

Alberta Conservation Association
2019/20 Project Summary Report

Project Name: Fish Stocking, New Lakes

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Partnerships

Alberta Environment and Parks

Alberta Fish & Game Association

Alberta Transportation

County of Grande Prairie

Saddle Hills County

Taber Irrigation District

Town of Taber

Key Findings

- Recommendations from stakeholders and regional fisheries biologists identified nine waterbodies as potential trout stocking sites for field evaluation.
- Desktop and field evaluation of these nine waterbodies indicate that three (Boulder Lake, ACA Demo Farm Pond, and Barnwell Reservoir) have fisheries potential.
- Approval for stocking Chestermere Pond is pending our assessment of aquatic community composition, water chemistry, and under-ice dissolved oxygen concentrations.

Abstract

Stocked trout fisheries are popular in Alberta, accounting for nearly a quarter of the total number of days reported fishing at all waters in 2005. Given the popularity of trout-stocked fisheries in Alberta, this project seeks to expand the number of stocked ponds through identification and screening of ponds with potential to support a stocked trout fishery. We evaluated nine new ponds in 2019, with three being suitable for further investigation. Chestermere Pond, a candidate pond from 2017, remains promising and is undergoing further evaluation prior to being stocked.

Introduction

Alberta Conservation Association (ACA) stocks over 60 waterbodies with catchable-sized trout (i.e., 20 cm) under its Fish Stocking (FS) project. Stocked trout fisheries are popular in Alberta, accounting for nearly a quarter of the total number of days reported fishing at all waters in 2005. FS ponds can receive upwards of 2,000 angler hours per hectare during the summer months (Fitzsimmons and Keeling 2015), making them some of the most intensely fished waterbodies in the province. FS ponds are very popular because they are often within a reasonable driving distance of many anglers. To expand our fish stocking project, ACA is working to identify new lakes to stock and/or develop as part of this project.

Methods

Over the past five years we have evaluated 225 waterbodies using Google Earth © (2020) imagery supplemented with input from regional fisheries biologists and stakeholders. Priority was given to waterbodies within a 50 km radius of a large urban centre. We used satellite imagery and provincial fisheries database queries to eliminate unsuitable waterbodies based on attributes including: potential for fish escapement, presence of trout predators, water depth (excessive weed growth), overlap with sensitive amphibian habitat, and potential for user conflict (e.g., on a golf course). Nine waterbodies were recommended for field evaluation in 2019.

We completed field assessments on the remaining waterbodies to determine physical, chemical, and biological suitability of these waterbodies for recreational trout fishing. At each pond we

measured water depth, dissolved oxygen, temperature, conductivity, pH, water clarity, and noted aquatic weed abundance, shoreline characteristics, and accessibility to the public.

Results

Three of the nine waterbodies evaluated have potential to support stocked trout and evaluation is ongoing. In addition to the three new waterbodies, a candidate from 2017 (Chestermere Pond) is in the final stages of evaluation before being approved for stocking (Figure 1).

So far, three waterbodies we identified in previous years have been developed into fisheries and stocked with trout: Taber Pond, Shell True North Pond, and County Sportsplex Pond. All three of these ponds are gaining in popularity with local anglers.

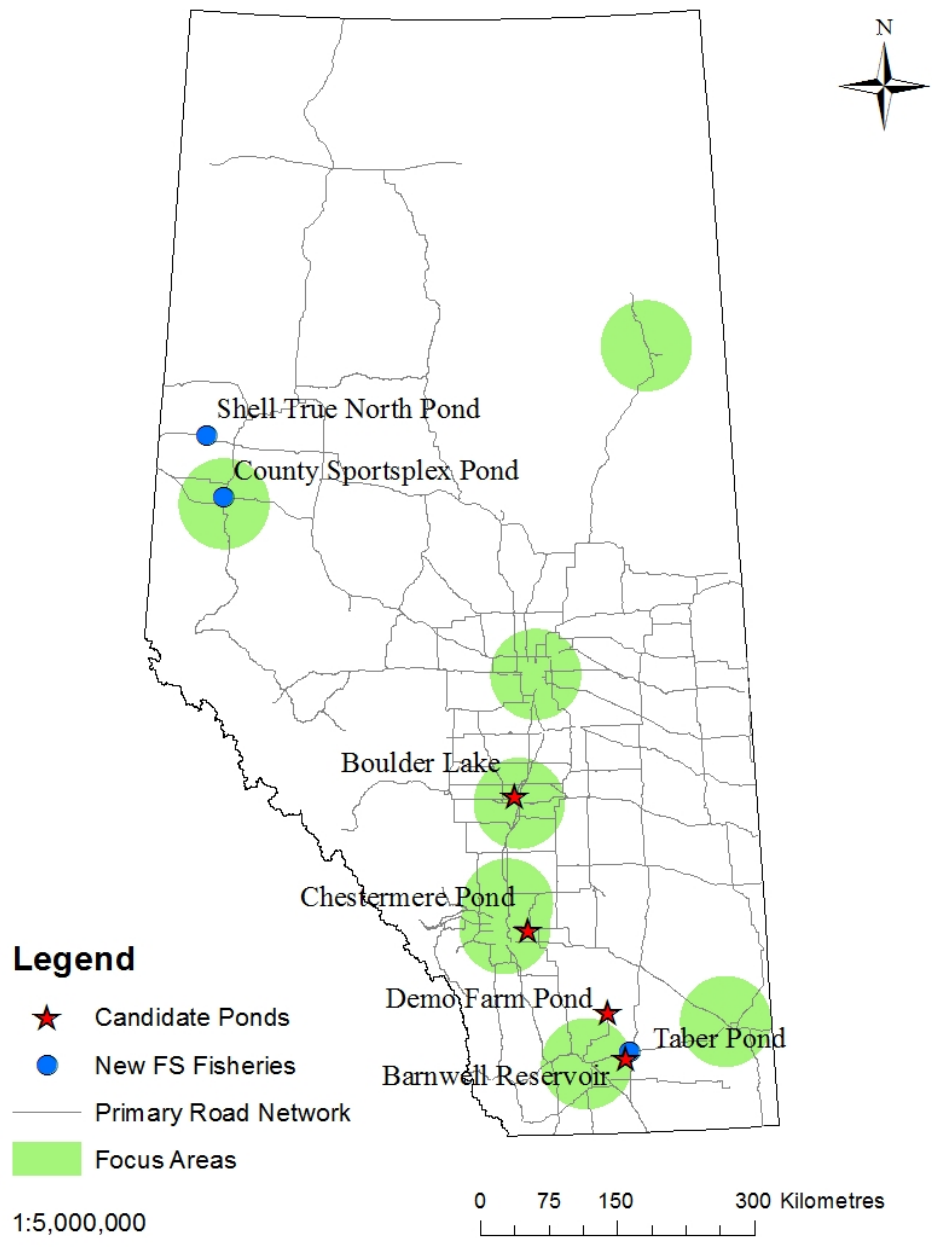


Figure 1: Provincial focal areas for Fish Stocking (FS) expansion, including 50 km buffers, new FS fisheries developed over last five years, and candidate ponds undergoing evaluation.

Conclusions

There are a limited number of waterbodies that are suitable for trout stocking under FS expansion. However, this project continues to find and develop quality fisheries, creating new fishing opportunities near large urban centers.

Communications

- ACA brochure “Remember the Old Fishin’ Hole? Let’s bring that back.”

Literature Cited

Fitzsimmons, K., and B. Keeling. 2015. Survival of stocked trout and a creel based sport fishery assessment of 12 Alberta Conservation Association stocked ponds. Data Report, produced by the Alberta Conservation Association, Sherwood Park, Alberta, Canada.

Photos



Candidate waterbody for fish stocking expansion, Boulder Lake, 12 km northwest of Red Deer, Alberta. Photo: Marco Fontana



A young angler with a healthy fish from Taber Trout Pond, Taber, Alberta. Photo: Tyler Johns



A successful angler at a Kids Can Catch event hosted at County Sportsplex Pond, Grande Prairie, Alberta. Photo: County of Grande Prairie