



# 2015 Annual Report

**Assiniboine Watershed Stewardship Association**



## **Table of Contents**

Acknowledgements	1
Introduction	2
Board Chair's Message	3
Watershed Manager's Message	4
The Association at a Glance	5
Membership Representation	6
AWSA Office & Staff	7
Assiniboine River Watershed Map	9
Yorkton Area Aquifers Map	10
2015 Notable Events	11
Five Year Service Awards	15
2015 Projects / Results	16
Agri - Environmental Group Plans & Farm Stewardship Program	17
Farm & Ranch Water Infrastructure Program	19
Decommissioning Abandoned Wells	21
SWF Fish Enhancement Projects	22
Upper Spirit Creek Watershed Drainage Pilot Project	23
Drainage Inventory Evaluation Project	26
Wetland Restoration Program	27
ALUS Saskatchewan Assiniboine Project	30
Assiniboine River Basin Initiative	31
Good Spirit Lake Shoreline Revitalization Project - Phase II	32
Wallace Creek Watershed Association Board No.11	35
Yorkton Creek Watershed Association Board No. 4	38
Emergency Flood Damage Reduction Program	43
Poster Contest	47
Pizza Farm	49
Fall Educational Sessions - Logan Green Trout Pond	50
Precision Weather Stations	51
Culvert Infrastructure Mapping Program	52
SWF - Fish Enhancement Program	53
Tree Planting Equipment Program	54
Acronym List	55
Auditors' Report	57



## **Acknowledgements**

The Assiniboine Watershed Stewardship Association (AWSA) would like to acknowledge our 37 “Grass Roots” members who truly value the importance of clean, fresh water and have made a considerable effort to protect this precious resource. Thank you for the past and present support towards the protection of the source waters in the Assiniboine River Watershed.

We also want to thank the board of directors, staff, advisory committees and the technical committee for their time, effort, and dedication towards the AWSA.

We would like to recognize the Water Security Agency for their financial support, guidance, and expertise in aiding us with our *Source Water Protection Plans* now and into the future.

We would also like to recognize Agriculture Canada, Ducks Unlimited Canada, Lake Winnipeg Basin Stewardship Fund - Environment Canada, Eco-Action - Environment Canada, Saskatchewan Association of Watersheds, Saskatchewan Ministry of Agriculture, Saskatchewan Ministry of Environment - Good Spirit Provincial Park and the Saskatchewan Wildlife Federation for their financial and technical support towards a shared interest in protecting source waters within the Assiniboine River Watershed.



## **Introduction**

This Annual Report outlines the Assiniboine Watershed Stewardship Association's activities over their 2015 fiscal year (Nov. 1, 2014 - Oct. 31, 2015). The projects and activities found throughout this report are governed by the association's vision statement, as written by its Board of Directors, and by the objectives, recommendations and key actions contained in the *Assiniboine River Watershed Source Water Protection Plan* and the *Yorkton Area Aquifers Source Water Protection Plan*.

Please visit the AWSA's website at: [www.assiniboinewatershed.com](http://www.assiniboinewatershed.com) for a full electronic version of this report along with more information on past and present reports and projects.

## **2015 Assiniboine Watershed Stewardship Association's Board of Directors**



Front Row L to R: Don Fogg, Grant McCallum, Don Olson, Al Schatz, Tom Gall  
Back Row L to R: Wally Butterfield, Duane Hicks, Ben Pengilly, Michael Buchholzer, Rod Semeschuk, Garry Liebrecht, Dale Heshka

## **Board Chair's Message**



Water resources have traditionally been overused and their true value has been underappreciated in Canada and in Saskatchewan. In light of this, there is growing awareness that the way fresh water is currently managed poses significant challenges to ensuring the environmental well-being and economic prosperity of our country and of our province. Confronting current and forthcoming challenges – such as increased water scarcity due to a changing climate – will require new and innovative water policy and management approaches.

Canadians are acutely aware of the need for a more fundamental analysis of how we use our water supplies, and why we make certain choices to use water in the ways we do. This awareness signals a readiness for a fundamental shift in how we view water, our connection to it, how we manage it and plan for the future, and importantly, how we govern it. We must shift the narrative and action on Canada's most precious resource to one that ensures:

- Prioritization of water allocations for environmental flows.
- Conservation of water for future generations.
- Collaborative decision-making processes.

We must create a new national vision for understanding the value of water, and we must create a national water strategy for current water policy reform.

### **A Saskatchewan Perspective:**

Most water pollution originates from non-point sources, such as agricultural runoff. Surface runoff and return flow from irrigated fields contain dissolved salts and other contaminants, such as chemical fertilizers and pesticides. These pollutants flow into nearby watercourses, or percolate through soil into groundwater supplies. Agriculture is Saskatchewan's leading industry and the largest consumer of provincial water resources (accounting for 67 per cent of the province's water use). Agricultural runoff is of critical concern to Saskatchewan residents because it can affect the quality of our drinking water supplies, and as a non-point source of water pollution, it makes it difficult to mitigate.

Dealing with water quality and agricultural runoff is a challenge that Saskatchewan will have to address in the coming years. The Province's current development of a new water strategy represents a potential opportunity to begin addressing the impact of agricultural runoff on the province's water resources.

Did you know .... the term "virtual water" refers to the total amount of water used to produce a product, for example the water embedded in goods such as wheat. According to the Water Footprint Network, wheat has a water footprint of 1300 liters of water for every 1 kilogram of wheat produced. Global wheat production consumes about 790 billion cubic meters of water annually – 12 per cent of the total water used for crop production globally. This is approximately six times the total volume of Manitoba's Lake Winnipeg. Saskatchewan supplies 10 per cent of the world's total exported wheat.

Good quality water supplies are vital to the economy of the Province, now and for the future generations to come.

Don Olson  
Board Chair,  
Assiniboine Watershed Stewardship Association



## Watershed Manager's Message



This 2015 Annual Report highlights the accomplishments of the Assiniboine Watershed Stewardship Association (AWSA) for the year ending October 31<sup>st</sup> 2015.

Even though it's my picture you see to the left, I must acknowledge that it was Aron Hershmillier, not I, that resided as manager for the majority of 2015. I officially took over the position as AWSA manager on September 14<sup>th</sup> of 2015, when Aron began a new career after making the difficult decision to leave the AWSA to become East-Central Regional Manager for the Water Security Agency. I say difficult, for Aron had been a devoted manager of the AWSA since its inception in April of 2007, and had grown the AWSA from humble beginnings into the most prominent watershed organization in Saskatchewan.

I would like to thank our 37 member municipalities for their continuous support in making the AWSA what it is today. I look forward to continuing to build on the solid foundation we've created over the years and will strive to maintain our status as a leading watershed devoted to the implementation and promotion of meaningful source water protection projects and programming. I'm confident that my 7 years of experience as AWSA coordinator under Aron's tutelage, coupled with my strong educational background, will ensure that I'm up to all challenges that lie ahead.

I would also like to acknowledge the support of the AWSA board of directors for their commitment to the AWSA and the Assiniboine River Watershed. I want to especially thank the AWSA staff; Katelyn Smith, Caitlyn Peters, and Janet Kristjanson for their tremendous work and dedication.

Last year was the busiest year to date for the AWSA in terms of number of projects on-the-go. But again, thanks to a fantastic staff, we rose to the occasion and once again proved that we're committed to making the AWSA the premier watershed association in the province. 2015 Highlights include:

- Completion of the Good Spirit Shoreline Revitalization Project - A massive undertaking to permanently armour and protect the shoreline around the outlet structure. Made possible through collaboration of the AWSA and the Good Spirit Lake Watershed Assoc. Board.
- Continuing our commitment of restoring previously-drained wetland habitat. Through the support of the National Wetland Conservation Fund, Lake Winnipeg Basin Stewardship Fund, and Ducks Unlimited Canada we were able to restore 114.9 acres 67 (wetlands) in our watershed in 2015.
- Undertaking a Pilot Project in the Upper Spirit Creek sub-watershed to test the provincial government's new drainage regulations.
- Continued to lead the province in project applications to the Farm Stewardship Program and the Farm and Ranch Water Infrastructure Program.

You have before you a great summary document of what we've been up to this past year. I am looking forward to 2016 being just as busy continuing to serve our members and all individuals with a vested interest in the health of our great watershed!

Jesse Nielsen  
Manager,  
Assiniboine Watershed Stewardship Association

## **The Association at a Glance**

The Assiniboine Watershed Stewardship Association is an independent, non-profit organization committed to protecting source waters in the Assiniboine River Watershed. The association's vision is:

***Citizens and communities of the Assiniboine River Watershed working together to protect the source waters of the Assiniboine River, its tributaries and aquifers within the watershed.***

To fulfill this vision, the Association works in partnership with public and private stakeholders throughout the watershed to carry out projects that protect and enhance water sources. Much of this work focuses on the objectives, recommendations and key actions contained in the *Assiniboine River Watershed Source Water Protection Plan* and the *Yorkton Area Aquifers Source Water Protection Plan*. The Association's Board of Directors has also chosen to undertake some other initiatives, which are detailed in this Annual Report.

The business and affairs of the Association are managed by its Board of Directors. The Board is comprised of 12 members elected from three advisory committees: the Assiniboine River Advisory Committee, the Whitesand River Advisory Committee and the Yorkton Area Aquifers Advisory Committee. Each advisory committee elects four members to the Board.

### **The Assiniboine Watershed Stewardship Association's Board of Directors:**

Michael Buchholzer - City of Yorkton  
 Grant McCallum - Town of Saltcoats  
 Rod Semeschuk - R.M. of Sliding Hills No. 273  
 Garry Liebrecht - R.M. of Wallace No. 243  
 Dale Heshka - City of Melville  
 Tom Gall - Town of Springside  
 Al Schatz - R.M. of Stanley No. 215  
 Ben Pengilly - R.M. of Cana No. 214  
 Don Olson - Town of Sturgis  
 Don Fogg - Town of Langenburg  
 Wallace Butterfield - R.M. of Keys No. 303  
 Duane Hicks - R.M. of Clayton No. 333

All Directors are elected for a two-year term at their respective Advisory Committee meetings. Directors are elected on a staggered two-year basis after the first meeting of the Advisory Committees. For the initial appointments, half of each Advisory Committee was appointed for two years and the other half for one year. These appointments were determined randomly.

All Directors may be re-elected and are not restricted as to the number of consecutive terms served.

The Board of Directors meet four times a year, and annually appoints a Chair, Vice-Chair and such other officers as the Board may determine.

The day-to-day business of the Association is conducted by the Watershed Manager. The Watershed Manager reports to the Board, and is granted such powers and duties as the Board may specify.

The Association receives operating revenue in the form of a grant from the Water Security Agency. The Association also receives revenues from its paid membership. The membership currently consists of the following 37 local municipalities:

City of Melville	City of Yorkton
Town of Canora	Town of Churchbridge
Town of Kamsack	Town of Langenburg
Town of Preeceville	Town of Saltcoats
Town of Springside	Town of Sturgis
Village of MacNutt	Village of Rhein
Village of Theodore	
R.M. of Langenburg #181	R.M. of Churchbridge #211
R.M. of Saltcoats #213	R.M. of Cana #214
R.M. of Stanley #215	R.M. of Calder #241
R.M. of Wallace #243	R.M. of Orkney #244
R.M. of Garry #245	R.M. of Ituna Bon Accord #246
R.M. of Cote #271	R.M. of Sliding Hills #273
R.M. of Good Lake #274	R.M. of Insinger #275
R.M. of Foam Lake #276	R.M. of St.Philips #301
R.M. of Keys #303	R.M. of Buchanan #304
R.M. of Invermay #305	R.M. of Livingston #331
R.M. of Clayton #333	R.M. of Preeceville #334
R.M. of Hazel Dell #335	R.M. of Sasman #336

## **Membership Representation**

### **2015 Board of Directors**

<b>Don Olson</b> Board Chair	Town of Sturgis
<b>Don Fogg</b> Board Vice Chair	Town of Langenburg
<b>Dale Heshka</b>	City of Melville
<b>Michael Buchholzer</b>	City of Yorkton
<b>Ben Pengilly</b>	R.M. of Cana No. 214
<b>Rod Semeschuk</b>	R.M. of Sliding Hills No. 273
<b>Wallace Butterfield</b>	R.M. of Keys No. 303
<b>Al Schatz</b>	R.M. of Stanley No. 215
<b>Duane Hicks</b>	R.M. of Clayton No. 333
<b>Garry Liebrecht</b>	R.M. of Wallace No. 243
<b>Grant McCallum</b>	Town of Saltcoats
<b>Tom Gall</b>	Town of Springside

### **2015 Staff Members**

**Aron Hershmillier** – Watershed Manager  
**Jesse Nielsen** – Watershed Coordinator / Manager  
**Katelyn Smith** – Technologist II / Administration  
**Caitlyn Peters** – Technologist I  
**Janet Kristjanson** – Administrator

### **Assiniboine River Advisory Committee**

**Marlo Schappert** – R.M. of Langenburg No. 181  
**Neil Mehrer** – R.M. of Churchbridge No. 211  
**Melvin Woloschuk** – R.M. of Calder No. 241  
**Ken Kalmakoff** – R.M. of Cote No. 271  
**Wallace Butterfield** – R.M. of Keys No. 303  
**Ted Klimm** – R.M. of Livingston No. 331  
**Duane Hicks** – R.M. of Clayton No. 333  
**Darcy Rediger** – R.M. of Preeceville No. 334  
**Cameron Last** – R.M. Hazel Dell No. 335  
**Russ Thies** – Town of Churchbridge  
**Brian Earl** – Town of Kamsack  
**Don Fogg** – Town of Langenburg  
**Johnny Petryshyn** – Town of Preeceville  
**Don Olson** – Town of Sturgis  
**Shayne Wagner** – Village of MacNutt

### **Whitesand River Advisory Committee**

**Dale Heshka** – City of Melville  
**Michael Buchholzer** – City of Yorkton  
**Sylvester Hryniw** – Town of Canora  
**Tom Gall** – Town of Springside  
**Grant McCallum** – Town of Saltcoats  
**Kim Hyshka** – Village of Rhein  
**Nick Lastiwka** – Village of Theodore  
**Joe Skitcko** – R.M. of Saltcoats No. 213  
**Ben Pengilly** – R.M. of Cana No. 214  
**Al Schatz** – R.M. of Stanley No. 215  
**Garry Liebrecht** – R.M. of Wallace No. 243  
**Dale Hackman** – R.M. of Orkney No. 244  
**Anthony Chambers** – R.M. of Garry No. 245  
**Philip Buczulak** – R.M. of Ituna Bon Accord No. 246  
**Rod Semeschuk** – R.M. of Sliding Hills No. 273  
**James Hupka** – R.M. of Good Lake No. 274  
**Dwayne Kitzan** – R.M. of Insinger No. 275  
**Grant Faye** – R.M. of Foam Lake No. 276  
**Lorne Olynyk** – R.M. of Buchanan No. 304  
**Jack Prychak** – R.M. of Invermay No. 305  
**Barry Marquette** – R.M. of Sasman No. 336

### **Yorkton Area Aquifers Advisory Committee**

**Michael Buchholzer** – City of Yorkton  
**Grant McCallum** – Town of Saltcoats  
**Joe Skitcko** – R.M. of Saltcoats No. 213  
**Ben Pengilly** – R.M. of Cana No. 214  
**Garry Liebrecht** – R.M. of Wallace No. 243  
**Dale Hackman** – R.M. of Orkney No. 244

### **Technical Committee Members**

**Trevor Plews** - Ducks Unlimited Canada  
**Nolan Johnson** - Ducks Unlimited Canada  
**Jason Signarowski** - Ducks Unlimited Canada  
**Jodie Horvath** - Ducks Unlimited Canada  
**Adam Matichuk** - Saskatchewan Wildlife Federation  
**Brian Campbell** - Saskatchewan Ministry of Agriculture  
**Naomi Paley** - Saskatchewan Ministry of Agriculture  
**Charlotte Ward** - Saskatchewan Ministry of Agriculture  
**Lyndon Hicks** - Saskatchewan Ministry of Agriculture  
**Warren Thomson** - Water Security Agency  
**Rick Jasper** - Water Security Agency  
**Glen Merkley** - Water Security Agency



## **AWSA Office & Staff**

The Assiniboine Watershed Stewardship Association (AWSA) office is located on 29, 2<sup>nd</sup> Avenue North in Yorkton, Saskatchewan. Our office hours are Monday to Friday from 8:00am to 5:00pm (closed over the noon hour).

The AWSA moved to this location in 2009, a distinction that has provided our association with a strong individual identity. Located in Yorkton's downtown business district, our office is only one block away from Yorkton City Hall and three blocks from the RM of Orkney and Wallace offices. It is also located in close proximity to Canada Post, and many local businesses and banks, making it an ideal location.

## **Original 2015 AWSA Staff**

**Aron Hershmilller**  
Manager

**Katelyn Smith**  
Technician

**Jesse Nielsen**  
Coordinator



February 24, 2015 Annual General Meeting

## **2015 AWSA Staff Changes**

The AWSA underwent its most significant staff restructuring to date with the resignation of Aron Hershmillier to become manager of the WSA's East Central Regional Office in Yorkton in September of 2015. Previous 7 year AWSA coordinator, Jesse Nielsen, stepped into the manager position and 3 year technician, Katelyn Smith, underwent a change of job title and duties to become a Technologist Level II. We then added a new member to the AWSA team with the hiring of Caitlyn Peters as a Technologist Level I. Prior to the restructuring, the AWSA hired a part-time administrator, Janet Kristjanson, in August 2015 to fill the vacant position which Katelyn had been temporarily covering since previous administrator, Deidre Williams, left the AWSA on maternity leave March of 2014.

### **New 2015 AWSA Staff**

**Katelyn Smith**  
Technologist II

**Jesse Nielsen**  
Manager

**Caitlyn Peters**  
Technologist I

**Janet Kristjanson**  
Administrator

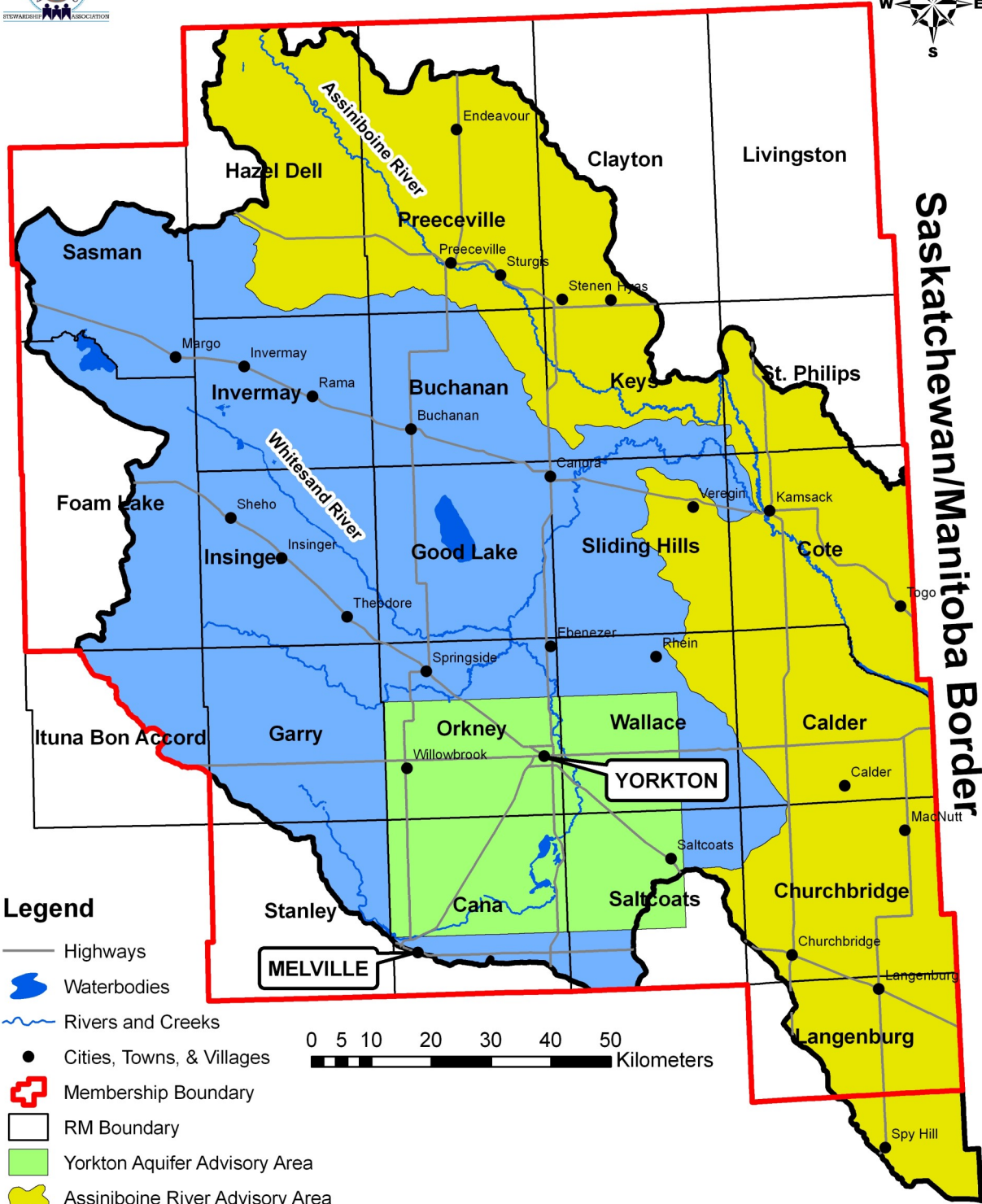


(Picture provided by the AWSA)



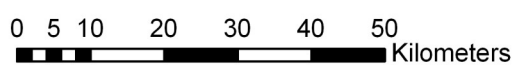


# Assiniboine River Watershed



## Legend

- Highways
- Waterbodies
- Rivers and Creeks
- Cities, Towns, & Villages
- Membership Boundary
- RM Boundary
- Yorkton Aquifer Advisory Area
- Assiniboine River Advisory Area
- Whitesand River Advisory Area



Projection: UTM Zone 13N  
Datum: NAD 1983

Created by: Jesse Nielsen





**Location and extent of  
major aquifers in the  
Yorkton study area**

**Aquifer extents**

- Bredenbury (Dunleath) aqu.
- Bredenbury aqu.
- Collicott aqu.
- Empress Gp. aqu.
- Leach Lake aqu.
- Logan North aqu.
- Logan South aqu.
- Logan Valley aqu.
- Orcadia aqu.
- Otthon aqu.
- Sturdee aqu.
- Unnamed Bredenbury Fm. aqu.
- Unnamed Empress Gp. aqu.
- Unnamed Intertill aqu.
- Willowbrook 'A' aqu.
- Willowbrook aqu.

- Road
- Highway

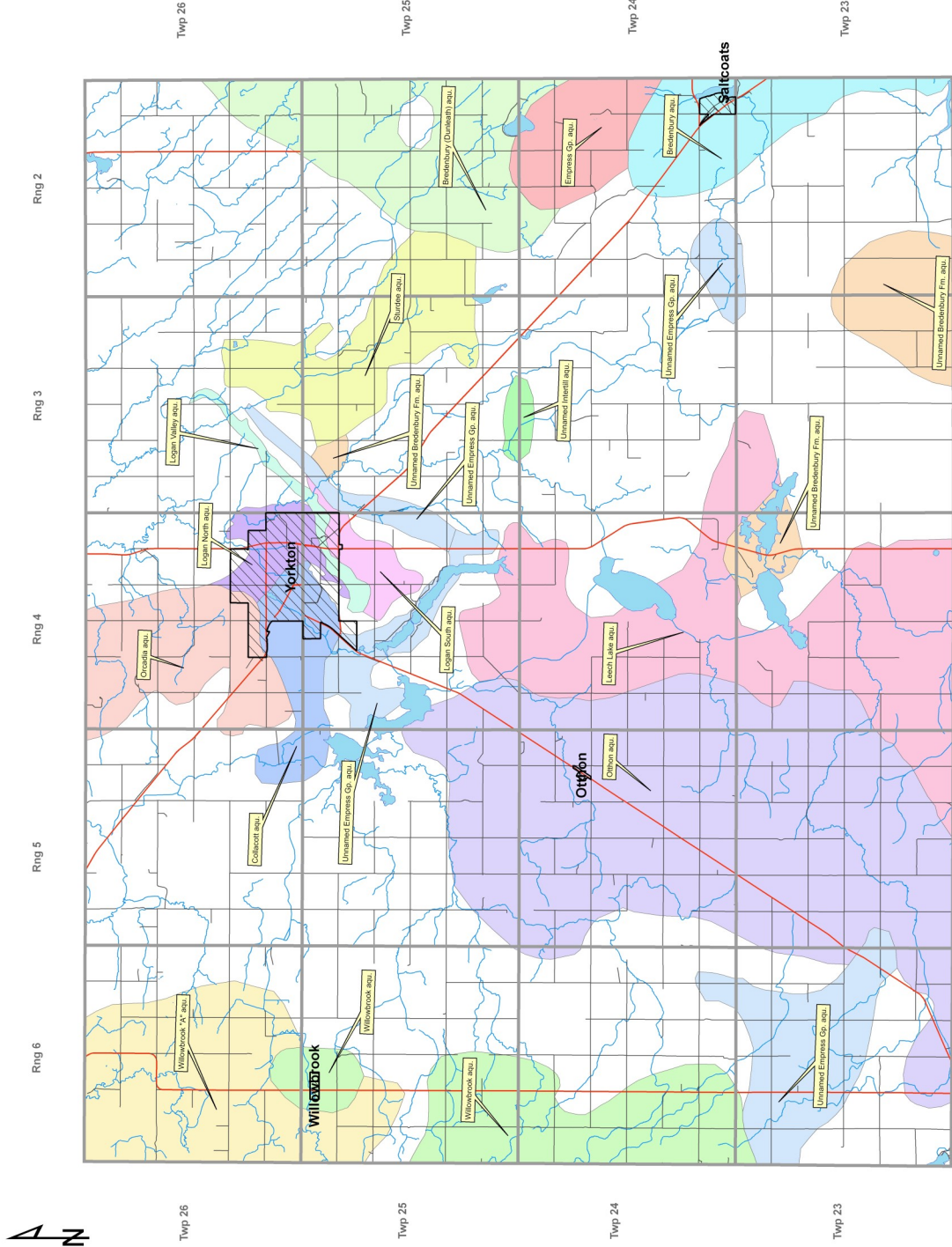


These maps are accompanied by a series of cross sections which depict the subsurface units along the transects shown on the map. The boundaries of the aquifers and wells indicated on the maps. The boundaries outline areas in which the aquifer units mapped do not always occur continuously within the areas shown. The boundaries are based on geological data and at some locations may be found outside the boundaries shown.

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Map accompanies report:

Research 14, and Research 14-202. Groundwater resources in the Yorkton aquifer management plan area. Final report Saskatchewan Research Council, SRC Publication No. 10419-1E06



Ring 2  
Ring 3  
Ring 4  
Ring 5  
Ring 6

Twp 26  
Twp 25  
Twp 24  
Twp 23

## **2015 Notable Events**

1. November 3rd – MLA Reception Regina, SK
2. November 4th – LWBSF Wetland Restoration project supervision
3. November 5th – In the field working on the Good Spirit Lake outlet structure
4. November 5th - 8th – Booth display at Grain Miller's Harvest Showdown tradeshow/expo Yorkton, SK
5. November 6th – Presentation at RM/community meeting Churchbridge, SK
6. November 12th – WCWAB meeting with Ministry of Highways Yorkton, SK
7. November 12th – 14th – Booth display and presentation at the ARBI conference/workshop Regina, SK
8. November 17th – WCWAB onsite meeting Wallace Creek
9. November 18th – WCWAB project Inspections Wallace Creek
10. November 20th – Onsite meeting with the Town of Springside & CP Rail Springside, SK
11. November 24th – SAW booth display at the Canadian Western Agribition Regina, SK
12. November 26th – AWSA Board meeting Yorkton, SK
  
13. December 1st - 2nd – Presentation at MCDA Conference Brandon, MB
14. December 2nd – In the field performing EFDRP final inspections
15. December 3rd – Presentation at APAS annual general meeting Moose Jaw, SK
16. December 4th – GSLWAB Board meeting Canora, SK
17. December 4th – In the field performing EFDRP final inspections
18. December 5th – Onsite inspection of Good Spirit Lake Gate Project
19. December 8th – AEGP technical review committee meeting Yorkton, SK
20. December 9th – Water Management & Drainage Stewardship Conference Balcarres, SK
21. December 19th – YCWAB Board meeting Yorkton, SK
  
22. January 6th – Meeting for NWCF Wetland Restoration project Regina, SK
23. January 11th – Presentation for grade 11 Environmental Studies class Melville, SK
24. January 13th – ARBI conference call
25. January 14th – Yorkton District Planning Committee meeting Yorkton, SK
26. January 16th – PWS field visit to install weather station
27. January 20th – ALUS ASAP project meeting Yorkton, SK
28. January 21st – WCWAB Board meeting Yorkton, SK
29. January 22nd – Invasive species meeting with MOE and Watershed Associations Saskatoon, SK
30. January 23rd – PWS field visit to install weather station
31. January 26th – PWS field visit for maintenance calls
32. January 27th – NWCF Wetland Restoration project conference call
33. January 28th - 29th – Presentation at PCAP workshop Saskatoon, SK
  
34. February 2nd – ARBI conference call
35. February 2nd – Meeting with Northern Plains Drainage Systems about current BMP's and potential for Tile Drainage funding Yorkton, SK
36. February 3rd – AEGP technical review committee meeting Yorkton, SK
37. February 3rd – Field visit with Environment Canada Environmental Officer's to promote options for producers facing violations of the Fisheries Act regulations
38. February 4th – Field visit with Environment Canada Environmental Officer's to promote options for producers facing violations of the Fisheries Act regulations
39. February 4th – NWCF Wetland Restoration project conference call
40. February 4th – Poster contest presentation in Yorkton, SK
41. February 5th – FSP/FRWIP Webinar for proposed 2015/16 BMP changes
42. February 6th – Poster contest presentation Melville, SK
43. February 10th – NWCF Wetland Restoration project conference call
44. February 11th – Booth display at Cattleman's Appreciation Night banquet Yorkton, SK
45. February 11th – ALUS ASAP project conference call
46. February 12th – Invasive Species workshop Regina, SK
47. February 16th – NWCF Wetland Restoration project conference call
48. February 17th – Multi Producer Erosion Control BMP webinar
49. February 23rd – Yorkton District Planning Committee meeting Yorkton, SK
50. February 23rd – Poster contest presentation Kamsack, SK

## **2015 Notable Events**

51. February 24th – AWSA Annual General Meeting Yorkton, SK
52. February 24th – AWSA Board meeting Yorkton, SK
53. February 26th – WCWAB Board meeting Yorkton, SK
54. February 27th – NWCF Wetland Restoration project meeting Regina, SK
  
55. March 2nd – Presentation at LWBSF conference Winnipeg, MB
56. March 4th – ARBI meeting Moosamin, SK
57. March 4th – AWSA presentation for Lower Souris Watershed Fairlight, SK
58. March 13th – YCWAB Board meeting Yorkton, SK
59. March 20th – ALUS ASAP meeting Yorkton, SK
60. March 24th - 25th – FSP/FRWIP annual meeting Regina, SK
61. March 25th – ALUS ASAP project conference call
62. March 30th – PWS field visit to install weather station
  
63. April 2nd – Alien Invasive Species training Pike Lake, SK
64. April 7th – WSA EFDRP initial inspection field visits
65. April 7th – ARBI conference call
66. April 8th – WSA EFDRP Inspectors meeting for 2015 program roll out Moose Jaw, SK
67. April 10th – ARBI conference call
68. April 13th - 15th – Booth display at SAW annual conference Melfort, SK
69. April 16th – Presentation at RM of Clayton No 333 annual rate payers banquet Hyas, SK
70. April 19th – WSA EFDRP initial inspection visit
71. April 22nd – Meeting/training tutorial with Lower Qu'Appelle AEGP technician Yorkton, SK
72. April 23rd – WSA EFDRP conference call
73. April 24th – WSA EFDRP initial inspection field visit
74. April 24th – FRWIP field visit for RM & 2 producers 6 well decommission applications
75. April 29th – SAW poster contest award presentation
76. April 30th – SAW poster contest award presentation
  
77. May 4th – YCWAB Board meeting Yorkton, SK
78. May 4th – WSA EFDRP initial inspection field visit
79. May 5th – FSP field visit for creek crossing application
80. May 6th – AWSA Board meeting Yorkton, SK
81. May 7th – FSP field visit for creek crossing & natural waterway erosion control applications
82. May 7th – FRWIP field visit for well decommission application
83. May 11th – ALUS ASAP project conference call
84. May 12th – Yorkton District Planning Commission meeting Yorkton, SK
85. May 13th – Logan Green meeting Yorkton, SK
86. May 13th – FRWIP field visit for 2 well decommission applications
87. May 13th – FSP field visit for 3 creek crossing applications
88. May 14th – WSA EFDRP conference call
89. May 15th – AEGP technical review committee/new BMP proposals meeting Yorkton, SK
90. May 15th – WSA EFDRP initial inspection field visit
91. May 19th – ARBI conference call
92. May 21st – GSWAB Board meeting/WSA presentation Canora, SK
93. May 22nd – FSP field visit for creek crossing application
94. May 22nd – Rented out tree planter & mulch applicator
95. May 27th – WSA EFDRP conference call
96. May 27th – FSP field visit for natural waterway erosion control application
97. May 29th – Meeting with WSA, MOA, MOE, & DUC to discuss new drainage regulations Yorkton, SK
98. May 30th – Rented out tree planter
  
99. June 1st – Meeting with WSA & Ebenezer Creek Board to discuss Town flooding issues Ebenezer, SK
100. June 1st – FRWIP field visit for dugout application
101. June 3rd - 4th – AEGP range health assessment training Mortlach, SK
102. June 4th – Presentation at Lower Qu'Appelle Watershed Stewards AGM Abernathy, SK
103. June 5th – MOA pizza farm planting days Yorkton, SK
104. June 10th – City of Yorkton meeting Yorkton, SK



## **2015 Notable Events**

105. June 10th – Meeting with RM of Langenburg regarding culvert mapping Langenburg, SK
106. June 10th – Rented out tree planter
107. June 11th – SAW meeting Regina, SK
108. June 12th – FSP field visit for natural waterway erosion control application
109. June 15th – YCWAB Board meeting Yorkton, SK
110. June 16th – ALUS ASAP project meeting Yorkton, SK
111. June 16th – WSA NWCF conference call
112. June 17th – FRWIP field visit for 4 well decommission applications
113. June 17th – FSP field visit for 2 creek crossing applications
114. June 17th – PWS field visit to install weather stations
115. June 17th – SAW manager's conference call
116. June 18th – WCWAB onsite meeting Rhein, SK
117. June 19th – PWS field visit to install weather stations
118. June 23rd – Meeting with WSA & the Village of Kelliher to discuss Town flooding issues Kelliher, SK
119. June 25th – AEGP technical review committee meeting Yorkton, SK
  
120. July 2nd – FSP field visit for creek crossing and natural waterway erosion control applications
121. July 2nd – FRWIP field visit for well decommission application
122. July 10th – FRWIP field visit for 4 well decommission application
123. July 10th – FSP field visit for 2 creek crossing applications
124. July 13th – ARBI conference call
125. July 14th – WSA drainage pilot program meeting with RM representatives Hazel Dell, SK
126. July 16th – AEGP technical review committee meeting Yorkton, SK
127. July 23rd – FRWIP field visit for 2 well decommission applications
128. July 23rd – FSP field visit for natural waterway erosion control application
  
129. August 11th – AEGP technicians conference call
130. August 11th – WCWAB Board meeting Yorkton, SK
131. August 11th – SWF top up funding signage installation near Whitesand River Canora, SK
132. August 13th – Rented out mulch applicator
133. August 17th – FSP field visit for natural waterway erosion control application
134. August 18th – Telephone interview for MoAg Think Ag campaign
135. August 18th – AEGP technical review committee meeting Yorkton, SK
136. August 19th – AWSA Board meeting Yorkton, SK
137. August 24th – Video Interview for MoAg Think Ag campaign Yorkton, SK
138. August 25th – Photo shoot for MoAg Think Ag campaign Yorkton, SK
139. August 26th – FRWIP field visit for 3 well decommission applications
140. August 27th – SAW Annual Conference conference call
141. August 31st – YCWAB Board meeting Yorkton, SK
  
142. September 1st – FRWIP field visit for 3 well decommission applications
143. September 1st – AWSA Staff & Board meeting to discuss staff changes to come Yorkton, SK
144. September 3rd – SAW Annual Conference conference call
145. September 8th – FRWIP field visit for 2 well decommission applications
146. September 8th – SAW Managers conference call
147. September 8th – ARBI conference call
148. September 9th – WSA NWCF meeting Regina, SK
149. September 11th – AEGP technical review committee meeting & Manger's farewell Yorkton, SK
150. September 15th – AEGP technicians conference call
151. September 15th – Photo shoot for MOA Think Ag campaign Canora, SK
152. September 16th – MOA pizza farm harvest days Yorkton, SK
153. September 17th – WSA managers meeting Moose Jaw, SK
154. September 28th – PWS field visit for maintenance call
155. September 30th – PWS field visit for maintenance call
  
156. October 5th – Wetland recon training for new staff RM of Garry, SK
157. October 6th – PWS field visit for maintenance calls
158. October 6th – Field work on Good Spirit Outlet project

## **2015 Notable Events**

- 159. October 6th – ALUS ASAP project meeting Yorkton, SK
- 160. October 7th – MOA free lecture (Patrick Moore) U of R Regina, SK
- 161. October 8th – SAW Annual Conference conference call
- 162. October 8th – Logan Green Trout Pond critter dipping with Yorkdale School Yorkton, SK
- 163. October 9th – WSA Drainage pilot project producer meeting Rama, SK
- 164. October 9th – Logan Green Trout Pond critter dipping with Yorkdale School Yorkton, SK
- 165. October 13th – Field work on Good Spirit Outlet project
- 166. October 16th – WSA Drainage pilot project producer visits Rama, SK
- 167. October 16th – WSA Drainage pilot project producer visits Rama, SK
- 168. October 16th – PWS weather station maintenance visits
- 169. October 20th – AEGP technicians conference call
- 170. October 20th – Field visit for Good Spirit Outlet project
- 171. October 21st – WSA Drainage pilot project producer visits Rama, SK
- 172. October 22nd – LWBSF Wetland restoration project tour
- 173. October 22nd – PWS field visit for maintenance calls
- 174. October 23rd – WSA Drainage pilot project meeting Regina, SK
- 175. October 23rd – Wetland drainage recon RM of Churchbridge, SK
- 176. October 29th – AEGP technical review committee meeting Yorkton, SK
- 177. October 30th – PWS field visit for maintenance calls



### **AWSA, DUC and MOA Staff**

L to R: Lyndon Hicks, Nolan Johnson, Katelyn Smith, Jesse Nielsen, Jodie Horvath, Kyle Schmidt, Sheldon Diduck, Caitlyn Peters, Aron Hershmilller, Laura Uhyrn, Avery Nerbas



## Five Year Service Awards

The Assiniboine Watershed Stewardship Association (AWSA) annually recognizes any board members and staff members for completing the tremendous milestone of five years of service to the AWSA. The AWSA recognized Jesse Nielsen, AWSA coordinator, for providing 5 years of service, at its 2015 Annual General Meeting. Jesse began his career with the AWSA in May 2009.

L to R: Jesse Nielsen - AWSA Coordinator & Aron Hershmillier - AWSA Manager



### Past Recipients

1. Don Olson – Board Chair	Town of Sturgis	2013
2. Don Fogg – Board Vice-Chair	Town of Langenburg	2013
3. Al Schatz	RM of Stanley	2013
4. Ben Pengilly	RM of Cana	2013
5. Dale Heshka	City of Melville	2013
6. Garry Liebrecht	RM of Wallace	2013
7. Grant McCallum	Town of Saltcoats	2013
8. Tom Gall	Town of Springside	2013
9. Aron Hershmillier	AWSA Manager	2013
10. Wally Butterfield	RM of Keys	2014

## **2015 Projects / Results**

The following chart illustrates the members we worked with and the amount of project funding the AWSA distributed throughout the Assiniboine River Watershed in 2015.

1. Water Security Agency (WSA) / Ministry of Agriculture ( MOA) Project Administration Funding
2. Agri-Environmental Group Plan (AEGP) Program
3. Farm & Ranch Water Infrastructure (FRWIP) Program
4. Wetland Restoration Programs
5. Good Spirit Lake Shoreline Revitalization Project
6. Canadian Wildlife Service (CWS) Forage Funding
7. Emergency Flood Damage Reduction Program
8. Precision Weather Stations
9. Wallace Creek Watershed Association / Yorkton Creek Watershed Association

<b>Members</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>Totals</b>
Village of MacNutt	\$2,541						\$216			\$2,757
Village of Rhein	\$2,541						\$216		\$88,282	\$91,039
Village of Theodore	\$2,541						\$216			\$2,757
Town of Canora	\$2,541						\$216			\$2,757
Town of Churchbridge	\$2,541						\$216			\$2,757
Town of Kamsack	\$2,541						\$216			\$2,757
Town of Langenburg	\$2,541						\$216			\$2,757
Town of Preeceville	\$2,541						\$216			\$2,757
Town of Saltcoats	\$2,541						\$216			\$2,757
Town of Springside	\$2,541						\$216			\$2,757
Town of Sturgis	\$2,541						\$216			\$2,757
City of Melville	\$2,541						\$216		\$712	\$3,469
City of Yorkton	\$2,541						\$216		\$1,424	\$4,181
R.M. of Langenburg	\$5,336		\$4,317				\$216			\$9,869
R.M. of Churchbridge	\$5,336	\$9,345	\$1,500				\$216		\$88,282	\$104,679
R.M. of Saltcoats	\$5,336	\$69,911	\$33,081	\$31,000		\$11,988	\$216		\$88,994	\$240,526
R.M. of Cana	\$5,336	\$12,624	\$11,310			\$21,070	\$216	\$238	\$712	\$51,506
R.M. of Stanley	\$5,336	\$64,137	\$15,000			\$30,380	\$216			\$115,069
R.M. of Calder	\$5,336	\$39,574	\$2,000				\$216		\$88,282	\$135,408
R.M. of Wallace	\$5,336	\$41,072	\$1,650				\$216	\$1,187	\$88,994	\$138,455
R.M. of Orkney	\$5,336	\$59,747				\$9,660	\$216	\$238	\$712	\$75,909
R.M. of Garry	\$5,336	\$23,190	\$13,134	\$116,000			\$216			\$157,876
R.M. of Ituna Bon Accord	\$5,336					\$4,130	\$216	\$338		\$10,020
R.M. of Cote	\$5,336	\$60,170	\$19,769				\$216	\$1,657		\$87,148
R.M. of Sliding Hills	\$5,336	\$10,000	\$19,900				\$216	\$363	\$88,282	\$124,097
R.M. of Good Lake	\$5,336	\$78,960	\$10,201		\$19,781		\$216			\$114,494
R.M. of Insinger	\$5,336	\$41,232	\$30,107		\$19,781		\$216	\$463		\$97,135
R.M. of Foam Lake	\$5,336	\$53,844	\$4,200	\$82,800		\$1,470	\$216			\$147,866
R.M. of St.Philips	\$5,336	\$2,206					\$216			\$7,758
R.M. of Keys	\$5,336	\$6,779	\$24,400				\$216	\$613		\$37,344
R.M. of Buchanan	\$5,336	\$31,809	\$15,570		\$19,781		\$216			\$72,712
R.M. of Invermay	\$5,336		\$9,373		\$19,781		\$216			\$34,706
R.M. of Livingston	\$5,336		\$2,700				\$216			\$8,252
R.M. of Clayton	\$5,336	\$6,894	\$56,898				\$216	\$363		\$69,707
R.M. of Preeceville	\$5,336	\$32,246	\$70,179				\$216			\$107,977
R.M. of Hazel Dell	\$5,336	\$47,389					\$216			\$52,941
R.M. of Sasman	\$5,336		\$1,700				\$216			\$7,252
<b>Totals</b>	<b>\$161,097</b>	<b>\$691,129</b>	<b>\$346,989</b>	<b>\$229,800</b>	<b>\$79,124</b>	<b>\$78,698</b>	<b>\$7,992</b>	<b>\$5,460</b>	<b>\$534,676</b>	<b>\$2,134,965</b>



## **Agri – Environmental Group Plan (AEGP) Program & Farm Stewardship Program (FSP)**

The FSP and AEGP programs provide eligible Saskatchewan producers with financial assistance to implement beneficial management practices (BMPs) to help maintain or improve the quality of soil, water, air, or biodiversity resources. The AWSA will be assisting with the delivery of this program until 2018.

A BMP is any agricultural management practice which ensures the long-term health and sustainability of land-related resources used for agricultural production, positively impacts the long-term economic and environmental viability of agricultural production; and minimizes negative impacts and risk to the environment.

The program includes 24 BMPs under seven categories:

### **Livestock Site Management;**

- BMP – Relocation of Livestock Confinement Facilities
- BMP – Fencing to Protect Surface Water
- BMP – Farmyard Run-off Control
- BMP – Riparian Area Grazing Management and Fencing
- BMP – Native Rangeland Grazing Management
- BMP – Carcass Disposal Planning\*\*



### **Manure Management;**

- BMP – Manure Storage Enhancements\*\*
- BMP – Manure Application Equipment and Technologies\*\*

### **Land Management;**

- BMP – Natural Waterway Erosion Control
- BMP – Creek and Stream Crossings
- BMP – Protecting High Risk Erodible and Saline Soils
- BMP – Shelterbelt Establishment\*\*
- BMP – Native Plant Establishment
- BMP – Weather Data Collection & Monitoring\*\*
- BMP – Water Flow & Erosion Control
- BMP – Multi-Producer Erosion Control



### **Agriculture Waste Management;**

- BMP – Used Oil Storage\*\*
- BMP – Grain Bag Roller\*\*



### **Irrigation Management;**

- BMP – Irrigation Management Planning\*\*
- BMP – Irrigation Equipment Modification\*\*
- BMP – Variable Rate Irrigation Equipment\*\*

### **Precision Farming;**

- BMP – Variable Rate Fertilizer Technology\*\*
- BMP – Variable Rate Mapping\*\*

### **Environmental Solutions:**

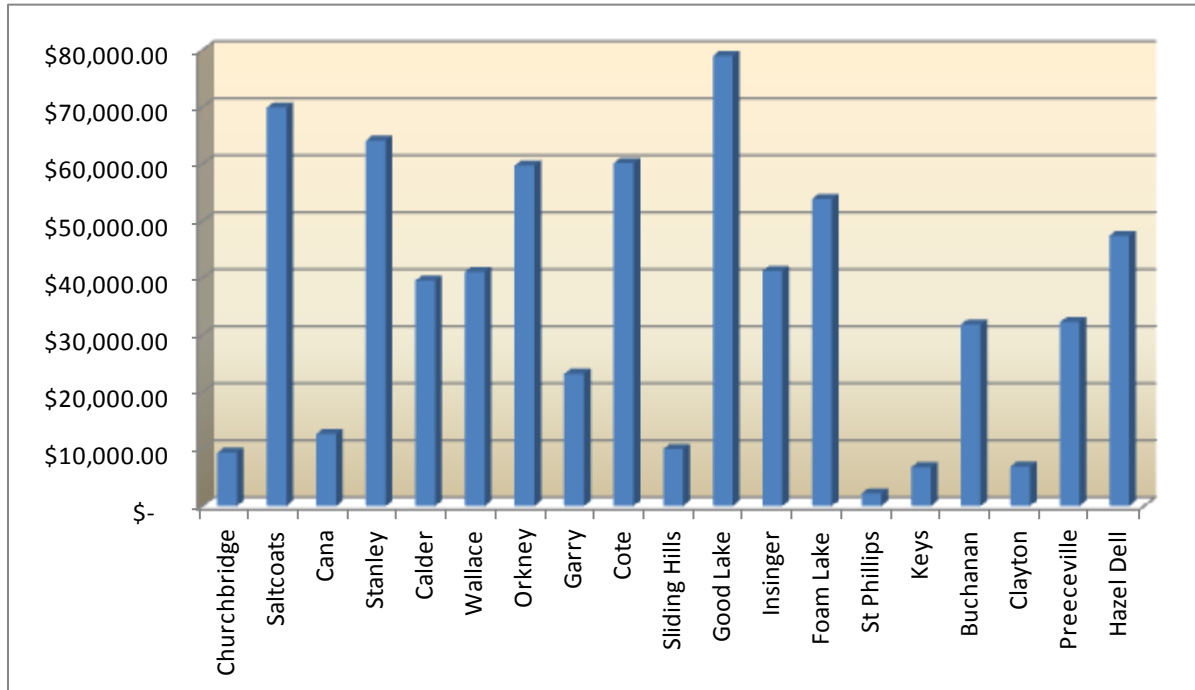
- BMP – Environmental Solutions\*\*



**\*\* BMP's that Require an individual Environmental Farm Plan (EFP) certificate**

## Agri – Environmental Group Plan (AEGP) Program & Farm Stewardship Program (FSP)

As of year end, we submitted 106 project applications for an approximate total of \$691,128.58 in projects, on 116 quarter sections of land.



Rural Municipality	Project Cost Totals	Project Applications	Quarter Sections
Churchbridge	\$ 9,344.67	2	2
Saltcoats	\$ 69,910.97	12	15
Cana	\$ 12,623.89	2	2
Stanley	\$ 64,136.71	8	12
Calder	\$ 39,573.91	5	5
Wallace	\$ 41,071.63	6	6
Orkney	\$ 59,746.52	10	14
Garry	\$ 23,189.87	4	4
Cote	\$ 60,169.96	5	4
Sliding Hills	\$ 10,000.00	1	1
Good Lake	\$ 78,960.14	12	13
Insinger	\$ 41,232.38	9	9
Foam Lake	\$ 53,844.43	6	6
St Phillips	\$ 2,205.82	1	1
Keys	\$ 6,779.28	1	1
Buchanan	\$ 31,808.96	5	3
Clayton	\$ 6,894.36	3	3
Preeceville	\$ 32,245.77	6	7
Hazel Dell	\$ 47,389.31	8	8
<b>Totals</b>	<b>\$ 691,128.58</b>	<b>106</b>	<b>116</b>

## **Farm & Ranch Water Infrastructure Program (FRWIP)**

The AWSA assisted with the delivery of the Farm and Ranch Water Infrastructure Program (FRWIP) from 2013 and will continue to assist producers with this program until 2018. FRWIP supports the development of secure water supplies in Saskatchewan to expand irrigated acres, the livestock industry, encourage rural economic activity and mitigate the impacts of drought under four program categories:

- On-Farm
- Agricultural Business Development
- Community Well
- Irrigation District

### **Eligibility**

Farmers, Ranchers, First Nations Bands, Rural Municipalities and Irrigation Districts across Saskatchewan are eligible to apply for funding to develop eligible projects.

- **Wells**
  - ⇒ **New Small & Large Diameter**
  - ⇒ **RM Tank Loading Stations**
- **Dugouts**
  - ⇒ **New and Expansions**
- **Remote/Offsite Cattle Watering Systems**
  - ⇒ **Solar, Nose Pumps, Wet-Well Systems, Etc.**
- **Shallow/Deep Buried Pipelines**
  - ⇒ **In-Pasture Cattle Watering**
- **Decommissioning Abandoned Wells**
  - ⇒ **Completed by a Qualified Contractor**
- **Protecting Existing Wells**
  - ⇒ **Earth Work and Landscaping**

### **Funding Levels**

**Producers: 50% funding to a max of \$60,000**

**RMs: 2/3 of project costs to a max of \$150,000**

**\* Well Decommissioning: 90% funding to a max of \$10,000/project (does not count against applicant's overall program cap)**

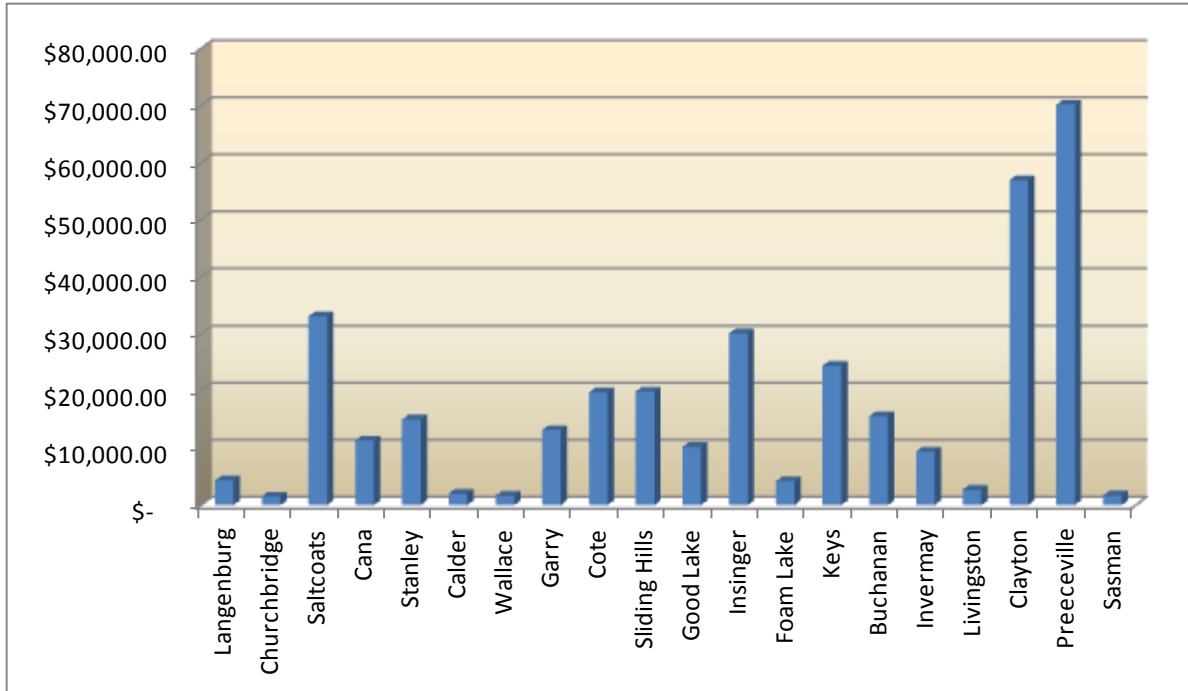
### **Producer Eligibility Criteria**

- **Own a min of 320 acres of farmland**
- **Earn a min of \$35,000 gross farm income per year**



## **Farm & Ranch Water Infrastructure Program (FRWIP)**

As of year end, we submitted 52 project applications for an approximate total of \$346,988.79 in projects, on 53 quarter sections of land.



<b>Rural Municipality</b>	<b>Project Cost Totals</b>	<b>Project Applications</b>	<b>Quarter Sections</b>
Langenburg	\$ 4,317.08	1	1
Churchbridge	\$ 1,500.00	1	1
Saltcoats	\$ 33,081.18	4	8
Cana	\$ 11,310.14	1	1
Stanley	\$ 15,000.00	1	1
Calder	\$ 2,000.00	1	1
Wallace	\$ 1,650.00	1	1
Garry	\$ 13,133.66	4	5
Cote	\$ 19,769.00	3	2
Sliding Hills	\$ 19,900.00	3	2
Good Lake	\$ 10,200.50	2	2
Insinger	\$ 30,107.48	2	3
Foam Lake	\$ 4,200.00	2	2
Keys	\$ 24,400.00	4	2
Buchanan	\$ 15,570.00	1	2
Invermay	\$ 9,373.00	3	3
Livingston	\$ 2,700.00	1	1
Clayton	\$ 56,897.75	8	6
Preeceville	\$ 70,179.00	8	8
Sasman	\$ 1,700.00	1	1
<b>Totals</b>	<b>\$ 346,988.79</b>	<b>52</b>	<b>53</b>



## Decommissioning Abandoned Wells

Abandoned wells are wells that are no longer in use. Over the years, many wells and test holes around homes and farms throughout our watershed have been abandoned without being properly sealed and decommissioned. These wells pose a serious threat to groundwater quality and can be a safety hazard to humans and livestock. These abandoned wells act as a direct conduit that can allow surface water to directly enter an aquifer, contaminating the groundwater and potentially contaminating nearby wells. Through the Farm & Ranch Water Infrastructure (FRWIP) program, we applied to decommission **25 wells** this fiscal year.

The following pictures are some of the wells that were applied for this year.

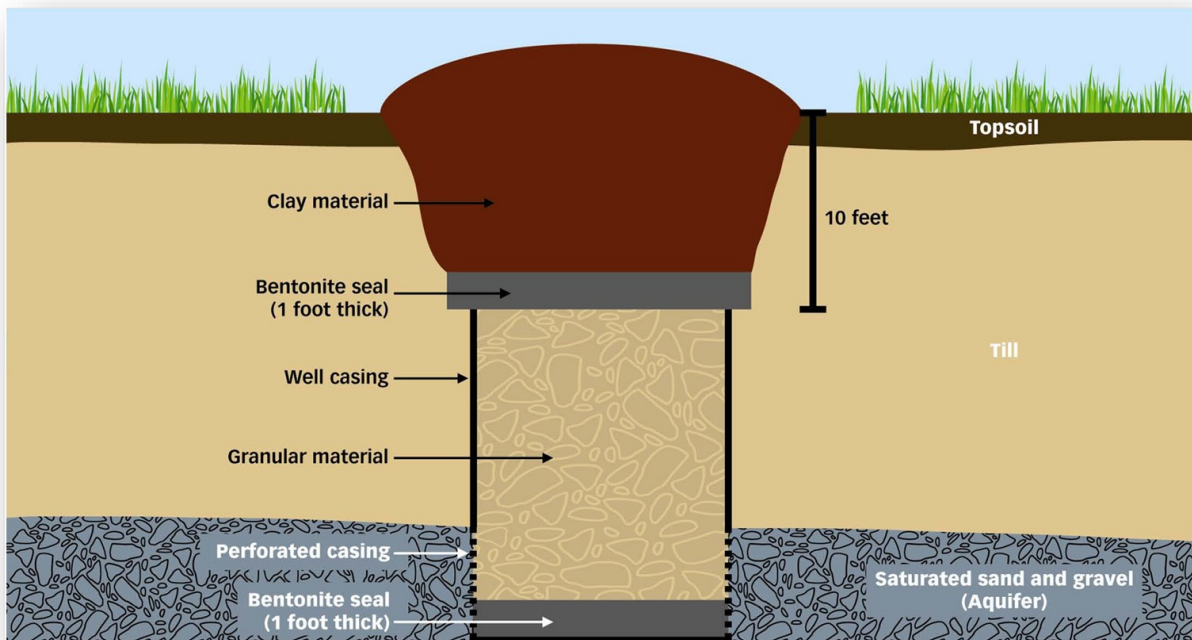
Bill Chernoff - RM of Cote



Evan Matsalla - RM of Invermay



Well Decommissioning process for a large diameter well



## **SWF - Fish Enhancement Projects**

The goal of these projects is to continue to improve fish habitat in the Assiniboine River Watershed. We partnered with the Saskatchewan Wildlife Federation (SWF) to offer producers an additional 25% funding for the following BMPs.

BMP – Relocation of Livestock Facilities - Any permanent structured livestock facility that is located less than 1000 ft from a fish bearing waterway.

BMP – Fencing to Protect the Environment - Any new livestock fencing projects that eliminates livestock access to a fish bearing waterway.

BMP – Remote Water Systems - Any new remote water system set up, that eliminates livestock access to a fish bearing waterway.

BMP – Planting Vegetation to Protect Riparian Areas - Any newly seeded acres along or around fish bearing waterways.

BMP – Improved Stream and Creek Crossings - Any existing crossings that are improved for fish passage.



BMP - Remote Water System off the Whitesand River  
Sliding Hills Charolais - RM of Sliding Hills (273)





## **Upper Spirit Creek Watershed Drainage Pilot Project**

On September 1, 2015 the Minister responsible for the Water Security Agency (WSA), Herb Cox, announced new drainage regulations in Saskatchewan. The new regulations are the first phase of an agricultural water management strategy that recognizes the benefits of drainage and the importance of mitigating negative impacts.

The key changes in the new regulations are:

- ensuring that impacts related to flooding, water quality and habitat loss are addressed as part of the drainage works approval process (as shown in the photo, the negative impacts of drainage can be overlooked by producers)
- allowing landowner agreements as evidence of land control (rather than easements)
- flow control structures required in high risk drainage basins
- culvert, weir, or other structures that will slow the flow of water as it leaves a producer's quarter
- simplifying and streamlining the application approval process
- no longer exempting works constructed before 1981 from requiring an approval (no "grandfather clause")
- enabling the use of "qualified persons" in the design of higher risk drainage works
- dead storage, in some cases landowners may be required to retain a portion of drained water

The new regulations are the first step in a phased-in approach to bring all drainage in the province into compliance over the next 10 years. These changes facilitate the start of the overall approach to the agricultural water management strategy.

The WSA is beginning to phase in these rules through on the ground application in two pilot project areas. One of the pilot areas is in the Upper Spirit Creek basin where the AWSA is acting as the qualified persons to be the facilitators between the WSA and producers.



## **Upper Spirit Creek Watershed Drainage Pilot Project**

Given the large area of land located within the pilot, we are unable to reach each producer at once. We have begun meeting with producers in smaller drainage basin networks just North-East of Rama. There are 4 smaller networks we have begun with. Network 17 has 9 quarters, Network 18 has 10 quarters, Network 19 has 12 quarters (will likely be expanded), and Network 20 has 10 quarters involved in the applications.

We have been meeting with producers one on one to discuss the new regulations and explain changes from the previous approval process. Once we have worked through the details of the regulations we provide the producer with a site plan which outlines any wetlands (existing or drained), drainage works, and the acres of water in total that have or will be drained. We then communicate back and forth to ensure the site plans provided are an accurate representation of the current state of their land. We have met one on one with approximately 20 producers to date.

Once the site plans have been confirmed by the producer we are able to proceed with a joint application. WSA would like to see neighbours work together by applying for a joint application instead of individual applications within a network. The advantage of the joint application is that the land control is locked in regardless of any name changes on the titles of land included in the approval. This involves working with the producer starting “at the top of the hill” to the producer at the bottom of the drainage basin, where WSA has defined the adequate outlet. The alternative is an individual application with separate land control agreements. The drawback to individual agreements is that they are no longer valid if any name on title changes. The individual applicants would then need to re-apply for approval.

In order to help expedite this joint application process we held a group meeting with producers in the same networks on November 2, 2015. It was an informative meeting with AWSA and WSA staff who were available to answer questions producers had after our initial meetings. We held another joint meeting on December 3, 2015 in Rama. At this meeting we had the applications drafted, as well as approvals drafted, so producers knew what they would be signing and what the result of the application would be.

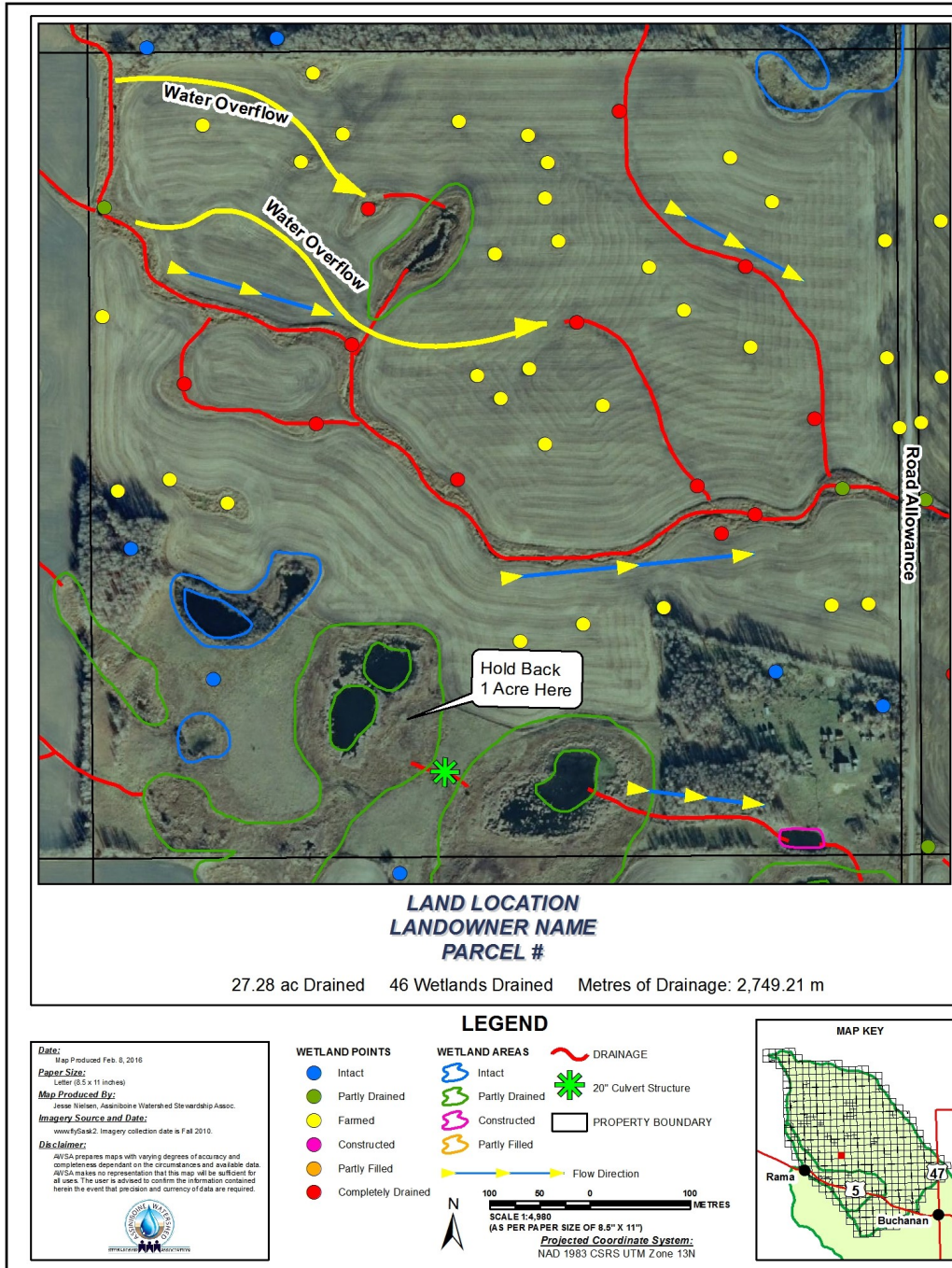
Our next steps are to finalize the applications within our current networks and get final approvals issued from WSA.





# Upper Spirit Creek Watershed Drainage Pilot Project

This map is an example of the sketch plans created by the AWSA for each quarter section a landowner was required to sign a joint application for.

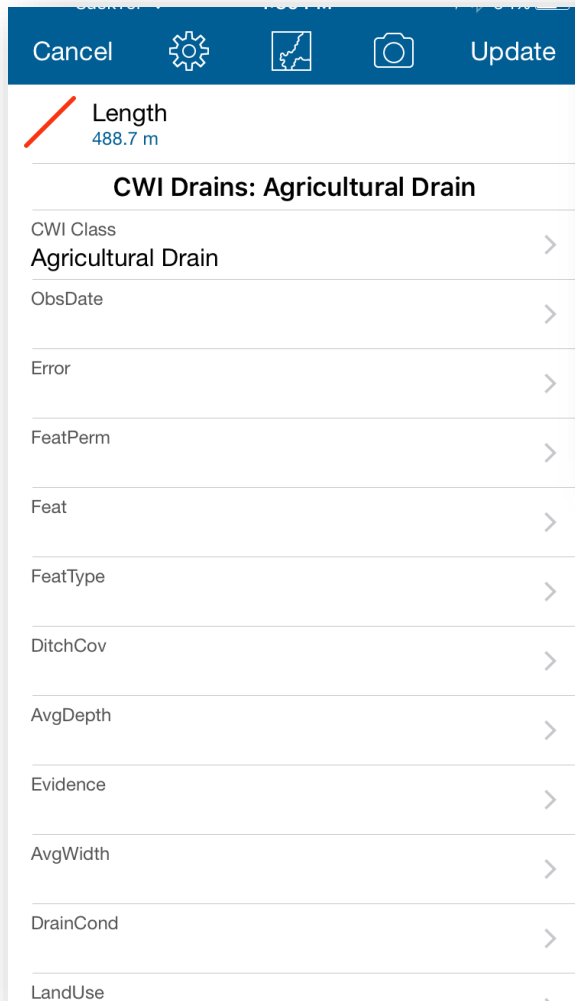


## **Drainage Inventory Evaluation Project**

AWSA was contracted by the Water Security Agency to evaluate the current detection rates of drainage features identified within the drainage inventory dataset provided by Ducks Unlimited. This dataset is known as the Canadian Wetland Inventory (CWI). AWSA ground truthed data and compared it with the CWI. This was done via the ArcGIS Collector app with an account set up by Ducks Unlimited and the Water Security Agency.

Staff used a quad and went on site to locations selected within the Upper Spirit Creek Basin and recorded their observations in the app using a hand held device.

The screen shot to the right shows the drains marked in red and has a blue outline around sampled quarters. If drains were existing on site but not marked in the inventory these were also recorded either by physically driving the drain or drawing it in on the app.



Cancel [Settings] [Map] [Camera] Update

Length  
488.7 m

**CWI Drains: Agricultural Drain**

CWI Class  
Agricultural Drain >

ObsDate >

Error >

FeatPerm >

Feat >

FeatType >

DitchCov >

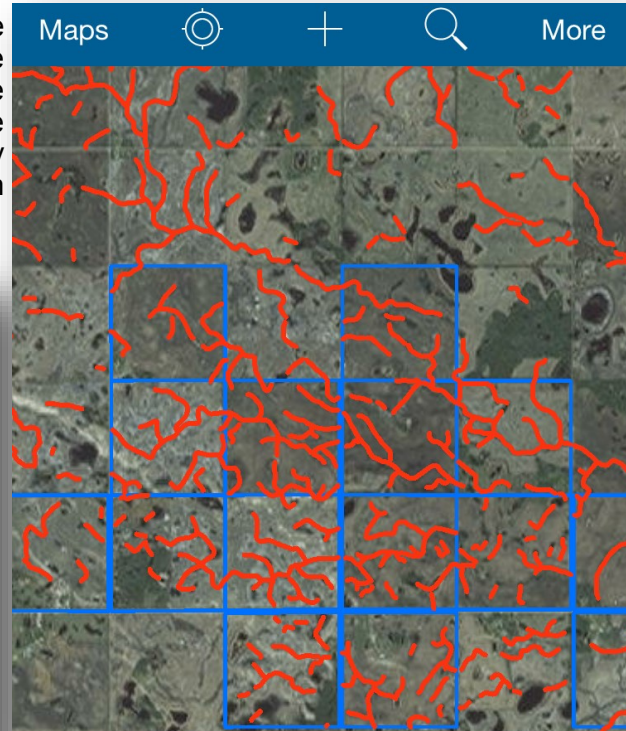
AvgDepth >

Evidence >

AvgWidth >

DrainCond >

LandUse >



The drains were then individually selected to edit. The screenshot to the left shows the attributes that were entered for each drain.

Data collected was then verified by the landowner. This exercise proved to be quite useful as the information gathered was used in the Upper Spirit Creek Pilot Project to verify current drainage works.

The existing data was fairly accurate. A few drains had to be added in and a few were omitted from the inventory. Considering the imagery was from previous years, it was impressive how accurate the current detection rates of drainage features were in the drainage inventory dataset.



## Wetland Restoration Program

The AWSA partnered with the Lake Winnipeg Basin Stewardship Fund - Environment Canada, the National Wetland Conservation Fund - Environment Canada, the Water Security Agency, SK Ministry of Highways and Infrastructure, and DUC to promote the importance of wetlands and to restore/re-establish drained or in-filled wetlands. We restored a total of 114.9 wetland acres (67 individual basins) on 14 quarters of land in November of 2014 and October of 2015 (2015 fiscal year). The program compensated landowners \$2000 for every wetland acre they re-established on their land. In return for the incentive payment, landowners were required to sign a 10 year agreement stating they will not breach any of the restored wetlands, nor do any new drainage or bush clearing to the existing wetland and upland habitat within the quarter of land in which the restoration was done (we protected 355.2 acres of existing habitat). Over time these restored wetlands will once again become full functioning wetland ecosystems.

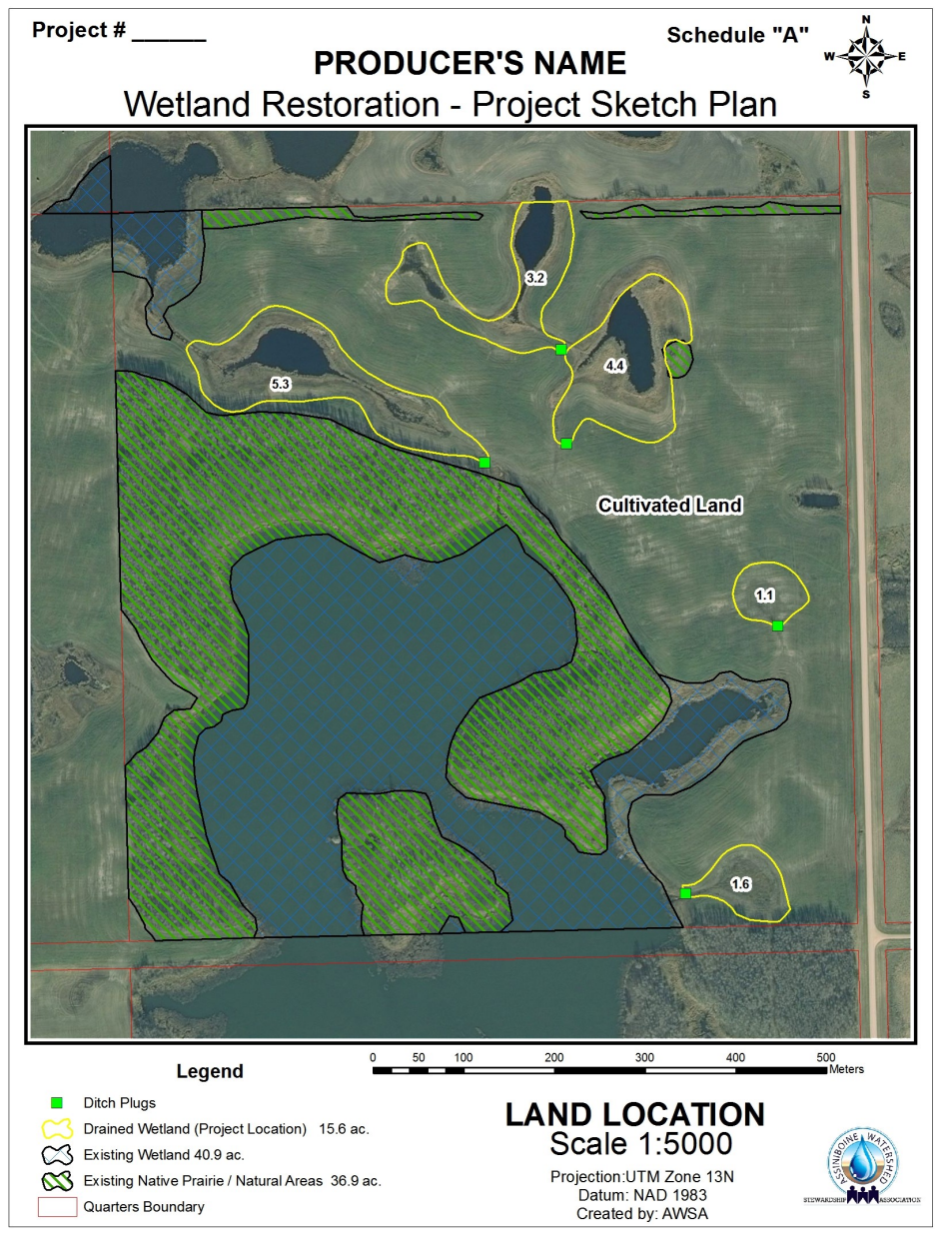


- Wetlands are commonly referred to as marshes, sloughs or potholes.
- Wetlands reduce the severity of floods by retaining water and releasing it slowly during drier periods.
- Wetlands recharge groundwater supplies by capturing and storing surface water, a portion of which infiltrates into the underlying water table.
- Wetlands help purify surface water by breaking down, capturing, or assimilating nutrients, agricultural herbicides and pesticides, organic waste, and sediment that is carried to them by runoff water.
- Around 80 acres of wetlands are destroyed in Canada every day - that's equal to approximately 40 CFL football fields! The vast majority of this loss is occurring on the Prairies.
- Wetlands act as Phosphorus sinks, helping to reduce the eutrophication of our lakes and waterways. They assimilate approximately 2 g P/m<sup>2</sup>/year (or 8.1 kg P/acre/year). That means **the wetlands we restored this fiscal year have the ability to assimilate over 930 kg of Phosphorus annually!**



# Wetland Restoration Program

This sketch plan is an example of the process we use for landowner negotiations and wetland restoration. Each land parcel is initially mapped using GIS (Geographic Information System) software in conjunction with the satellite imagery. In-field "ground-truthing" is then performed using an RTK-grade GPS and/or a laser-level system to accurately map out ditch plug locations and restored basin boundaries. The final sketch plan such as that below, is then presented to the landowner for review prior to contract signing. This particular parcel had 4 separate basins to restore, for a total of 15.6 acres of wetland habitat. In addition, the 77.8 acres of existing habitat are also protected under contract for a period of 10 years.





## **Wetland Restoration Program**

The following 3 pictures were all taken on the same quarter section on October 20, 2015. Restoration construction on these wetlands took place on November 4, 2014 the funding received from the Lake Winnipeg Basin Stewardship Fund. It is amazing how quickly these wetlands re-established themselves after only one year! As you can see, they are all holding water and recolonizing with wetland vegetation quite nicely. These wetlands are now functioning to retain potential nutrient laden runoff on the producer's own land rather than it entering nearby water courses which ultimately flow into Lake Winnipeg via the Whitesand and Assiniboine Rivers.



## **ALUS Saskatchewan Assiniboine Project (ASAP)**

ASAP’s strength lies in the producer friendly simplicity of the ALUS project model. The ALUS vision: Alternative Land Use Services (ALUS) has a simple, yet revolutionary goal...create a healthy landscape that sustains agriculture, wildlife and natural spaces for all Canadians. ALUS is a community-developed, farmer-delivered program that provides support to farmers and ranchers to enhance and maintain nature’s benefits. Simply put, ASAP creates a cash value for the natural benefits a producer’s land provides.

Founding partners of ASAP are the Saskatchewan Farm Stewardship Association (Sask FSA), the Assiniboine Watershed Stewardship Association (AWSA) and ALUS Canada. Sask FSA endorses ALUS as an agriculture-based conservation program. Core support for ASAP comes from ALUS Canada through various federal government and private organization grants. The AWSA is the delivery agent and program administrator.

We offer the following annual payments to producers:

Project Classification	Annual Payment	Description
Forage Conversion	\$50/acre	Converting cropland to perennial forage cover using a blend of tame grass/legume species.
Forage Conversion – Baled or Grazed Acres	\$25/acre	If the producer decides to bale or graze forage acres enrolled in ASAP they will receive 50% of the forage conversion payment so as not to subsidize production.
Wetland Conservation < 2 acres	\$30/acre	Conserving existing prairie pothole wetland habitat (basin size less than 2 acres in area).
Wetland Conservation > 2 acres	\$20/acre	Conserving existing prairie pothole wetland habitat (basin size greater than 2 acres in area).
Upland Conservation	\$20/acre	Conserving existing upland habitat composing of native trees, shrubs, and grasses.

### **PROJECT TERMS - 5 TO 10 YEARS**

- 5 years is the designated baseline to maximize efficiencies of project administration
- Can be cancelled at any time by contacting the program administrator

### **FORAGE ESTABLISHMENT**

- ASAP will reimburse the producer for their forage establishment cost at \$42.50/acre





## Assiniboine River Basin Initiative (ARBI)



2015 marked a busy year for the Assiniboine River Basin Initiative. The highlight of the year was the official formation of the organization at the group's first ever Annual General Meeting and Conference held in Regina, SK November 20-23, 2014. The three-day meeting laid the groundwork for the new organization to move forward and begin serving stakeholders in Manitoba, Saskatchewan, and North Dakota, to seek co-ordinated solutions to water management across the entire river basin area. The greater Assiniboine River basin includes the sub-basins of the Qu'Appelle, Souris (Mouse), and the Assiniboine rivers. The Assiniboine River basin was the only major river basin on the Northern Great Plains without any overall organization in place to guide water management activities prior to the formation of ARBI.

The conference brought those who farm and live in the region, including representatives of municipalities and counties, together with representatives of conservation, water, agricultural, science-based groups and government departments from Manitoba, Saskatchewan and North Dakota.

Since the Regina conference... The ARBI board and executive committee undertook the required work to establish the organization such as: incorporation in both Canada and the US, expansion of the board, development of bylaws, and development of a funding base to work towards. The work to create awareness of the initiative was also undertaken with meetings occurring across the basin with local stakeholders as well as with governments (federal, provincial and state) and other interest groups. The board also began taking steps in the development of a basin wide coordinated action plan well as other projects as outline in the goals and objectives such as: a basin wide modeling platform in cooperation with partners; white paper review and development as required; heritage river designation; supporting LiDAR funding applications; supporting the City of Minot application for National Disaster Funding; supporting a basin wide water quality analysis project to be delivered by the International Institute of Sustainable Development (IISD) and delivered a second conference in November 2015 in Brandon, Manitoba, where they reported on activities and reconfirmed direction.

With the resignation of Aron in September 2015, his seat as Saskatchewan's representative on the ARBI Executive Committee was replaced by David Pattyson, manager of the Upper Souris Watershed Association. As new AWSA manager, Jesse was appointed to the ARBI board of directors and looks forward to helping ARBI continue to build on the tremendous momentum gained in 2015.



1st Annual ARBI Conference & AGM in Regina November 20, 2014

## Good Spirit Lake Shoreline Revitalization Project - Phase II

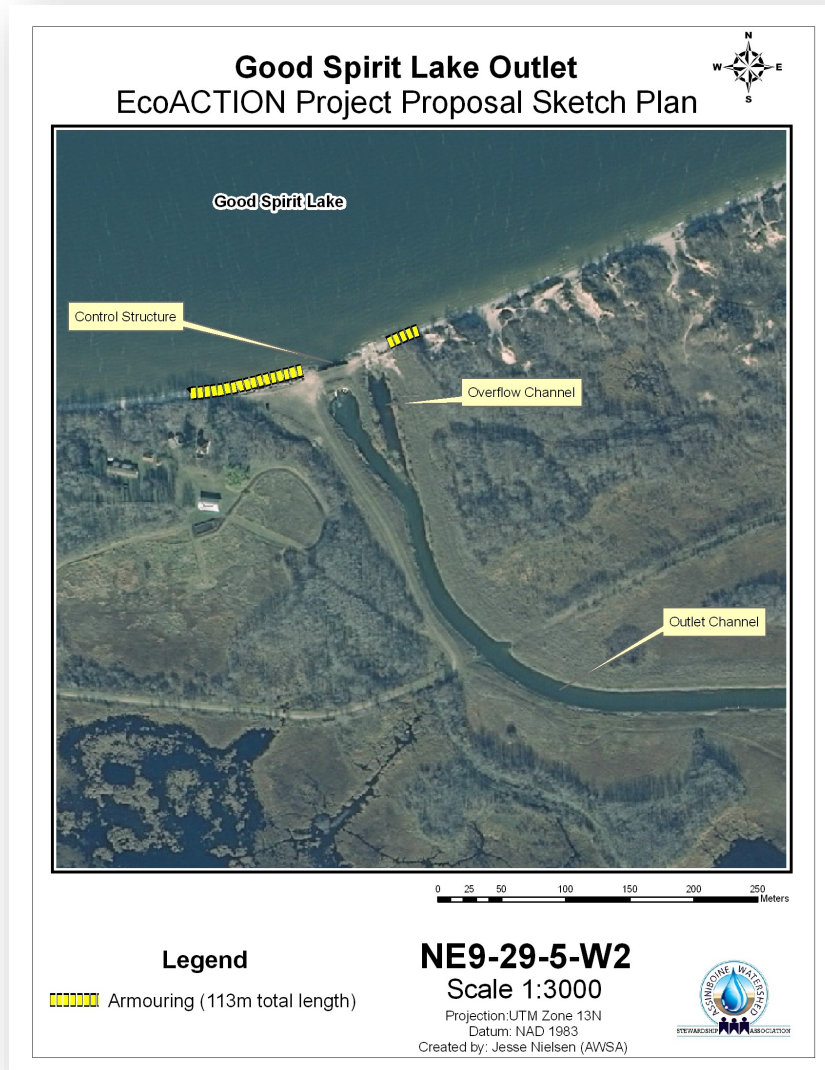
The AWSA completed phase II of the project October 27, 2015 (phase I, a 13 meter section east of the outlet structure, was completed in the fall of 2014). The Good Spirit Shoreline Revitalization Project was made possible through the AWSA's partnership with the Water Security Agency, Good Spirit Lake Watershed Association Board (GSLWAB), Good Spirit Provincial Park, EcoACTION- Environment Canada, and the Saskatchewan Wildlife Federation.

Phase II involved construction activities on a 100 meter section west of the outlet structure to provide permanent shoreline erosion protection to prevent the risk of possible washout of the lake's entire control outlet structure.

The need for this project stems from the extreme flooding of the lake experienced in 2010 and 2011. As a result, huge tracts of the lake's sandy shoreline were eroded away, causing infilling of an already very shallow lake and heavy sedimentation in the Whitesand River downstream. The problem was of most concern around the lake's control outlet structure. There, the shorelines experienced a massive amount of erosion, and as a result, a temporary erosion control solution consisting of around 50 round flax bales was implemented. This temporary solution eventually turned into great disarray, as the majority of the bales had been eroded away, leaving the area prone to erosion once again, creating a terrible eye sore, and most importantly, leaving the control outlet structure prone to the potential of a complete washout (which was of tremendous concern during the 2010 flood).

Funding provided by EcoACTION allowed the AWSA and its partners to prevent further shoreline erosion by permanently armouring the shoreline around the outlet structure using a combination of clay, geotextile erosion control fabric, pit-run gravel, and bouldering (as per design recommendations of a Water Security Agency engineering report).

Special thanks goes out to Jerry Cherewyk for the tremendous construction work done on the project and the GSLWAB for all their in-kind construction material support.





## Good Spirit Lake Shoreline Revitalization Project - Before



(Pictures provided by the AWSA)



## Good Spirit Lake Shoreline Revitalization Project - After



(Pictures provided by the AWSA)



## Wallace Creek Watershed Association Board No.11

The Wallace Creek Watershed Association Board No. 11 (WCWAB) was formed under the provincial *Watershed Act* and officially incorporated in September of 2013. The WCWAB is comprised of a 11 member Board of Directors (2 from each RM and 1 from the town of Rhein) appointed from the municipalities that make up the Wallace Creek Watershed membership area (see map next page). The AWSA was appointed by the Board to act as the administrator/ projects manager for the Association. Unlike the AWSA and provincial watershed associations that were formed by the Water Security Agency under the *Source Water Protection Planning Process*, because the WCWAB is formed under the *Watershed Act*, they are considered a form of municipal government with the ability to levy funds from their membership. Thus, for most projects being undertaken by the WCWAB, each rural municipality pays for a portion of the total cost according to the percentage of area each RM has within the Wallace Creek drainage basin (see map next page).

Culvert Addition in RM of Wallace



Improved Creek Crossing

Culvert Replacement in RM of Sliding Hills

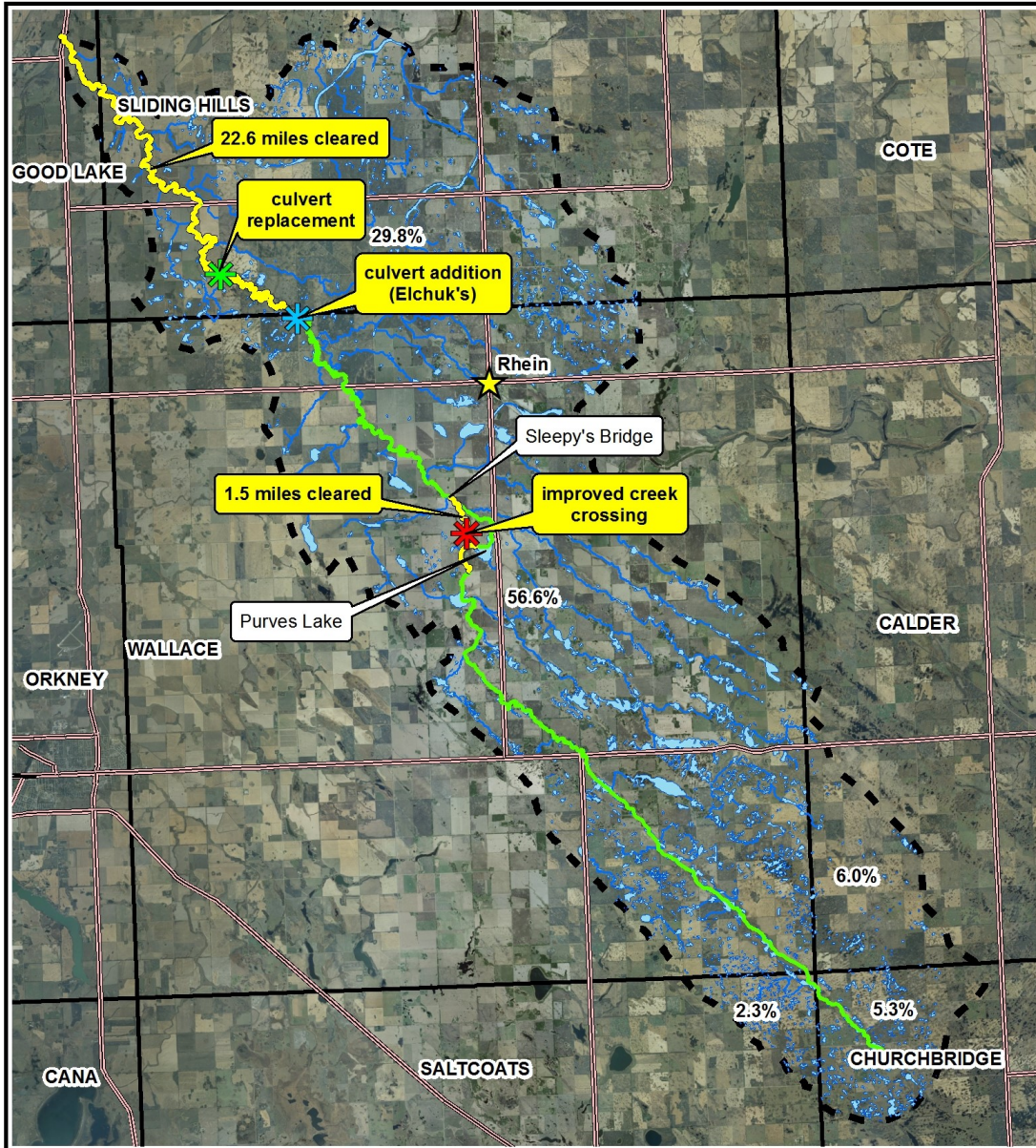


(Pictures provided by the AWSA)



# Wallace Creek Watershed Association Board No.11

## Wallace Creek - Completed Projects Map (Nov.1, 2014 - Oct.31, 2015)



### Legend

- Wallace Creek
- Waterbodies
- RM Boundary
- Highway
- Waterways
- Watershed Boundary



Created: Feb.12, 2016  
 Projection: UTM Zone 13N  
 Datum: NAD 1983  
 Created by: Jesse Nielsen (AWSA)



# WCWAB No.11 - 22.6 miles Wallace Creek Channel Clearing



(Pictures provided by the AWSA)



## **Yorkton Creek Watershed Association Board No.4**

The AWSA was appointed as secretary/project manager of the Yorkton Creek Watershed Assoc. Board (YCWAB) on October 31, 2014 by a unanimous decision vote of the board of directors. The AWSA will work with the board to manage the flows of water in and around the Yorkton South Complex.



The massive flooding that took place in 2014 in the ARW also took its toll on the structures of the Yorkton Creek Watershed system. The weir between Little Leech Marsh and Leech Lake was affected. Erosion on the west side of the weir was repaired using adjacent native materials in 2015.



COMPLETED PROJECT SHEET

Project #4924289  
Map #62M/1  
#62M/2

COMPLETED 1986

YORKTON SOUTH

Location:

NE 23/NW 24-24-4-2. The complex of ten wetlands that represent the Yorkton South project lie within the watershed of the Assiniboine River and are located primarily south and west of the city of Yorkton, Saskatchewan. The area is depicted on the 62M (Yorkton) 1:250,000 plus the 62M/1 (Yorkton) and 62M/2 (Willowbrook) 1:50,000 mapsheets of the National Topographic Series. The site of the main water level control structure for the complex is on the road allowance between the northeast quarter of section 23 and the northwest quarter of 24, township 24, range 4, west of the second meridian. The Universal Transverse Mercator (U.T.M.) is 13-6785-56621 with the co-ordinates being 102° 27' N latitude and 51° 05' W longitude.

History:

There has been a long and often controversial history related to the system of lakes and marshes south and west of Yorkton. In 1899, following a drought period that saw Crescent and Leech Lakes go dry during 1896, the Willow Brook diversion dam was constructed by the Public Works Department of the North West Territorial Government in an effort to provide more water to the system. This also included a diversion ditch from the Rousay Lakes to York Lake. Historical records indicate that wet conditions returned in 1902 and public pressure was exerted during the next twenty-five years to lower levels in the lakes. An unanticipated benefit to this cause came in 1906 with the washing out of the Willow Brook diversion dam.

As the dry cycle of the 1930's began and water levels on the lakes began to drop conflicts arose as local interests attempted to divert water for their own uses. As a result of this demand for water Ducks Unlimited received a request in 1938 from local residents to investigate means of improving the water supply for Rousay Lake and Maddaford Marsh. In 1942 authorization to reconstruct the diversion works on Willow Brook was granted



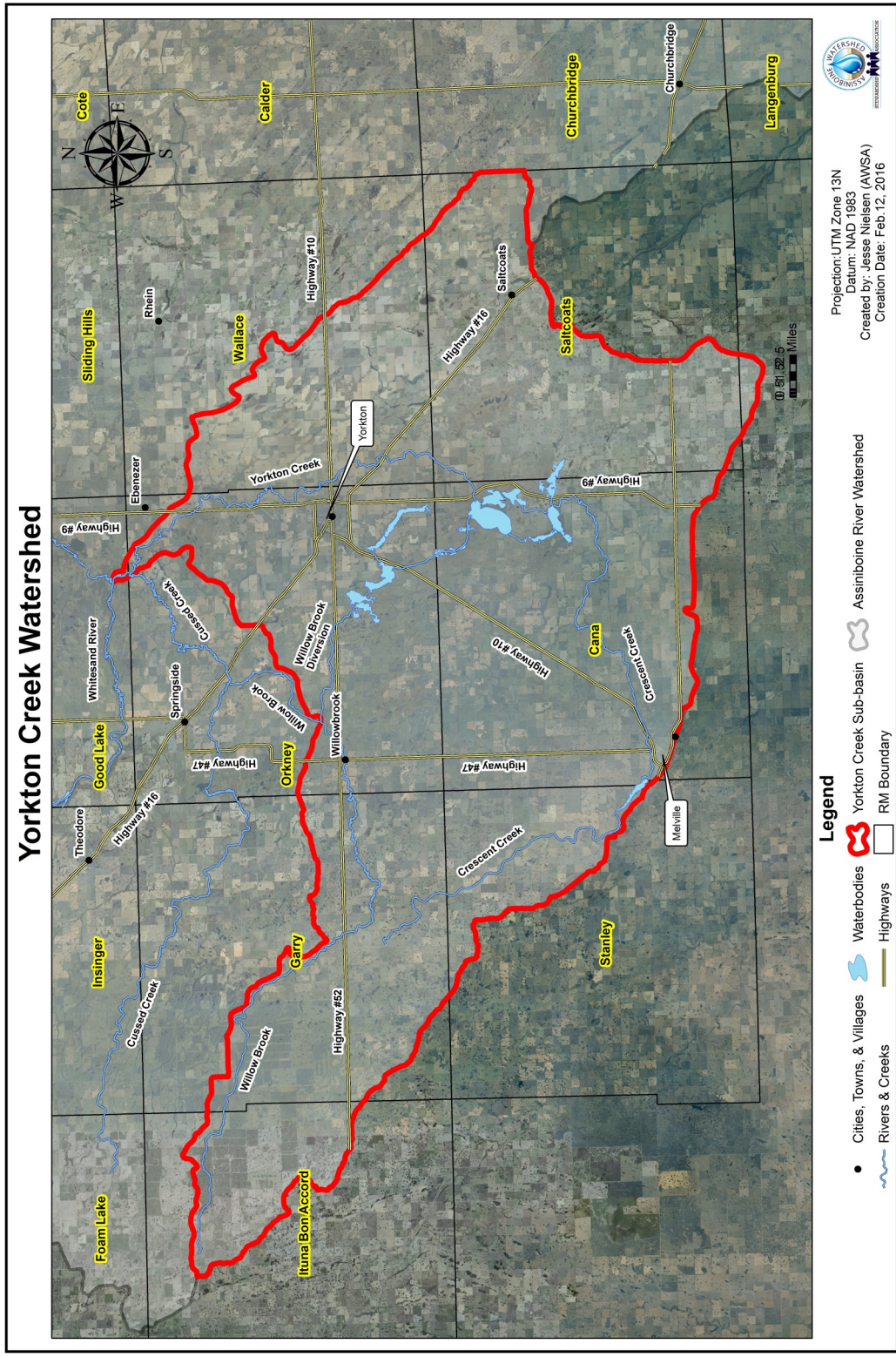
to the City of Yorkton under the Water Rights Act. This construction was carried out jointly by the City of Yorkton and Ducks Unlimited.

During the next two decades Ducks Unlimited built extensive works throughout this wetland complex in an effort to maintain water levels during years of low runoff. However, problems again arose as the wet cycles of the 1950's and 60's brought surpluses of water into the system. This situation was aggravated because of a lack of adequate outlet facilities to provide for flood control.

In addition to problems with flooded agricultural lands a rivalry started between the cities of Yorkton and Melville over water supply. Numerous public meetings and investigations resulted with the culmination in 1972 when a petition from farmers brought the Government of Saskatchewan and all interested agencies together (Table 1). As a consequence, the Saskatchewan Wetlands Committee (Provincial Interdepartmental Drainage and Flood Control Review Committee) established a sub-committee, the Yorkton Creek Ad Hoc Committee, to investigate and present recommendations for resolving the problems attendant to this watershed. During the course of its work, the Yorkton Creek Ad Hoc Committee has reviewed, co-ordinated and attempted to compromise the interests and involvement of several government and private groups (Fig. 1).

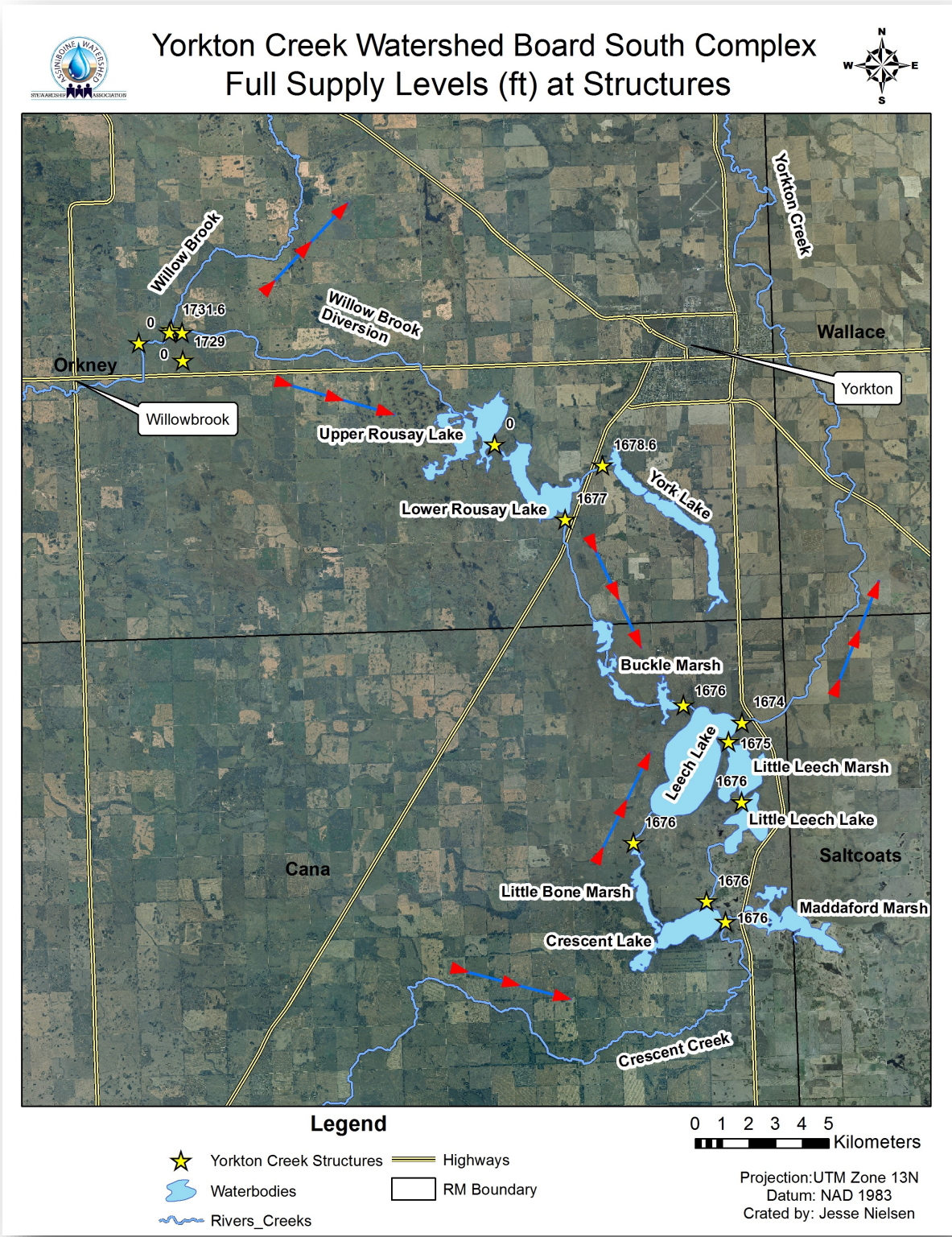
To implement and fund the development of the Yorkton South project it was recommended that a Watershed Authority be established under the Watershed Associations Act, administered by the Land Improvement Branch, Saskatchewan Department of Agriculture. The Yorkton Creek Watershed Association No. 5 was established by order in council 2 June 1977. Ducks Unlimited negotiated with the Watershed Association and a proposal was agreed upon where Ducks Unlimited would undertake certain works within and adjacent to the Yorkton Creek Marshes. In consideration Ducks Unlimited received assurances that the wetlands will be managed to a mutually agreeable water level for the production of waterfowl and other wildlife benefits.

# Yorkton Creek Watershed Association Board No.4





# Yorkton Creek Watershed Association Board No.4





## **Emergency Flood Damage Reduction Program**

The AWSA once again contracted their services to the Water Security Agency for assistance with the Emergency Flood Damage Reduction Program (EFDRP) during 2015. The AWSA's Katelyn Smith acted as a program inspector, providing both initial and final site inspections and reporting. AWSA coordinator, Jesse Nielsen, provided mapping and surveying services. EFDRP provided assistance with the implementation of emergency flood damage reduction or prevention measures in 2015 for communities, rural municipalities, businesses, non-profit organizations, individual farm and country residences and cottages to prevent damage from imminent flooding.

Activities and works covered by the program provisions:

- Engineering support
- Construction of dykes/berms
- Installation of culverts
- Construction of diversion works (Approvals required)
- Sandbags, material to fill sandbags, equipment rental to fill sandbags, and placement of sandbags with machinery
- Temporary flood dykes (water tubes, basket type dykes, etc.)
- Channel clearing
- Pumping
- For communities and municipalities, use of their own equipment for flood prevention work at standard industry rates
- For yard sites – owners can use their own equipment and cost-sharing will be based on appropriate equipment rental rates



(Pictures provided by the AWSA)



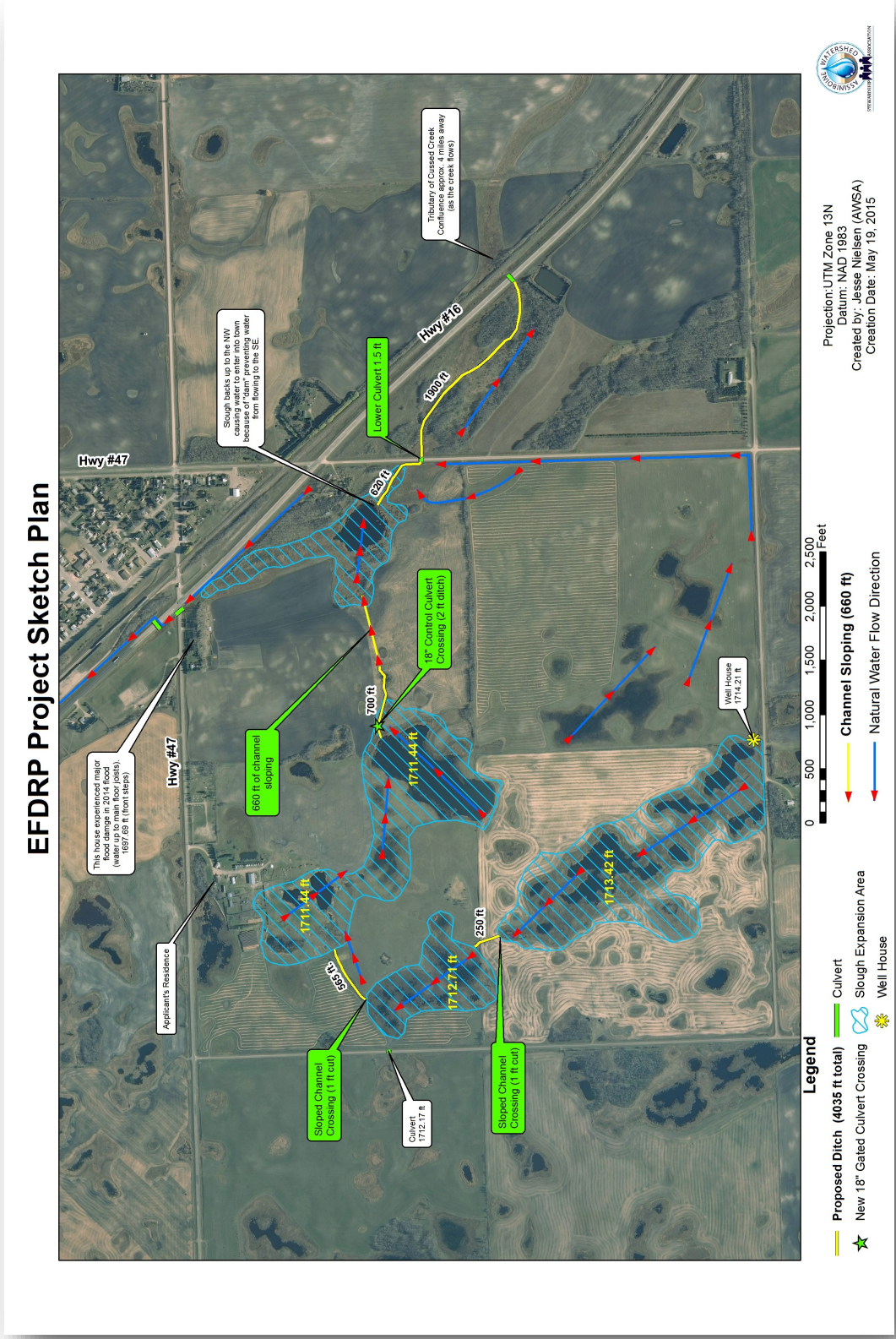
# Emergency Flood Damage Reduction Program



(Pictures provided by the AWSA)

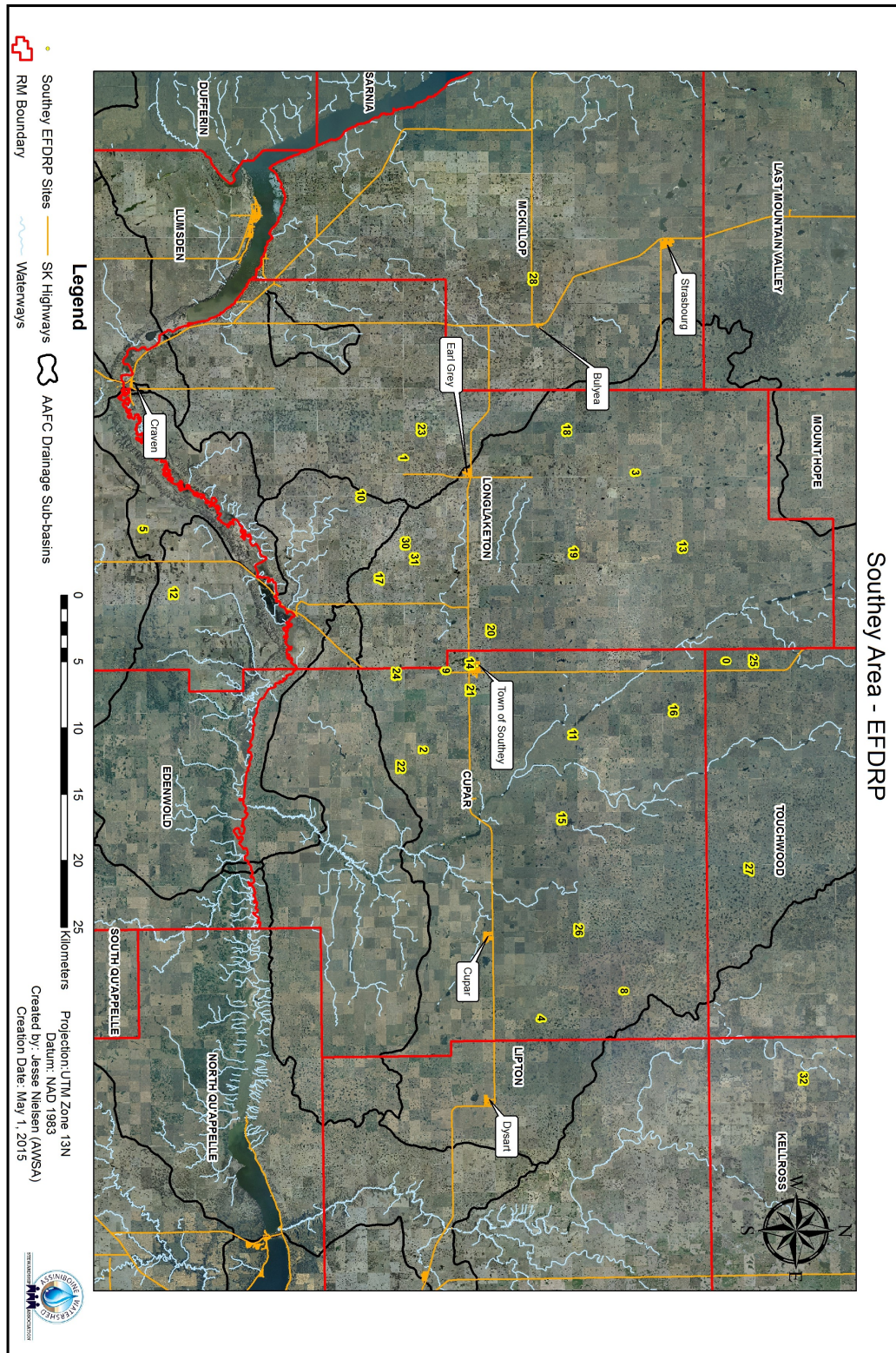


# Emergency Flood Damage Reduction Program - Mapping





# Emergency Flood Damage Reduction Program - Mapping





## Poster Contest

The Assiniboine Watershed Stewardship Association once again participated in the SAW provincial poster contest. The theme for 2015 was "Water and Wildlife". The contest was open to grade 5, 6, and 7 students. They had an opportunity to win several prize packs locally, with the first place poster having a 1 in 11 opportunity to also win the provincial Grand Prize of a \$1000 Cabelas's Gift Card donated by the 11 participating provincial Watershed Associations! Jesse gave a total of 6 presentations at 3 schools across the watershed, teaching students about several aspects of the Assiniboine River Watershed such as where our drinking water comes from and the many different types of animals that live in an around the watershed's wetland ecosystems. We would like to thank all those teachers and students that participated.



**1st Place** - Jade Fidek  
Gr.7, 12 years old  
Invermay School

Jesse presenting to  
Jade during a school-wide  
assembly





## Poster Contest

2nd Place - J.J. Reyes, Gr.6, 11 years old, Churchbridge



3rd Place - Jada Starr, Gr.6, 12 years old, St. Henry's SR





# Pizza Farm

## WE PROUDLY SUPPORT



*Learning about Agriculture and Food Production from the Ground Up!*

The **AWSA** is a proud supporter of Yorkton's Pizza Farm. Led by the Saskatchewan Ministry of Agriculture, this project has touched the lives of over 350 grades 3 & 4 students from Yorkton and surrounding areas.



The Pizza Farm is a large circular plot of land partitioned into smaller plots shaped like pizza wedges. Each of the farm's



wedges produce ingredients used in making pizza. Wheat and canola for crust, tomatoes, peppers, garlic, onions and herbs for sauce, pigs for pepperoni & ham, and a dairy cow for cheese.



The project is an educational tool for teaching kids about where food comes from and the important role that modern agriculture and technology play in food production.



**THANK YOU**  
FOR YOUR SUPPORT!





## Fall Educational Sessions - Logan Green Trout Pond



On October 8 and 9, 2015 Katelyn and Caitlyn provided an educational session for two grade seven classes on the importance of wetlands. Approximately 20 students were in attendance each day and the session was approximately 2 hours long.

Information was given about where our water comes from and why groundwater is so important in our watershed. Students then had an opportunity to “critter dip” in the City of Yorkton trout pond. They were able to scoop out insects from the pond and identify them.



A model was also borrowed from Ducks Unlimited, which illustrated the importance of wetlands and highlighted the consequences of ditching.

(Pictures provided by the AWSA)

## **Precision Weather Solutions**

The AWSA has partnered with a Manitoba based weather station equipment supplier to assist in the installation and maintenance of weather stations in the Assiniboine River Watershed.

Precision Weather Solutions enables its patrons to be a part of one of the largest, most accurate and fastest alerting meteorological networks available. Their monitoring network consists of over 10,000 weather stations in North America.

The AWSA's partnership with PWS began in Fall 2014 when a workshop was arranged to teach the AWSA proper installation and maintenance protocols. The AWSA has installed 8 stations and performed 22 maintenance visits during this past year.



(Pictures provided by the AWSA)



# Culvert Infrastructure Mapping Program



## Culvert Infrastructure Mapping Available



The Assiniboine Watershed Stewardship Association is pleased to offer its services to our Rural and Urban member municipalities interested in having their culvert infrastructure GPS mapped and inventoried. AWSA staff will measure and record dimensions, GPS locations, culvert heights and any other relevant infrastructure information; and compile it in both electronic spreadsheet and GIS formats.

### Cost to Membership Municipalities

\$500/day flat rate (field and/or in-office map creation)

- ⇒ Member - Urban and Rural Municipalities will receive 2 FREE days of mapping.
- ⇒ New for 2015 - The AWSA has purchased a survey grade GPS with RTK capability that has sub-inch horizontal & vertical accuracy.



For more information contact Jesse at the  
Assiniboine Watershed Stewardship Association  
306-783-1692

# SWF - Fish Enhancement Program



## Fish Enhancement Projects-Funding



The goal of these projects is to continue to improve fish habitat in the Assiniboine River Watershed. We partnered with the Saskatchewan Wildlife Federation (SWF) to offer producers an additional 25% funding for the following BMPs. **Individual project maximums apply.**

### Projects Available for Funding

BMP – Relocation of Livestock Facilities - Any permanent structured livestock facility that is located less than 1000 ft from a fish bearing waterway.

BMP – Fencing to Protect the Environment - Any new livestock fencing projects that eliminates livestock access to a fish bearing waterway.

BMP – Remote Water Systems - Any new remote water system set up, that eliminates livestock access to a fish bearing waterway.

BMP – Planting Vegetation to protect Riparian Areas - Any newly seeded acres along or around fish bearing waterways.

BMP – Improved Stream and Creek Crossings - Any existing crossings that are improved for fish passage.



For more information contact Katelyn at the Assiniboine Watershed Stewardship Association  
306-783-1693



# Tree Planting Equipment Program



## Tree Planting Equipment Rental



The Assiniboine Watershed Stewardship Association is pleased to announce that it will now be renting tree planting equipment to all residents within its Rural and Urban member municipalities. We have one tree planter and three plastic mulch applicators available for rental on a first-come-first-served basis.



### Rental Costs

- ⇒ Equipment rental
  - ⇒ \$50/day or \$200/week (5 days)
- ⇒ Plastic Mulch
  - ⇒ \$100/roll (48"x1500') or \$50/half



### Equipment Information

- ⇒ Tree Planter
  - ⇒ "Non-hydraulic" model (coultter disc requires well-tilled soil to create furrow)
  - ⇒ Seats 2 people for planting
  - ⇒ Clevis-pin hitch
  - ⇒ Can be pulled behind tractor or 4-wheel drive truck
- ⇒ Mulch Applicator
  - ⇒ Pull-type
  - ⇒ Requires 50hp+ tractor with hydraulic hook-up capability
  - ⇒ Clevis-pin hitch



For more information  
contact the  
Assiniboine Watershed  
Stewardship Association  
306-783-1696



## **Acronym List**

**AAFC** – Agriculture and Agri-Food Canada  
**ADOPT** – Agricultural Demonstration of Practices and Technology  
**AEGP** – Agri-Environmental Group Plans  
**AESB** – Agri-Environment Services Branch (Formerly PFRA)  
**AGM** – Annual General Meeting  
**AAIS** – Aquatic Alien Invasive Species  
**ALUS** – Alternative Land Use Services  
**ARBI** – Assiniboine River Basin Initiative  
**ARW** – Assiniboine River Watershed  
**ASAP** – ALUS Saskatchewan Assiniboine Project  
**AWSA** – Assiniboine Watershed Stewardship Association  
**BMP** – Beneficial Management Practice  
**COY** – City of Yorkton  
**CPR** – Canadian Pacific Railway  
**CNR** – Canadian National Railway  
**CSFSP** – Canada / Saskatchewan Farm Stewardship Program  
**DFO** – Department of Fisheries and Oceans  
**DUC** – Ducks Unlimited Canada  
**EFP** – Environmental Farm Plan  
**FNR** – First Nations Reserve  
**FRWIP** – Farm and Ranch Water Infrastructure Program  
**FSP** – Farm Stewardship Program  
**GIS** – Geographic Information System (computer mapping)  
**GF2** – Growing Forward 2  
**GPS** – Global Positioning System  
**GSLWAB** – Good Spirit Lake Watershed Association Board  
**GSLPP** – Good Spirit Lake Provincial Park  
**ILO** – Intensive Livestock Operation  
**IACC** – Institutional Adaptation to Climate Change  
**LID** – Low Impact Development  
**LIRA** – Land and Infrastructure Resiliency Assessment  
**LQWS** – Lower Qu'Appelle Watershed Stewards  
**LWBSF** – Lake Winnipeg Basin Stewardship Fund  
**MCDA** – Manitoba Conservation Districts Association  
**MOA** – Ministry of Agriculture  
**MOE** – Ministry of Environment  
**MOH** – Ministry of Highways



## **Acronym List**

**NRCAN** – Natural Resources Canada  
**NWCF** – National Wetland Conservation Fund  
**PCAB** – Provincial Council of Add Boards  
**PCAP** – Prairie Conservation Action Plan  
**PHJV** – Prairie Habitat Joint Venture  
**PFRA** – Prairie Farm Rehabilitation Administration  
**RM** – Rural Municipality  
**RTK**– Real Time Kinematic (Extremely High Accuracy GPS)  
**SARM** – Saskatchewan Association of Rural Municipalities  
**SAW** – Saskatchewan Association of Watersheds  
**SCDA** – Saskatchewan Conservation & Development Association  
**SES** – Saskatchewan Environmental Society  
**SRC** – Saskatchewan Research Council  
**SUMA** – Saskatchewan Association of Urban Municipalities  
**SWA** – Saskatchewan Watershed Authority  
**SWAT** – Soil and Water Assessment Tool  
**SWAUMP** – Source Water and Urban Municipal Projects Fund  
**SWF** – Saskatchewan Wildlife Federation  
**SWPP** – Source Water Protection Plan  
**WCWAB** – Wallace Creek Watershed Association Board  
**WSA** – Water Security Agency (Formerly SWA)  
**YCWAB** – Yorkton Creek Watershed Association Board  
**YWF** – Yorkton Wildlife Federation

**Aquifer** – A permeable body of rock capable of yielding usable quantities of groundwater to wells and springs.

**Watershed** – An elevated boundary contained by its drainage divide and subject to surface and subsurface drainage under gravity to the ocean and interior lakes.



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**STEWARDSHIP**



**ASSOCIATION**

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**Assiniboine Watershed Stewardship Association  
29 - 2<sup>nd</sup> Avenue North  
Yorkton, Saskatchewan  
S3N 1G1  
306-783-1696**

**[www.assiniboinewatershed.com](http://www.assiniboinewatershed.com)**