

Alberta Conservation Association 2017/18 Project Summary Report

Project Name: Enhanced Fish Stocking Expansion – New Lakes

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Partnerships

Alberta Environment and Parks
Alberta Fish and Game Association
Alberta Transportation
County of Grande Prairie
Taber Irrigation District
Town of Taber

Key Findings

- Recommendations from stakeholders and regional fisheries biologists identified an initial seven waterbodies as potential trout stocking sites for field evaluation.
- Field evaluation of these seven waterbodies indicate that three have fisheries potential—two highway borrow pits near Wembley and Chestermere and a reservoir near Raymond.
- Shell True North Pond, near Spirit River, identified during the 2015/16 EFS New Lakes search, has been added to the EFS project and stocked with 640 brook trout.
- Taber Pond, identified in 2016/17, has been developed and will be stocked in the spring of 2018.
- County Sportsplex Pond (County of Grande Prairie), identified in 2016/17 EFS New Lakes search, is undergoing further evaluation for addition to the EFS project.

Introduction

There are approximately 300,000 recreational anglers and only 1,100 waterbodies with sport fish in Alberta; 800 have natural fish populations and 300 have stocked fisheries (Zwickel 2012). Given the limited number of sport fisheries in Alberta, stocked waterbodies are very popular. Alberta Conservation Association stocks 61 waterbodies with catchable-sized trout (i.e., 20 cm) under its Enhanced Fish Stocking (EFS) project. EFS ponds can receive upwards of 1,000 angler hours per hectare during the summer months (Fitzsimmons and Keeling 2015) making them some of the most fished waterbodies per hectare of surface area in the province. Existing EFS waterbodies are also very popular because they are often within a reasonable driving distance of many anglers (Patterson and Sullivan 2013). In this project, ACA is working

to identify new lakes to stock and/or develop to create additional recreational fishing opportunities as part of the EFS project.

Methods

In the first two years (2015 – 2016) of the project, we identified and evaluated 212 waterbodies within a 50-km radius of major urban Alberta centres using Google Earth imagery, input from regional fisheries biologists and stakeholders. We also included waterbodies further than 50 km from major urban centres that were recommended by biologists and/or stakeholders. 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 2017, we relied solely on recommendations from local anglers, area fisheries biologists and other stakeholders to identify candidate ponds overlooked during our initial search in 2015/16. We completed field assessments to evaluate the 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

Seven waterbodies were recommended by stakeholders for field evaluation in 2017. Three waterbodies met water quality and access criteria and will undergo further evaluation prior to addition to the EFS program: two highway borrow pits (Anderson Pond near Wembley, Alberta Transportation borrow pit near Chestermere) and one reservoir (Corner Lake near Raymond) (Figure 1).

In addition to searching for new waterbodies, waterbodies we identified in previous years are being developed into fisheries: Shell True North Pond, stocked with 640 brook trout in 2017, is now an EFS fishery. Taber Pond has been developed by the Town of Taber and Taber Irrigation District and will be stocked with 3,600 rainbow trout in the spring of 2018. County Sportsplex Pond (County of Grande Prairie) is undergoing further review to determine suitability for EFS expansion.

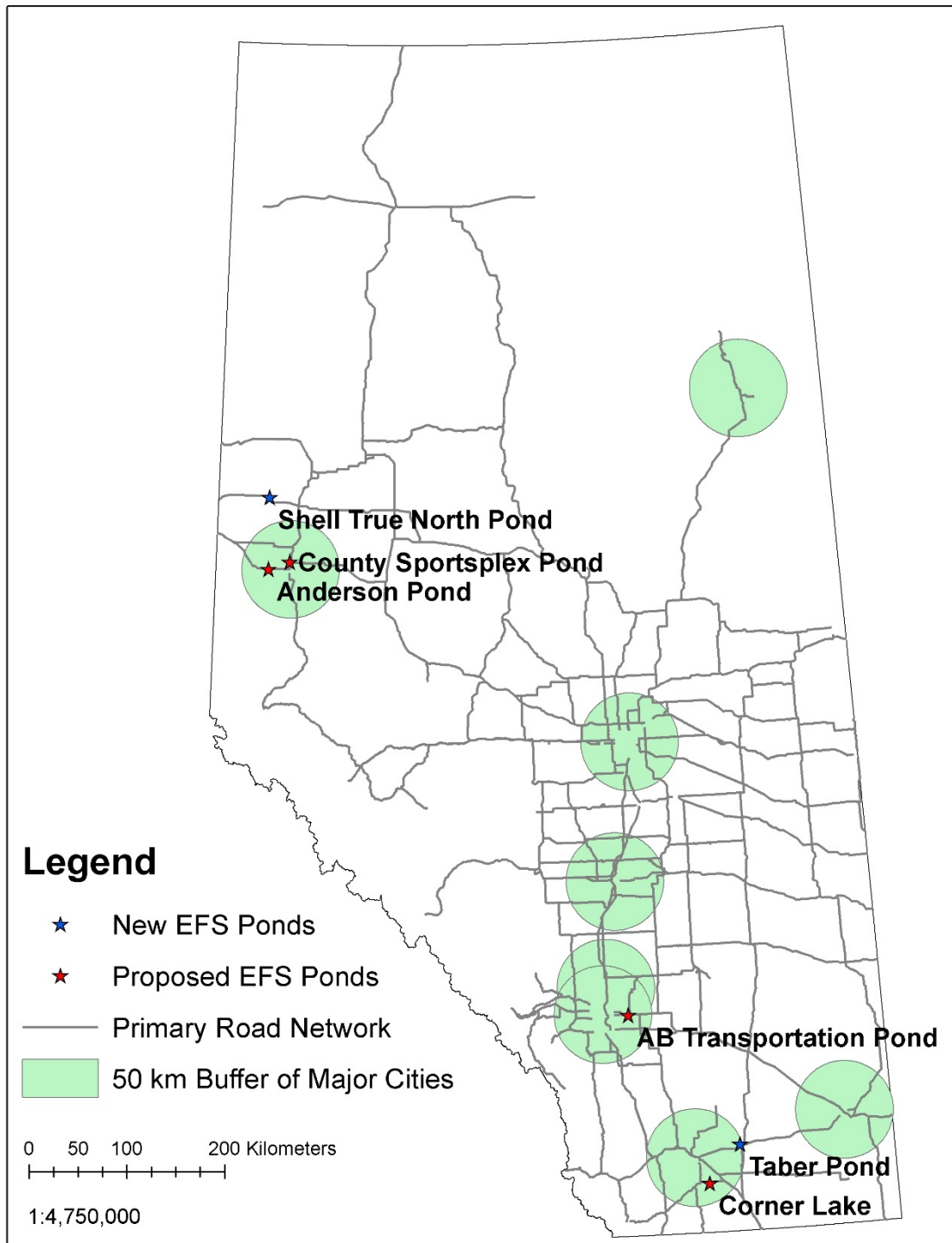


Figure 1: Provincial focal areas for Enhance Fish Stocking expansion, including 50 km buffers, proposed EFS ponds, and new EFS fisheries.

Conclusions

There are a limited number of waterbodies suitable for EFS expansion. However, recommendations from stakeholders continue to provide waterbodies that meet EFS water quality standards. To date, three waterbodies we identified through this project are being developed into fisheries, creating new fishing opportunities in close proximity to 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.
- Patterson, W. F. and M. G. Sullivan. 2013. Testing and refining the assumptions of put-and-take rainbow trout fisheries in Alberta. *Human Dimensions of Wildlife* 18:340-354
- Zwickel, H. 2012. Sport fishing in Alberta 2010: summary report from the eighth survey of recreational fishing in Canada. Alberta Sustainable Resource Development, Fisheries Management Branch. Edmonton, Alberta, Canada. 46 pp.

Photos



Enhanced Fish Stocking candidate waterbody, Anderson Pond, Wembley, Alberta.
Photo: Scott Seward.



Enhanced Fish Stocking candidate waterbody, AB Transportation Borrow Pit, east of Chestermere, Alberta, approximately 9 km. Photo: Diana Rung.



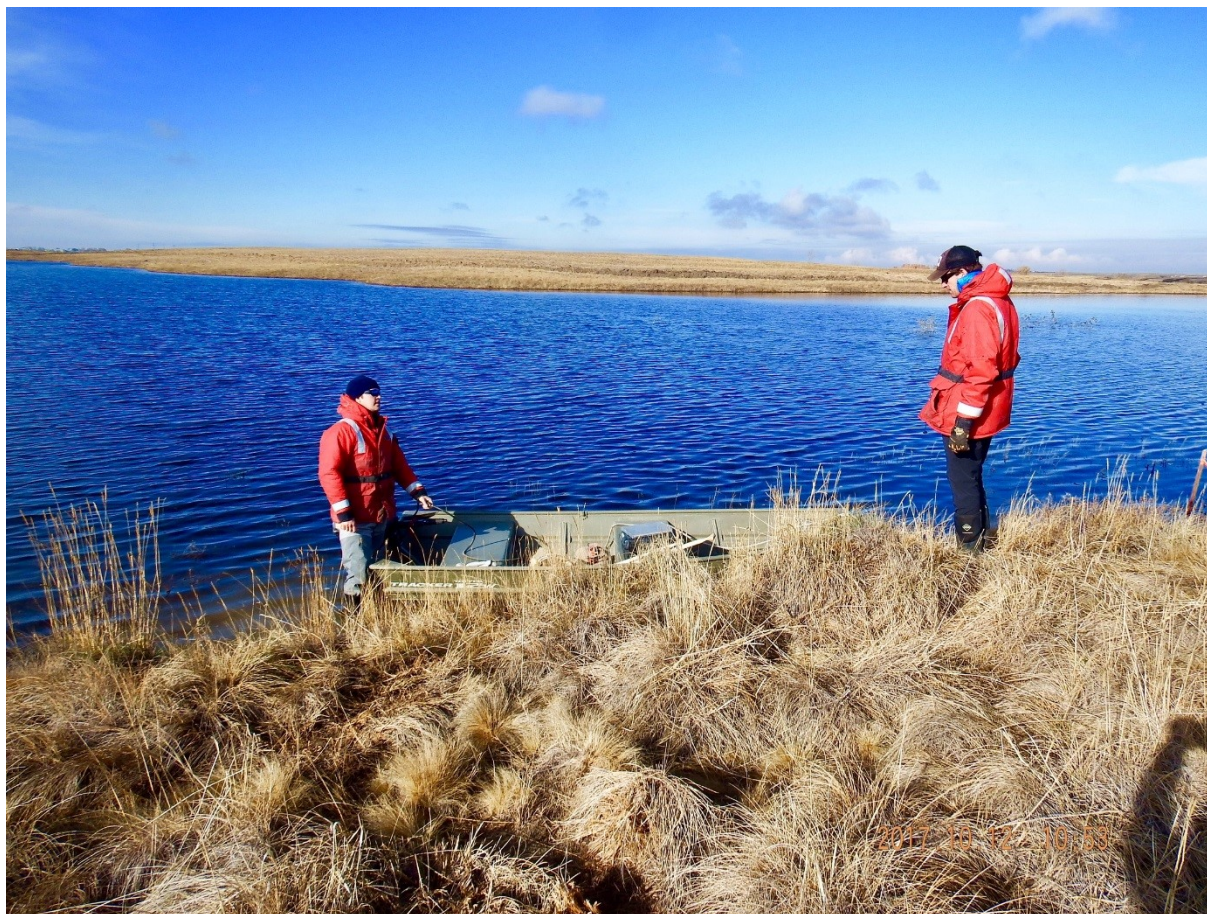
Enhanced Fish Stocking candidate waterbody, Corner Lake, Raymond, Alberta.
Photo: Diana Rung



Enhanced Fish Stocking candidate waterbody, County Sportsplex Pond, Clairmont, Alberta.
Photo: Scott Seward



Enhanced Fish Stocking waterbody and newly developed parking lot, Shell True North Pond.
Photo: ACA



Enhanced Fish Stocking waterbody, Town of Taber Trout Pond. Photo: Andrew Malcolm