Alberta Conservation Association

2024/25 Project Summary Report

Project Name: Sturgeon River Wetland (Fisheries)

Fisheries Program Manager: Peter Aku

Project Leader: Kevin Fitzsimmons

Primary ACA Staff on Project: Jason Blackburn, Troy Furukawa, Chad Judd, Lindsay Marley, Kade McCormick, and Ariel Schlereth

Partnerships

Government of Alberta
Lac Ste. Anne County

Key Findings

- We captured 881 fish in the Sturgeon River between Highway 777 and Matchayaw Lake.
- We captured five species of fish: spottail shiner, brook stickleback, white sucker, northern pike, and fathead minnow; four immature northern pike were the only sport fish captured.
- Dipterans and amphipods were the most abundant invertebrate families at 57.8 and 18.7% respectively.
- Macroinvertebrate diversity was low and decreased with distance downstream.

Details

The ecological integrity of rivers, streams, and wetlands in Alberta can be negatively affected by human disturbance. Wetlands and riparian areas can be degraded by agricultural and industrial practices. Alberta Conservation Association and Lac Ste. Anne County have partnered to collect baseline fish, macroinvertebrate, water quality, wildlife, and riparian health data on the Sturgeon River Wetland property, a 58 ha parcel of land along the Sturgeon River. The goal is to restore the shoreline and wetland function, improve water quality, and enhance wildlife and fish habitat.

Here, we report on baseline fish, macroinvertebrate, and water quality along a section of the river encompassing the Sturgeon River Wetland property.

We collected fish community data at six electrofishing sites and at three minnow trapping sites. We collected benthic invertebrate, and water quality data at three bridge crossing locations in the study area.

We captured a total of 881 fish comprising five species. Spottail shiners and brook sticklebacks were the most abundant species representing 64.5 and 31.5% respectively. The remaining catch was white sucker, fathead minnows, and northern pike. Northen pike were the only sport fish species captured. All pike captured were small, <250 mm, and considered immature. We identified 16 families, 12 orders, and six classes of macroinvertebrates. Dipterans and amphipods were the most abundant orders collected. Invertebrate species diversity decreased with distance downstream. All measured water quality parameters were within acceptable provincial or federal limits.

Photos

Photo 1. ACA staff members Jason Blackburn, Chad Judd, Lindsay Marley, and Kade McCormick boat electrofishing the Sturgeon River. Photo: Kevin Fitzsimmons

Photo 2. ACA staff members Jason Blackburn and Lindsay Marley backpack electrofishing the Sturgeon River. Photo: Kevin Fitzsimmons

Photo 3. ACA staff member Lindsay Marley with northern pike captured from the Sturgeon River. Photo: Kade McCormick