

Alberta Conservation Association 2010/11 Project Summary Report

Project Name: *Beaverlodge Riparian Conservation*

Fisheries Program Manager: Peter Aku

Project Leader: John Hallett

Primary ACA staff on project:

John Hallett

Partnerships

Alberta Agriculture and Rural Development
ConocoPhillips
County of Grande Prairie
Environment Canada
Penn West Energy
Royal Bank of Canada
West County Watershed Group

Key Findings

- Established four riparian projects including streambank fencing (covering 866 m), off-site watering and tree planting with signed Habitat Enhancement Agreements that protected 38.1 ha (94.2 acres).
- Planted 30,178 seedlings on 12 landowner properties covering 46.5 ha (115 acres); nine of these properties were new additions.
- Local, landowner-driven West County Watershed Society has taken the lead in identifying future project sites and activities.

Introduction

In a 2002 survey, riparian habitat degradation was documented for the Beaverlodge River and two of its tributaries, Beavertail and Steeprock creeks (Hallett 2003). Bank-side livestock feeding and watering, vehicle fording, and in-stream alterations have degraded the riparian zones of these watercourses. Since 2004, Alberta Conservation Association (ACA), in partnership with landowners, provincial and municipal government and other conservation organizations, embarked on riparian restoration and conservation projects along these watercourses. To date, several projects including streambank fencing, alternative livestock watering systems and tree planting have been completed; several new projects are in negotiations with landowners. In 2010/11, we continued to develop riparian protection and enhancement projects with landowners, monitor riparian health conditions, and conduct public outreach activities.

Methods

We assisted the County of Grande Prairie and Alberta Agriculture and Rural Development in identifying project sites and planting trees. We contracted Cows and Fish to conduct riparian health assessments at existing and new project sites. We conducted water quality sampling as part of a long-term monitoring protocol; a West County Watershed Group (WCWG) volunteer biologist collected water quality samples at 10 sites on April 25 and sent these samples to Maxxam Analytics (a CAEAL-accredited lab) for analysis. Low water flows prevented additional water sampling later in the season.

Results

In 2010, we completed one riparian fencing project (Browns property) that totaled 866 m and protected 5.8 ha (14.3 acres). We supported the County of Grande Prairie and Alberta Agriculture and Rural Development to plant trees at 12 sites, nine (including the Browns property) of which were new project sites. In total, we planted 30,178 seedlings on 46.5 ha (115 acres). We signed four Habitat Enhancement agreements with landowners who received trees and/or riparian fencing. In total, these agreements protected 38.1 ha (94.2 acres).

Seven sites had phosphate ($\text{PO}_4\text{-P}$) levels above recommended water quality guidelines. The sites with high phosphorus included one site from the Beavertail River and all four Beaverlodge River sites, with the highest being just downstream of Horse Lakes. Both sites from the Redwillow River (considered to be much less affected by agriculture) also showed high phosphorus levels.

Conclusions

Our riparian conservation efforts are resulting in incremental changes in the watershed. Pace of change has been slow; however, the emergence of the WCWG promises to be a driving force in the local community for fostering change and finding additional landowner partners.

Communications

- ACA, the County of Grande Prairie, and the Fish and Wildlife Division of Alberta Sustainable Resource Development (ASRD) organized a public tour of selected project sites on October 7, 2010. A bus transported members of the public to three riparian project sites. At one site, ASRD staff gave an electrofishing demonstration. Landowners were key presenters at these stops and talked about their projects.
- ACA, in co-operation with Jill Henry of the County of Grande Prairie, met several times with WCWG members, Cathy Newhook and Kreg Alde. These meetings helped foster and encourage project direction and local initiatives.
- ACA assisted the County of Grande Prairie and Cathy Newhook in assessing seedling survival on several planted sites.

Literature Cited

Hallett, J. 2003. Summary of the 2002 – 2003 Beaverlodge land use riparian assessment. Activity Report, Alberta Conservation Association. Peace River, Alberta.

Photos



Jill Henry from the County of Grande Prairie (left) and landowner, Cheryl Brown (right), and the Brown Riparian Fencing. (Photo: John Hallett)



Cheryl Brown and the Riparian Fence/Habitat Lands. (Photo: John Hallett)



Steeprock Creek riparian tree planter, May 2010. (Photo: Jill Henry)



Alberta Sustainable Resource Development Fish and Wildlife Division staff discussing the fish on the Beaverlodge River (Toews Project site) during the public tour on October 7. (Photo: John Hallett)



Landowner, Carlos Toews, at his project site, 2010. Carlos Toews at his (pre) project site, 2007. (Photos: John Hallett)