

Alberta Conservation Association 2017/18 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, Jalen Hult, Doug Manzer, Kyle Prince, Blair Seward, Layne Seward, and Mike Uchikura

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

- In 2017, we planted more than 8,000 shrubs to create escape cover and winter habitat for pheasants, grey partridge, and other wildlife species.
- A 6.18-acre wetland was constructed to help filter nutrients and to provide wildlife habitat
- We installed signage to showcase the initiative partners involved, and to highlight how wildlife habitat benefits broader ecological functions.
- We undertook 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), Alberta Conservation Association (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 1.4 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 in particular, 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 kilometres of fencing has been installed to delineate the corridor boundary and reduce impacts on sensitive riparian zones. There is an additional 20 kilometres of fencing remaining to be installed. Twenty 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. Approximately half of the 40,000 shrubs targeted for the initiative have been planted to date. We’ve 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 the habitat plantings to date, which includes spraying, mowing, and discing areas to help ensure the success of habitat enhancements and to help control noxious and invasive weeds.

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.

Photos



Aerial view of the newly constructed 6.18-acre wetland at the west end of Ridge Reservoir.
Photo: Kyle Prince



Offsite watering unit used to supply water and defer grazing from cattle.
Photo: Mike Uchikura



Newly planted shrub rows with mulch laid to increase moisture retention and reduce weed competition. Photo credit: Layne Seward