# Alberta Conservation Association 2018/19 Project Summary Report

Project Name: Connectivity Project

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## Partnerships

St. Mary River Irrigation District (SMRID) Taber Irrigation District (TID)

## **Key Findings**

- We've entered into an MOU with SMRID with the overarching goal of improving water quality and habitat important for wildlife within their system.
- The first phase with SMRID will be to develop a comprehensive habitat conservation strategy that will improve wildlife habitat and water quality.
- Detailed plans are in place to assess health of the vegetation community around four to five reservoirs in 2019, and a total of 18 reservoirs over the next 3 years. This will include range, riparian, and wildlife assessments on 10,000 acres of land that together spans more than 360 km of shoreline habitat.
- We completed a detailed habitat plan for enhancing 156 acres of habitat for upland gamebirds on the south side of Sauder Reservoir (SMRID).
- We helped design and cost-shared the materials for 2.5 km of fence to defer grazing from a sensitive riparian zone on Horsefly Lake within TID.

• We completed riparian health assessments around the perimeters of three major reservoirs within Taber Irrigation District.

#### Introduction

Loss of habitat and habitat fragmentation is one of the greatest underlying threats to many of our wildlife species in southern Alberta. To mitigate the effects of habitat loss and fragmentation a broad range of stakeholders are needed to re-establish functional habitat connectivity across a large land base. Establishing strong relationships with partner groups including municipalities, town councils, chambers of commerce, irrigation districts, and other conservation groups is essential in aiding with the development of these large-scale projects. The connectivity project aims at capitalizing on the relationships that ACA has built with these various groups through other projects like MULTISAR, the Taber Pheasant Festival, and Milk River Ridge Water Quality Stewardship Initiative. Working collaboratively with other program areas within ACA, we offer landowners, grazing reserves, and irrigation districts a multitude of options to meet their operational needs as well as benefit wildlife and re-establish connectivity across the southern landscape.

#### Methods

We meet with municipalities, irrigations districts, and grazing reserves to better understand their operations and discuss habitat needs of various wildlife. We work together to identify and map habitat enhancements that can be dovetailed into their operations that will benefit not only wildlife but also improve other parameters such as water quality, vegetative stands for grazing, access to water for grazing, social licensing, and recreational access. After initial plans have been developed with the landholder, we approach other conservation groups for assistance in terms of letters of support, funding, and manpower needs. Once finalized plans have been developed, we will begin implementing the multi-year habitat enhancement plan on the landscape.

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We engage the public in a variety of ways to profile the projects and partners. Public engagement activities include presentations at workshops, stakeholder meetings, signage, public presentations, distribution of information booklets, site tours, and social media.

As part of our long-term adaptive plan, we evaluate the long-term impacts of enhancement actions on upland game birds (e.g., pheasants, grey partridge, and in some areas, sharp-tailed grouse) as well as non-target bird and amphibian species that may also be affected. We monitor shrub growth and mortality to determine the shrub species and planting techniques that are most beneficial for developing habitat for these target species. We also use a photo-point protocol to document changes in habitat over time resulting from these habitat enhancements.

#### Results

In 2018, which is the second year of this project, we established some very significant partnerships to assist with improving wildlife connectivity in Southern Alberta. We worked with Taber Irrigation District to conduct riparian health assessments on three major reservoirs within their district, in which we compiled our findings into a riparian health report along with recommendations designed to improve wildlife habitat and water quality. We also cost shared the materials for installing a 2.5 km fence to defer livestock grazing from sensitive riparian habitat.

We entered into an MOU with St. Mary River Irrigation District with the overarching goal of improving water quality and the habitat important for wildlife within their system. The first phase will include the development of comprehensive habitat conservation strategy's that will assess the health of the vegetation community around 18 reservoirs over the next three years. This will include range, riparian, and wildlife assessments on 10,000 acres of land that together spans more than 360 km of shoreline habitat. Baseline water quality sampling will be undertaken by SMRID along with a detailed hydrological assessment.

These assessments will be compiled into habitat conservation strategy reports, which will guide the implementation of enhancements and grazing practices to improve both water quality and wildlife habitat.

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With SMRID we are also in the process of developing a habitat enhancement plan for a 156 acre parcel of land on the south shore of Sauder Reservoir. The land is owned by SMRID, and they have agreed to help improve the habitat on this parcel for upland gamebirds with implementation expected to commence in spring 2020.

#### Conclusions

Habitat connectivity is crucial for ensuring the longevity for wildlife. Pathways that connect habitat across the landscape greatly reduce the risk of small populations winking out. Grey partridge and pheasants can thrive in southern Alberta's farmed landscape but they are vulnerable to periodic weather events that can decimate local numbers. We have made considerable headway developing partnerships with key members of the agricultural community and landholders over the past years. Our new partnerships with the irrigation districts are large step in restoring connectivity. We will continue to develop partnerships in Southern Alberta.

#### Communications

- Attended numerous meetings to discuss habitat enhancements and partnership opportunities.
- Received letters of support for the project from Lethbridge Fish & Game Association, Magrath Rod and Gun club, Calgary Pheasants Forever, Chinook Pheasants Forever, Backcountry Hunters and Anglers, Medicine Hat Fish & Game Association, and Southern Alberta Bowhunters Association.

## Photos



Riparian area around Horsefly Lake that was assessed and rated based upon its riparian score. Photo: Mike Uchikura