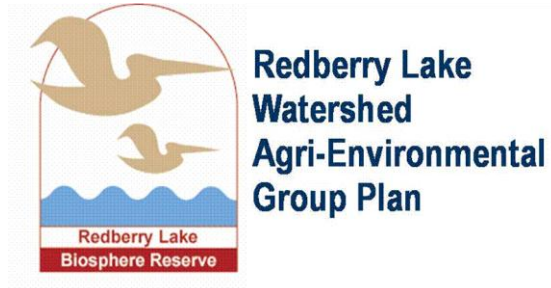


# REDBERRY LAKE WATERSHED AGRI- ENVIRONMENTAL GROUP PLAN



## FINAL REPORT 2010 – 2011



**Final Report  
June 10, 2011**

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## **Executive Summary**

The Redberry Lake Watershed AEGP (RLW AEGP) had a good year with huge inroads made with producers in the R.M of Meeting Lake. This was due to the hiring of a new technician from that area. This helped us meet and exceed the deliverables for the year. Our goals were to continue working with producers who had their applications approved, and to get at least 30 new projects off the ground. We were able to work with 45 producers on 102 projects. It is still a struggle to generate interest with grain producers with adopting buffer strips along riparian areas. Our partnership with Heifer International to develop a promotional DVD came to a sudden stop as our contact there took a job elsewhere and was not available to continue this project. We have succeeded in getting funding to proceed with the LIRA pilot study and will be working in close partnership with AESB, SAW, Redberry Lake Biosphere Reserve and Prairie Wild Consulting on this project. Working with other agencies and developing partnerships has also been a key area throughout the year.

## **Work Plan Goals and Deliverables for 2010-2011**

For 2010-2011 we had nine main goals that we were hoping to accomplish. The first was to continue work with producers to increase awareness on potential impacts that of agricultural has on water, soil, air and biodiversity within our watershed and the beneficial management practices that are available to help prevent and mitigate potential damage. The next goal was to assist producers to access funding through the FSP, FRWIP, DUC programming and any other sources available. The second was to work with AESB to see if their buffer planning tool could be a means of getting grain producers involved with our AEGP by seeding buffer strips along creeks and water bodies within our watershed. Another goal was to work with the NSRBC to help implement key actions within their Source Water Protection Plan (SWPP). We also wanted to continue working with various Government Ministries, Agencies and NGO's and develop new partnerships. Another goal was to help in the development of a promotional DVD that would highlight the good practices that producers are implementing on the ground in our watershed and the province. Starting to work with producers within the R.M. of Leask was added to our work plan. The final goal was the securing and the acquiring of funding to have a LIRA pilot sit within our watershed. (Appendix 1)

## **Actual Goals Accomplished for 2010-2011**

The RLW AEGP exceeded its goal that was set for the number of producers that would receive Certificates of Completion. We worked with 45 producers and planned 102 projects with them. The projects were spread across 6 of the 7 Municipalities with many producers not knowing very much about the AEGP. The R.M. of Mayfield which is a predominately grain producing municipality had no uptake this past year. (For the complete list of projects see Appendix 2).

We also were able to take part in, plan, coordinate and host or co-host 7 public events. These events were very instrumental in bringing in new producers to the AEGP.

For the dollar amount of the projects that were initiated to our member municipalities totaled to approximately 671,000 dollars (see Appendix 3).

## **Producer Engagement**

In our work plan we wanted to hold at least 3 public events. We were able to provide producers with 5 events that informed them on watershed awareness and the RLW AEGP. The following is a list of events that were held:

- Water Monitoring with School (May/10) – 30 kids
- Pasture Tour/ Workshop (August/10) – 32 producers
- Water Monitoring Adults (Sept/10) – 13 producers
- Regional Planning Workshop (Dec/10) -20 producers
- Annual January Workshop (January/11)- 90 producers
- Drought and Flood Awareness (March./11)-25 producers
- RM Douglas rate Payers Meeting (March/11)-25 producers

## **AEGP Partnerships & Partner Events**

### **Partners during 2010-2011**

During this past year we were able partner with various agencies to host events. These include:

- Water Monitoring – with the help of Ian Philips of SWA we held a water monitoring session with grades 4 and grades 11 students from Hafford School. By looking at macro-invertebrates and testing the water kids were able to see the health of the water through the type of bugs in the water and the nitrate and phosphate levels
- Annual January Workshop – For this event we were able to work with DUC, who sponsored the lunch for the workshop. We brought in Lorne Fitch from Cows and Fish, Alberta and Don Ruzicka who has done a lot of riparian restoration on his farm at Killam, Alberta. Presentations were enjoyed by all.
- Drought and Flood Awareness – We co-hosted this event with North Sask River Basin Council (NSRBC). This workshop highlighted how extreme weather events may become more prevalent and how producers should become more aware of them and be proactive in planning for them.
- RM Rate Payers Meetings – We gave an update on our project to producers in attendance and answered any questions.
- We are working closely with the PCAB Watershed Awareness and NSRBC in forming a new AEGP area adjoining the municipalities to the west of us. Have helped new Techs get acquainted with their job role.
- Regional Planning – our AEGP area is being used by the Redberry Lake Biosphere Reserve (RLBR) to do a Regional Municipal Planning on a Watershed basis. We are working closely with them to be sure that our AEGP is helping producers manage their land and the importance of this for the environment within the planning area.
- The RLBR has become a member of the Prairie Conservation Action Plan (PCAP) and through this partnership we will see how our AEGP can be involved.
- We are continuing our work with AESB in bringing a LIRA Pilot Project site to our Watershed. (Appendix 6)

## **Partners for 2011-2012**

We are continuing to work with other agencies to bring in projects to our AEGP area that will help bring awareness to environmental issues.

- We have made a partnership with the new School of Environment and Sustainability at the U Of S, who will be bringing in a class this fall to do field work within our AEGP area.
- We will continue to work with any new AEGP areas that need assistance.
- With the addition of 2 new Invasive Weed BMP's we will be working with Harvey Anderson , weed specialist for SARM.

## **Financial Report**

The RLW AEGP was able to operate with the \$40,000 that we were budgeted to work with. We relied heavily on support from our partners to do so. The monetary support we received from DUC, PCAB and the NSRBC was very instrumental for the success of our workshops. The financial support from the member Municipalities and the RLBR helped to subsidize all other expenses for day to day operations. An extra \$10,000-\$15,000 would go a long way in support of our project to make it a full time position and provide in-kind support back to our partners for some of their projects. (For details of our budget see Appendix 5)

## **Appendices**

### **1) Work Plan with Goals and Deliverables for 2010-2011**

<b><u>Issue</u></b>	<b><u>Best Management Practice</u></b>
Surface Water Quality	101 – Relocation of Livestock Confinement 201 – Fencing to Protect the Environment 301 – Winter Site Management: Portable Shelters & Windbreaks 302 – Water Systems 401 – Farmyard Runoff Control 801 – Modifying and Grassing Waterways 901 – Riparian Buffers 902 – Improved Stream Crossings 1101 – Soils at Risk 1601 – Shelterbelt Establishment
Ground Water Quality	1001 – Water Well Management: Capping Old Wells 1002 – Water Well Management: Protecting Existing Wells

### **Activities/ Deliverables for 2010-2011**

<b><u>Deliverable</u></b>	<b><u>Target</u></b>
Site Specific BMP Plans	30 project plans and applications (20 producers)
Awareness Events – Field Days	1 summer field day, 1 winter field day
Awareness Events – Seminars	2 seminars on Stewardship and Sustainability
Newsletter Articles	AEGP article in 4 editions of the RLBRA newsletter 1200 mailboxes
Buffer Planning	Provide planning tool for producers (see attached description)
Promotional Video	Produce video that highlights BMP projects

### **Goals for 2010-2011**

- Increase awareness of producers within the Redberry Lake watershed in regards to potential impacts of agriculture on water, soil, air, and biodiversity
- Increase in awareness, understanding and adoption of beneficial management practices
- Assist producers to develop implementation plans for BMPs, access funding through the FSP, FRWIP, etc.

- Develop a strategy and compile information to assist crop producers to implement riparian buffers in a strategic manner.
- Co-operate with the North Sask River Basin Council to implement key actions in the Source Water Protection Plan
- Continue to develop partnerships with RLBRA, MOA, PCAB, DUC, SWA, AAFC-AESB, NSRBC, Parkland AEGP, Eagle Creek AEGP
- Add the R.M. of Leask to our AEGP area and work with producers within their Rural Municipality
- Continue to work with Heifer Canada and PCAB in the development of a promotional DVD (see below)
- We are actively working with AESB and SAW on the Land and Infrastructure Resiliency Assessment (LIRA). We have submitted a proposal for the Redberry Lake Watershed AEGP area to be used as one of the proposed pilot project sites. This will give us the capacity to strategically identify potential problem areas within our watershed that may have negative impacts from flooding. This would include corral locations, water wells and other environmental concerns in flood prone areas.

## 2) List of 2010-2011 Projects

### PROJECT BY TYPE

	Scope of Project	# of Projects	\$ Amount
<b>FENCING PROJECTS</b>	94.183	62	\$ 373,435.00
<b>PORTABLE WINDBREAKS</b>	112	8	\$ 87,200.00
<b>PORTABLE CALF SHELTERS</b>	8	7	\$ 19,500.00
<b>GRASS SEEDING</b>	1535	16	\$ 104,181.00
<b>ALTERNATIVE WATER SYSTEMS</b>		5	\$ 71,447.00
<b>CREEK CROSSINGS</b>		1	\$ 4,975.00
<b>PREDATOR FENCING</b>			
<b>WELL DECOMMISSIONING</b>		3	\$ 11,000.00
<b>TOTALS</b>		102	\$ 671,738.00

### 3) Projects by Municipality 2010 - 2011

#### PROJECT DATA BY MUNICIPALITY

RURAL MUNICIPALITY	# OF PRODUCERS	# OF PROJECTS	TOTAL \$ AMOUNT	PRODUCER \$ AMOUNT
DOUGLAS 436	7	13	\$ 76,526.00	\$ 38,263.00
REDBERRY 435	18	41	\$ 249,840.00	\$ 124,920.00
BLAINE LAKE 434	7	12	\$ 87,817.00	\$ 43,908.50
MEETING LAKE 466	9	30	\$ 220,827.00	\$ 110,413.50
MAYFEILD 406				\$ -
GREATBEND 405	2	4	\$ 22,658.00	\$ 11,329.00
LEASK 464	2	2	\$ 14,070.00	\$ 7,035.00
<b>TOTALS</b>	45	102	\$ 671,738.00	\$ 335,869.00

### 4) LIRA Benefits

**DRAFT**

#### LIRA End User Benefits

#### Municipalities/Regional Planning Groups

##### 1. Assess Flooding vulnerability of region

- General idea of where flooding and damage will occur
- Better understanding where high value/high risk areas are located.
- Provides “hotspot” locations where more detailed analysis (infrastructure and engineering studies) should occur.

##### 2. Risk Management & Risk Mitigation

- Realistic pro-active options to reduce flood damage costs
- Adaptation options – cost benefit analysis to show cost savings of proactively planning for extreme rainfall events

##### 3. Incorporate future growth/community planning

- Act as catalyst for developing Official Community Plans

- Tie in community based activities such as watershed planning into municipal growth plans

#### **4. Tie in with other Municipal Initiatives**

- Emergency preparedness – what roads or areas are at highest risk, what infrastructure must remain accessible, etc
- Bylaw development
- Regional planning with other neighboring municipalities

#### **5. Quantitative analysis to support justification for infrastructure investment**

- Performing economic analysis to demonstrate the quantitative value of adaptation options that could be used to justify infrastructure investment in an area.
- Provide the opportunity for municipalities to demonstrate pro-active planning and due diligence.
  - Transportation corridors,
  - Infrastructure prioritization (replacing aging infrastructure)
  - Economic development and incorporating future growth

### **Watershed Groups**

#### **1. Assess Flooding vulnerability of region**

- General idea of where flooding and damage will occur
- Better understanding where high value/high risk areas are located.  
Provides “hotspot” locations where more detailed analysis (infrastructure and engineering studies) should occur.

#### **2. Use LIRA as a mechanism to implement watershed based plans such as “Source Water Protection Plans”**

- Provides opportunity to incorporate watershed plan with LIRA adaption options.

#### **3. Use LIRA results to target BMP’s activities**

- Help Watershed Technician focus BMP activities and demonstrations

#### **4. Quantitative analysis to provide science and economically based support justification for Ecological Goods and Services.**

- Providing economic value for cost savings based on producer based BMP adaptation option.

#### **5. Regional planning**

- Linking producers and watershed groups with rural and urban municipalities. Infrastructure will act as the bridge between informal and formal decision makers.

### **LIRA Partner Benefits**

#### **AESB**

#### **Branch**

#### **Region**

1. Link to IWRM activities in province. Be an example of “IWRM in action”
2. Utilize rural offices and local expertise to help build relationships with traditional PFRA clients such as watershed groups, RM’s and regional planning groups.

3. Help build capacity of Regional Staff and AESB clients through working on various components of LIRA methodology with local clients.

#### **INR/LUDS**

1. Work with land use decision makers at the local/regional scale to develop a technology (LIRA methodology) that can be utilized by municipalities and watershed groups throughout the country.
2. Develop and refine it methodology, create manual and transfer technology to partners and/or private industry.

#### **Saskatchewan Watershed Authority**

#### **Saskatchewan Association of Rural Municipalities (SARM)**

1. Regional Economic Analysis Component - LIRA will require local pilot site group to work together and develop local and regional growth strategies over a 25-30 yr planning horizon. SARM planners could utilize this process to promote and assist rural municipalities create Official Community Plans as well as drafting planning policy and bylaws.
2. Act as Communication bridge between the provincial planning ministry and local municipalities
3. Become involved with municipalities at the beginning of the planning stage and provide examples of how SARM planners are working with Rural Municipalities as well.

#### **Saskatchewan Municipal Affairs**

1. Promotes proactive planning in a regional context.
2. Ties economic values to planning (cost savings and adaptation options)
3. Planning for future growth may help promote Official Community Plans

#### **Saskatchewan Emergency Management Organization**

#### **University of Saskatchewan - Centre of Excellence for Transportation & Infrastructure**

#### **Saskatchewan Highways and Transportation**

## **5) Financial Statement**

					Total income	Projected expenses	Actual income
	RLBR cash	RM cash	Inkind(RLBR)	AEGP cash			
Salaries	2500	2500		28205	33205	32205	31386
Travel				3478	3478	4928	2926.6
Meals and Accommodations				1232	1232	1232	518.16
Programming	2000			568	2568	3568	3305
Communications			1000	437	1437	437	0
Administration			5000	3200	8200	8200	7649.2
Steering Committee				2880	2880	4640	0
TOTALS	4500	2500	6000	40000	53000	55210	45784.96

## 6) Data Capture Spreadsheet

**Agri-Environmental Group Planning "Data Capture Report" 2010-2011**

**NAME OF AEGP:** REDBERRY LAKE WATERSHED

**Reporting Categories Required**

	First Quarter April to June 2010	Running Total	Second Quarter July to Sept 2010	Running Total	Third Quarter Oct to Dec 2010	Running Total	Fourth Quarter Jan to Mar 2011	Final Total
<b>1. Participation in Awareness and extension:</b>								
<b>Presentation / Consultation:</b>								
Initial AEGP Consultation Presentations / Workshops		0						
One on One Consultation (#)	30	30	36	66	25	91	18	109
<b>General Awareness Strategies:</b>								
Newsletters and Flyers (Number):		0	100	100	100			
Distribution - # of households		0	100	100	100			
Number of Advertisements		0						
Distribution - # of households		0						
- circulation # - through newspaper(s)		0						
Number of News Articles		0	1	1	1	2	2	4
Distribution - circulation # - through newspaper	1200	1200	1200	1200		1200		
Technical Workshops (#)	2	2	1	3	1	4	2	6
Field Days and Demonstrations (#)		0	1	1				
<b>2. Directly Aiding Producers (BMPs)</b>								
Number of Producers eligible * for Group plan Participation	26	26	6	32	0	32	13	45
Number of projects applied for:	46	46	10	56	0	56	50	106
Number of producers involved in projects applied for	26	26	6	32	0	32	13	45
Technical Assistance to Producers (#)	26	26	6	32	0	32	18	50
Number of projects approved by peer review	46	46	6	52	0	52	50	102
Total cost of projects approved	304389	304389	63200	367589	0	367589	304149	671738
Number of producers involved in the projects approved	26	26	6	32	0	32	13	45
Number of projects completed		0						
Total cost of projects completed		0						
Number of producers involved in completed projects		0						
<b>3. Increase Public Awareness / Active Public Participation</b>								
Participation in Source Water Protection Planning	3	3	2	5	0	5	11	16
Partnerships that are Developed or Maintained with Key	8	8	new 2/10					
<b>4. Statement of Expenses</b>								
Salaries	\$ 8,160.00	\$ 8,160.00	\$ 8,160.00	\$ 16,320.00	\$ 8,160.00	\$ 24,480.00	\$ 6,906.00	\$ 31,386.00
Travel	\$ 616.15	\$ 616.15	\$ 264.81	\$ 880.96	\$ 751.66	\$ 1,632.62	\$ 1,294.02	\$ 2,926.64
Meals and Accomodations	\$ 58.26	\$ 58.26		\$ 58.26	\$ 209.90	\$ 268.16	\$ 250.00	\$ 518.16
Programming (Field days, workshops, demonstrations)		\$ -	\$ 305.00	\$ 305.00		\$ 305.00	\$ 3,000.00	\$ 3,305.00
Communications (Newsletters, Flyers, Advertising)		\$ -		\$ -				\$ -
Administration and office expenses	\$ 2,007.09	\$ 2,007.09	\$ 1,875.02	\$ 3,882.11	\$ 1,891.78	\$ 5,773.89	\$ 1,875.35	\$ 7,649.24
Number of Steering Committee/Board meetings	0	0						
Steering Committee/Board expenses		0						
Number of Peer Review Meetings	2	2	1	3	0	3	1	4
Peer Review expenses		0						

**Footnote**

\*Ways in Which the Understanding and Importance of Better Management Practices Are Promoted to the producer and public:

- a) An awareness of the local group plan and an understanding of what a watershed/aquifer is and which watershed/aquifer they are in.
- b) An understanding of agri-environmental issues and their priority issues within their watershed.
- c) An understanding of how ther activities might impact their watershed and BMPs that address the priority issue within the watershed.

**NOTES:**

Due to the fact of problems with the Redberry Lake Biosphere Reserve Book Keeper, adjustments were made to the first quarter Stateme

