

**Alberta Conservation Association
2021/22 Project Summary Report**

Project Name: Habitat Legacy Partnership

Wildlife Program Manager: Doug Manzer

Project Leader: Layne Seward

Primary ACA staff on project: Jalen Hulit, Daniel Knop, Doug Manzer, Layne Seward, Mike Uchikura, Samuel Vriend, and Cailyn Wilson

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 Chapter

Raymond Irrigation District

Southern Alberta Bowhunters Association

St. Mary River Irrigation District

Taber Irrigation District

Key Findings

- To date, we have planted 42,500 shrubs in key areas around Milk River Ridge Reservoir (Ridge Reservoir).

- In 2021, we planted 7,000 shrubs at the east end (East Ridge) of the reservoir, where approximately 80 acres of previously farmed and grazed Crown lands were fenced off from agricultural use.
- Approximately 70 acres of previously cultivated Crown lands were reseeded to permanent cover at East Ridge. Reseeding and planting shrubs were completed with the goal to establish long-term escape cover and winter habitat for pheasants, grey partridge, and other wildlife species.
- We undertook annual maintenance on existing enhancements to improve wildlife habitat including weeding, spraying, watering, maintaining fences, and mowing (to knock back weeds and enable desirable forbs to flourish).

Abstract

The Habitat Legacy Partnership (HLP) project works with a multitude of stakeholders to improve upland game bird habitat in southern Alberta. The Milk River Ridge Reservoir Water Quality Stewardship Initiative (MRRRWQSI) is part of the HLP and is a multi-year collaborative initiative in the County of Warner. The MRRRWQSI is overseen and managed by a working group consisting of Alberta Conservation Association, Alberta Environment and Parks, 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 shorelands of the Milk River Ridge Reservoir. These segments are predominantly focused on provincial Crown land—known as the “provincial land corridor”—surrounding the reservoir. The overall goal of this initiative is to improve water quality through the restoration of the vegetation community along shorelands and riparian areas. This restoration translates into the creation of vital wildlife habitat that also filters nutrients and reduces erosion. Approximately \$2.2 million has been raised and invested to date. Thus far, we have installed 56 km of fencing to protect shoreland and riparian habitat. In all, 25 off-site watering units have been installed in strategic areas surrounding the reservoir to redirect cattle away from fragile riparian zones. We have planted approximately 42,500 shrubs and seeded 456 acres back into perennial wildlife habitat. A large 6.18-acre wetland was developed on the west side of the reservoir, acting as a large filter for nutrients and a magnet for wildlife. Approximately 5 km of new fencing was installed at the east end (East Ridge) of the reservoir during the 2021/22 season, effectively

eliminating livestock access to the Crown corridor. In all, 7,000 shrubs were planted and approximately 70 acres of permanent cover were reseeded at this location. Partner meetings are ongoing for potential shrub plantings and permanent cover seeding for the 2022/23 season.

Introduction

In 2008, Alberta Conservation Association (ACA) and Pheasants Forever (PF) formed a partnership called the Habitat Legacy Partnership (HLP) aimed at improving pheasant habitat in southern Alberta. As part of this partnership, ACA and PF have identified focal landscapes. To initiate habitat work, ACA biologists meet with landowners and land managers within the targeted landscapes to develop and implement habitat plans. The long-term goals of this project are to 1) increase pheasant populations through habitat enhancement and 2) to increase hunter access and hunter satisfaction within discrete areas of southern Alberta. Under the umbrellas of HLP, the Milk River Ridge Reservoir Water Quality Stewardship Initiative (MRRRWQSI) has been the main focus in recent years. This multi-year collaboration initiative is in the County of Warner. The MRRRWQSI is overseen and managed by a working group consisting of ACA, Alberta Environment and Parks (AEP), 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 shorelands of the Milk River Ridge Reservoir (Ridge Reservoir). These projects are predominantly focused on provincial Crown land—known as the “provincial land corridor”—surrounding 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 that surrounds the reservoir and the inlet canal. By returning ecological function to compromised corridor lands, they will serve again as environmental buffers to intercept and slow runoff into Milk River Ridge Reservoir, and better anchor riparian areas and shorelands with desired vegetation communities. Approximately \$2.2 million has been raised and invested in the MRRRWQSI 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 and perennial cover, and planting shrubs, we are providing wildlife 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, 56 km of fencing has been installed to delineate the corridor boundary and reduce impacts on sensitive riparian zones. An additional 5 km of fencing has been installed at the south/east end of the reservoir, which completes the fencing around the entire system. In all, 25 off-site water units have been installed to change the distribution 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 42,500 shrubs to date and have also reseeded 456 acres into perennial wildlife habitat around the reservoir; we plan to do an additional 100 acres. A large wetland was developed on public land at the west end of the reservoir (6.18 acres); we plan to create three smaller wetlands, which would add 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 discing to promote growth as well as to control noxious and invasive weeds.

Conclusions

The MRRRWQSI 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, as we have already seen how these efforts led to additional opportunities to improve wildlife habitat in other counties. The benefits of this initiative to water quality, wildlife, recreational, and local users is profound. Under the umbrella of the HLP, we will continue to look for opportunities to work with landowners, counties,

conservation groups, and industry to find opportunities to create wildlife habitat and increase hunter access.

Communications

- Attended numerous partner group meetings to provide updates on the project and to discuss habitat enhancements and partnership opportunities.
- Hosted a tour for PF – Calgary Chapter to discuss funding opportunities for enhancements on the east end of the reservoir.
- Provided information and photos for PF – Calgary Chapter’s newsletter.

Literature Cited

Not applicable

Photos



Photo 1. Jalen Hulit inspecting shrub growth at North Ridge of the Milk River Ridge Reservoir. Photo: Samuel Vriend



Photo 2. Permanent cover mix and shrub plantings at East Ridge of the Milk River Ridge Reservoir. Photo: Dan Knop



Photo 3. Mowing and habitat maintenance at East Ridge of the Milk River Ridge Reservoir.
Photo: Dan Knop



Photo 4. Shrub plantings at North Ridge of the Milk River Ridge Reservoir.
Photo: Samuel Vriend