

## **Alberta Conservation Association 2009/10 Project Summary Report**

**Project Name:** *Red Deer – Battle River Riparian Conservation*

**Fisheries Program Manager:** Peter Aku

**Project Leader:** Diana Rung

**Primary ACA staff on project:** Diana Rung

### **Partnerships**

Agriculture and Agri-Food Canada  
Alberta Agriculture and Rural Development  
Alberta Environment  
Alberta Stewardship Network  
Alberta Sustainable Resource Development  
Cows and Fish  
Fisheries and Oceans Canada  
Grey Wooded Forage Association  
Lacombe County  
Penn West Energy  
Ponoka County  
Red Deer County  
Red Deer River Watershed Alliance  
Royal Bank of Canada  
Stantec  
Vermilion River Flow Advisory Committee

### **Key Findings**

- Conducted riparian health monitoring activities at seven project sites.
- Established one new landowner fencing and off-site watering project that protected 2.6 km of stream bank.
- Planted 400 willow clippings and 1,100 other shrubs at one project site.
- Riparian health at project sites showed improvement since the previous year.
- Community outreach activities included planning and implementation of ‘Stewards in Motion 7’ workshop, development and distribution of the Alberta Environmental Stewardship Calendar, attendance at three open houses, and maintenance of partnerships with numerous stewardship groups.

## **Introduction**

Many riparian areas in the Red Deer and Battle River watersheds have been negatively affected by the impacts of human activities including agriculture, residential development and numerous types of industrial activity. The Red Deer – Battle River Riparian Conservation project focuses on protecting and enhancing riparian habitats in these two watersheds. Since the project's inception in 1999, we have completed several successful restoration projects in partnership with landowners, governments and other conservation organizations within the watersheds. Riparian enhancement methods have included exclusion fencing of livestock, off-stream watering and riparian pasture management. In recent years, we have used aerial videography to assess riparian health at three lakes, Sylvan, Gull and Pigeon, as well as part of the Red Deer River. In 2009/10, we continued to develop riparian protection and enhancement projects with landowners, monitor riparian health conditions, and conduct public outreach activities.

## **Methods**

We worked with stewardship groups to implement on-the-ground riparian improvements. Groups included the Alberta Stewardship Network (ASN), the Red Deer River Watershed Alliance, and the Vermilion River Flow Advisory Committee.

We were very active with ASN, remained a member on the board of directors and attended five meetings. We participated on the ASN Stewardship Grant committee, which is funded by Alberta Environment's 'Water for Life Strategy', as well as participated in the planning and implementation of the seventh annual 'Stewards in Motion Workshop' on 25 June 2009. We also participated in the ASN Stewardship Recognition Committee, which acknowledged exceptional accomplishments by stewardship groups, individuals and stewardship projects. In addition, we partnered with numerous agencies to create the 2010 Environmental Stewardship Calendar which contains photographs and environmental stewardship facts. We distributed the calendar to 1,700 recipients throughout the province.

We attended open houses and meetings for Alberta Environment's 'Environment Week' Open House on June 4, for the Vermilion River Flow Advisory Committee on August 11, and the Red Deer River Watershed on November 25, 2009. We promoted the riparian program at each of these events with ACA displays and promotional items such as brochures and publications.

We inspected existing riparian project sites and planted trees at one site (Abraham site). Riparian health assessments (Cows and Fish short form) were completed at five sites. Livestock use was monitored on a riparian pasture (Sproule site) using two trail cameras. We also met with numerous landowners in the Blindman River Watershed, a sub-watershed of the Red Deer River, to promote the Riparian Conservation project and to initiate on-the-ground riparian enhancement projects.

## Results

We established one new landowner partnership restoration project (Simpson project) on the Blindman River near Rimbey by providing off-site watering systems to the landowner, and protected 2.6 km of stream bank. We also planted 400 willow clippings and 1,100 other shrubs at another project site (Abraham project).

Riparian health assessment scores in 2009 ranged from 59 to 78% (Table 1). Except for one site (McKelvie), riparian health in 2009 improved compared to the previous year. For example, riparian health at the Wiese project site improved from 72% in 2008 to 78% in 2009, Bennett from 66% to 70%, and Sproule from 48% to 59%; Simpson was assessed for the first time in 2009. Riparian health at the McKelvie project declined from 88% in 2008 to 78% in 2009 due to a change in land management at this site by the landowner contrary to our agreement; consequently, the agreement between ACA and the landowner was not renewed.

Table 1. Summary of riparian health assessments conducted in 2009.

Project ID Number	Site	Location	Overall health rating (%)	Riparian health description
RD 1	McKelvie	SW 1-44-25-W4	78	Healthy with problems
RD 3	Wiese	SW 28, SE 28, NE 28 and SW 27-41-1-W5	78	Healthy with problems
RD 4	Bennett	SE 23 and SW 24-40-22-W4	70	Healthy with problems
RD 7	Sproule	Sec.10 and 11-41-21-W4	59	Unhealthy
RD 9	Simpson	N1/2 35-41-2-W5 and SW 2-42-2-W5	66	Healthy with problems

The Sproule project is managed as a riparian pasture. Photos taken by trail cameras indicated that despite open access to the lake, livestock used the off-site watering system exclusively; all the 512 cattle photographed were at the off-channel watering site (Table 2).

Table 2. Summary of trail camera monitoring at the Sproule project site.

Location of Camera	Days Camera at Location	Photos of Livestock
NE 10-41-21-W4 at off-site watering system	4	512

We completed outreach activities which involved an estimated 235 people, including 90 people who attended the Stewards in Motion Workshop, 70 people who attended the Alberta Environment Open House, and 75 people who attended other meetings.

### **Conclusions**

We established one new landowner fencing and off-site watering project that protected 2.6 km of stream bank, and planted 400 willow clippings and 1,100 shrubs at another project site. We conducted riparian health monitoring activities at seven project sites. Riparian health at most project sites showed improvement since the previous year. Community outreach activities included planning and implementation of ‘Stewards in Motion 7’ workshop, development and distribution of the Alberta Environmental Stewardship Calendar, attendance at three open houses and the maintenance of partnerships with numerous stewardship groups.

### **Communications**

- Promotional items such as brochures, pamphlets and environmental stewardship calendars were distributed at one workshop, one open house and numerous stewardship group meetings.

## Appendix A



Pre-riparian enhancement condition at the Wiese Project site on Gull Lake, 2003. (Photo: Diana Rung)



Post-riparian enhancement condition at the Wiese Project site on Gull Lake, 2009. (Photo: Diana Rung)



The Simpson Riparian Enhancement Project on the Blindman River, 2009. (Photo: Diana Rung)



Willow clippings planted at the Abraham Riparian Enhancement Project on the Red Deer River in May 2009. (Photo: Diana Rung)