like a fingerprint, no two cows have exactly the same pattern of black and white spots.

Cows spend 8 hours per day eating, 8 hours chewing her cud and 8 hours sleeping.

Cows have almost 360 degree panoramic vision.

# **Got Grass? Saskatchewan Forage Incentive Program**

land and for creating habitat for wildlife. The bonus for you is these same sites can provide a sustainable source of feed or pasture for your livestock

Crop Production Services (CPS) and Ducks Unlimited Canada (DUC) are teaming up to off a Forage Incentive Program to growers in DUC target areas in Saskatchewan.

Producers in these location are eligible for \$100 per 50 lb bag to establish forages on their land.

Producers interested in the program must:

• Be located within critical DUC program areas of Saskatchewan

• Sign a management agreement with DUC

DUC is also looking to restore drained wetlands. With this program, you may be eligible for up to \$500 per acre! (some restrictions may apply)

Well managed forages not only provide a sustainable source of feed for livestock but also protect soil from wind and water erosion, offer diversity in crop rotations, improve water infiltration into soil and enhance soil fertility through

As a forage manager, you know the value forage the legumes' ability to fix nitrogen and release it back into the soil.

Research conducted by DUC has shown that perennial forages provide safe and attractive habitat for upland nesting waterfowl and other birds. Agricultural production areas that include forages also help protect the wetlands found on the landscape.

Through a unique partnership with CPS, DUC is please to offer conservation-minded producers an incentive to plant forages in areas of upland habitat restoration. The program includes extensive lineup of Proven® Seed forage varieties and proprietary alfalfas.

This Forage Incentive Program is just one more way for CPS and DUC to assist producers who wish to maintain and enhance healthy forage lands and protect the soils and water resources under their care.

For more information, please contact: Kylie McRae Phone: 306-421-0863 Email: k\_mcrae@ducks.ca

## **USWA Restores 172.2 Acres** of Previously Drained Wetlands

Since the breaking of the prairie producers have been draining and breaking up wetlands. The recent wet years have increased the pressure on farmers to drain water off their annual crop land in Southeastern Saskatchewan. In response the increased drainage activity the Upper Souris Watershed Association (USWA) has been over the past three years providing incentive funding to encourage their wetlands that they own that were drained in previous years.

This season the Upper Souris Watershed Association ran two separate wetland restoration programs that over all restored USWA's total to 172.2 acres.

Working watersheds, the National Wetland Conservation Fund, The Water Security Agency and Ducks Unlimited Canada, USWA helped fund the restoration of 61.1 acres of previously drained wetlands. USWA was quite pleased to participate in a regional wetland restoration program and sees the value in working with various partners networking on this important issue with colleagues throughout South Eastern Saskatchewan. producers to restore some of Over the four watersheds this program restored approximately 200 acres of wetland.

In addition with the financial support of Environment Canada's Lake Winnipeg Basin Stewardship Fund and Ducks 89.4 acres of wetland bringing Unlimited Canada USWA offered a similar program that restored

with 3 other an additional 28.3 acres.

Wetlands are an important part of the prairie ecosystem. Wetlands are a natural water purification system, important wildlife habitat and during dryer periods of the year wetlands slowly release water and can act as a recharge to local water supplies. A one acre wetland can hold up to 1.5 million gallons of water.

USWA plans to offer similar incentives in 2016 and hopes to reach a similar level of success to this past season. Producers interested in restoring wetlands that have man made drains should contact the USWA office at 306-634-7074.

David Pattyson, Coordinator USWA