

Alberta Conservation Association
2021/22 Project Summary Report

Project Name: Fish Stocking Expansion – New Lakes

Fisheries Program Manager: Peter Aku

Project Leader: Scott Seward

Primary ACA staff on project: Kevin Fitzsimmons, Brad Hurkett, David Jackson, Tyler Johns, Mike Jokinen, Nikita Lebedynski, Logan Redman, Diana Rung, and Scott Seward

Partnerships

Alberta Environment and Parks

Alberta Fish & Game Association

Alberta Transportation

County of Grande Prairie

Evelyn and Leslie Wadey

Lacombe Fish and Game Association

Saddle Hills County

Taber Irrigation District

Town of Taber

Key Findings

- Recommendations from stakeholders and regional fisheries biologists identified Rotary Park Pond as a potential trout stocking site for evaluation in 2021.
- Candidate ponds from previous years, Chestermere Pond near Chestermere and BP1 (a borrow pit) near Fort McMurray both have fisheries potential, but creating public access remains an issue at these ponds.
- Boulder Lake was stocked for the first time in 2021.

Abstract

Stocked trout fisheries are popular in Alberta, with rainbow trout being the third most sought after fish by anglers in Alberta (DFO 2019). 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 identified and evaluated Rotary Park Pond (in the Town of Westlock) during the 2021 field season and determined that it has fisheries potential. Chestermere Pond (near Chestermere) and a borrow pit (BP1 near Fort McMurray) remain possibilities for future fisheries, and we are working with AEP to determine public access options. We also stocked Boulder Lake for the first time in 2021 and it is now part of the Fish Stocking Project.

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, with rainbow trout being the third most sought-after fish by anglers in Alberta (DFO 2019). Our stocked 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. Being within a reasonable driving distance of many anglers contributes to the popularity of FS ponds. To expand our FS project, we continue to identify new waterbodies to stock and/or develop.

Methods

Over the past six years, we have evaluated a total of 231 waterbodies using Google Earth © (2021) 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; however, we also consider waterbodies farther from cities if we believe they will make exceptional fisheries. 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). In 2021, Rotary Park Pond in the Town of Westlock passed initial screening processes, which was followed up with further field evaluation.

We assessed the pond to determine physical, chemical, and biological suitability for recreational trout fishing. We measured water depth, dissolved oxygen, temperature, conductivity, pH, water clarity; and noted aquatic weed abundance, shoreline characteristics, and accessibility to the public. In addition to assessing new waterbodies, we continue to work towards having other waterbodies identified in previous field seasons developed into fisheries: This year we obtained stocking permits for Boulder Lake, which was first evaluated in 2019. We are also working with Alberta Environment and Parks (AEP) to address access issues at Chestermere Pond (near Chestermere) and BP1 (a borrow pit, near Fort McMurray), candidate ponds from 2017 and 2020, respectively.

Results

Rotary Park Pond has marginal water depth (2.1 ± 0.08 m) and water temperature ($24.1 \pm 1.4^{\circ}\text{C}$) for trout survival. However, our assessment was completed in the heat of summer (27°C), during the drought of 2021, which likely impacted water depths and water temperatures. Furthermore, the Town of Westlock is planning to deepen the pond and install aeration to improve water quality. Boulder Lake was stocked for the first time in 2021. Access into Chestermere Pond and BP1 are being reviewed to determine if roads can be built to these ponds (Figure 1).

Since 2015, we have developed four waterbodies into fisheries and stocked them with various species of trout.

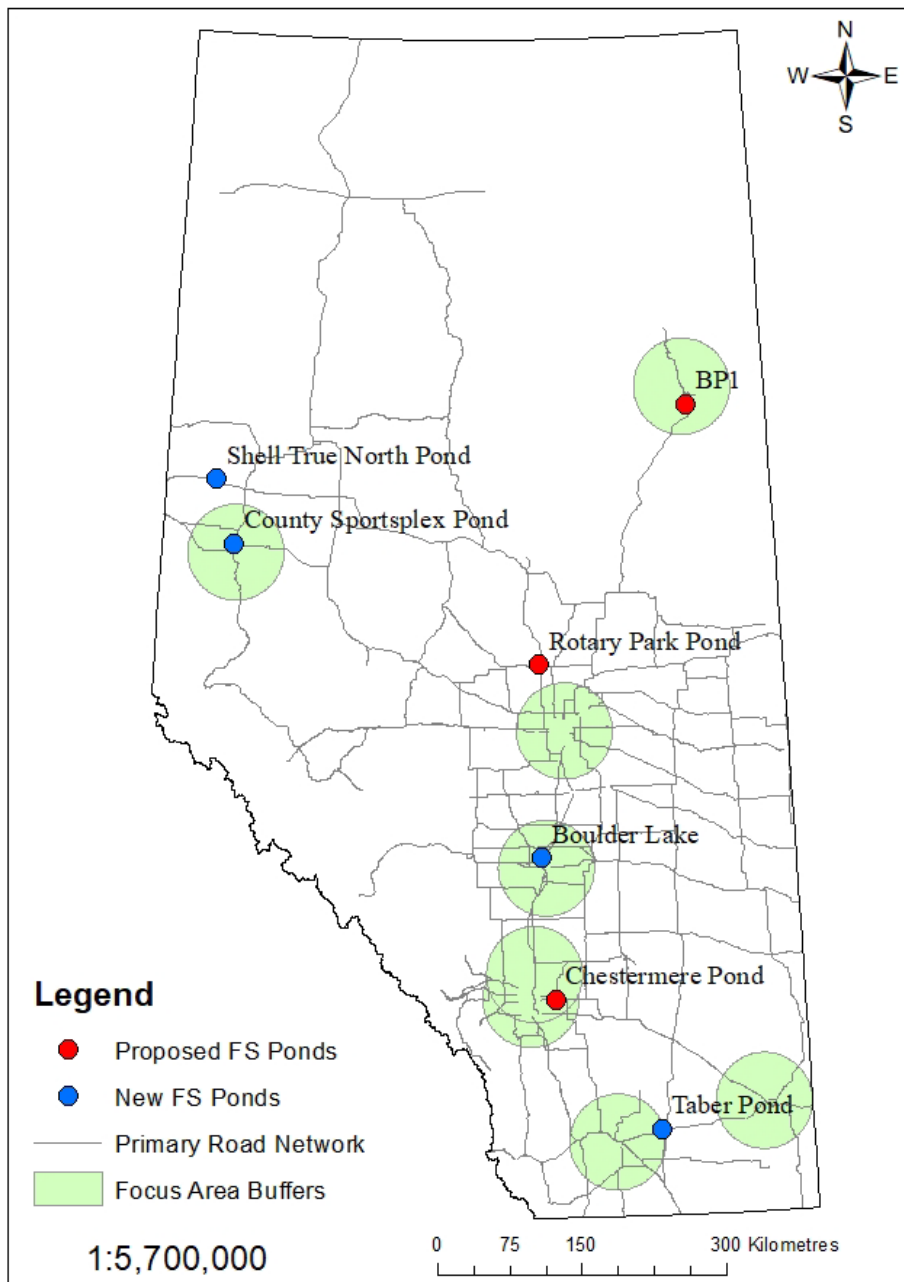


Figure 1. Provincial focal areas for fish stocking expansion, new fisheries developed over the last six years, and candidate ponds undergoing evaluation with a preference for waterbodies within the 50-km buffers.

Conclusions

There are a limited number of waterbodies across the province that are suitable for trout stocking under FS expansion. Nonetheless, we have added four new ponds with more developments on the horizon. All four ponds have been very well-received as anglers take advantage of these new opportunities. This project continues to find and develop quality fisheries, creating new fishing opportunities near large urban centres across the province.

Communications

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

Literature Cited

Fisheries and Oceans Canada (DFO). 2019. *Survey of Recreational Fishing in Canada, 2015*.

Fisheries and Oceans Canada. Ottawa, ON.

Fitzsimmons, K., and B. Keeling. 2016. *Stocked Trout Survival and Camera-based Angler*

Survey at Selected ACA Stocked Ponds. Data Report, D-2106-106. Alberta Conservation Association. Sherwood Park, Alberta, Canada. 25 pp + appendices.

Google Earth. 2021. Province of Alberta, Alberta, Canada. CNES/Airbus 2021, DigitalGlobe

2021. Google 2021. V 7.3.4.

Photos



Photo 1. Candidate waterbody for fish stocking expansion, Rotary Park Pond, within the Town of Westlock, Alberta. Photo: Lindsay Dowbush



Photo 2. Anglers enjoying the new stocked waterbody, Boulder Lake, 12 km northwest of Red Deer, Alberta. Photo: ACA