

**Alberta Conservation Association
2018/19 Project Summary Report**

Project Name: Ridge Reservoir Habitat Project

Wildlife Program Manager: Doug Manzer

Project Leader: Layne Seward

Primary ACA staff on project: Aiden Bateman, Eryk Calkins, Jalen Hult, Doug Manzer, Kyle Prince, Layne Seward, Mike Uchikura, and Emily Williams.

Partnerships

Alberta Environment and Parks

Alberta Fish & Game Association Zone 1

County of Warner

David Bissett

Irrican Power

Landowners

Lethbridge Fish & Game Association

Magrath Rod and Gun Club

New Dayton Rod and Gun Club

Pheasants Forever Calgary

Raymond Irrigation District

Southern Alberta Bowhunters Association

St. Mary River Irrigation District

Taber Irrigation District

Key Findings

- We planted 9,000 shrubs to create escape cover and winter habitat for pheasants, grey partridge, and other wildlife species.
- Haying was completed at the enhancement sites along the west end of the reservoir to reduce litter load and fire hazards.
- Students from Raymond High School visited the reservoir to help plant shrubs and lay fabric mulch over the newly planted shrubs.
- We continued annual maintenance on existing habitat enhancements including, weeding, spraying, watering, and mowing.

Introduction

The Milk River Ridge Reservoir Water Quality Stewardship Initiative (MRRWQSI) is a multi-year collaborative initiative in the County of Warner. The stewardship initiative is overseen and managed by a working group consisting of Alberta Environment and Parks (AEP), ACA, and the County of Warner whose actions are guided by terms of reference. The initiative consists of nine segments around the Waterton – St. Mary headworks inlet canal and along the shore lands of the Milk River Ridge Reservoir. These projects are predominantly focused on provincial Crown land—known as the “provincial land corridor” that surrounds the reservoir. The overall goal of this initiative is the improvement of water quality through the restoration of the vegetation community along shorelands and riparian areas. Water quality declines in Ridge Reservoir in previous years are attributed in part to a degradation of the provincial land corridor which surrounds the Reservoir and the inlet canal. By returning ecological function to compromised corridor lands, they will serve as environmental buffers to intercept and slow runoff into Milk River Ridge, and better anchor riparian areas and shore lands with desired vegetation communities.

Approximately 2.2 million dollars has been raised and invested in the MRRWQSI to date.

Methods

We recognize the benefit of improved water quality for humans, livestock, and wildlife in the area. Techniques used to filter out nutrients and reduce erosion also provide key resources for a broad variety of wildlife, invertebrates, amphibians, and fish in this system. By establishing wetlands, perennial cover, and planting shrubs, we are providing wildlife, and upland gamebirds, with many of the food, shelter, and security necessities essential during critical life stages. Reclaimed habitat around the reservoirs and canals also improves connectivity and travel corridors enabling species to move among essential habitat areas. This expands the usable range and dispersal of populations and helps moderate extremes in population cycles. The development of habitat and connectivity along reservoirs and canals is primarily occurring on crown land, which also provides hunters with additional opportunities.

Results

To date, 45 km of fencing has been installed to delineate the corridor boundary and reduce impacts on sensitive riparian zones. There is an additional 20 km of fencing remaining to be installed. Twenty-five offsite water units have been installed to change the movement of cattle and further reduce their impact on wildlife habitat and riparian areas. An additional eight waterers are yet to be installed. We have planted 30,000 shrubs to date, with another 3,000 to be planted in summer 2019. We have also reseeded 386 acres into perennial wildlife habitat around the reservoir, with plans to do an additional 200 acres. A large wetland was developed on public land at the west end of the reservoir (6.18 acres), and we have plans to create three smaller wetlands adding another seven acres. We installed a large experimental phosphorus filter at a major source point flowing into the reservoir to reduce nutrient loading. Each year we also invest roughly \$10,000 in maintenance of habitat plantings which includes spraying, mowing, and disking to promote growth as well as to control noxious and invasive weeds. Approximately 22 acres at the west end of the reservoir was strategically swathed and baled to reduce litter load and decrease the fire hazard, while still providing optimal wildlife habitat.

Conclusions

The Milk River Ridge Reservoir Water Quality Stewardship Initiative is an example of what can be accomplished when partners find common ground and work together towards a collective goal. We will continue to work with our partners to complete the objectives of this initiative, and already see how these efforts have led to additional opportunities to improve wildlife habitat in other counties. The benefits of this initiative to water quality, wildlife, recreational, and domestic users is profound.

Communications

- Attended numerous partner group meetings to provide updates on the project and to discuss habitat enhancements and partnership opportunities.
- Hosted a partnership field tour this summer, to review the work that has been completed and to plan the next phases of the project.
- Provided assistance in writing an article that was published in the Fall/Winter issue of *Conservation Magazine* highlighting the project.
- Assisted Alberta Fish & Game Association with a video production highlighting the accomplishments of the project.

Literature Cited

None

Photos



Aerial view of the 6.18-acre wetland and habitat at the west end of Ridge Reservoir in 2018.
Photo: Mike Uchikura



Swathing done on the west shore of the reservoir to reduce litter load and fire hazards but maintain wildlife habitat. Photo: Aiden Bateman



ACA staff, Aiden Bateman, Eryk Calkins, and Jalen Hulit, laying fabric mulch on newly planted shrubs; mulch is laid to increase moisture retention and reduce weed competition. Photo: Mike Uchikura



ACA staff, Aiden Bateman, discing between shrub rows to eliminate weed competition on site.
Photo: Jalen Hulit