A/OFRC PROJECT UPDATE **NIPISSING FIRST NATION**

December 2015

MCINNIS CREEK ONTARIO STREAM ASSESSMENT PROTOCOL

INTRODUCTION

The Anishinabek / Ontario Fisheries Resource Centre (A/OFRC) in partnership with Nipissing First Nation, initiated a multi-faceted project on McInnis Creek. This project took place in the fall of 2015.

METHODS

Following the Ontario Stream Assessment Protocol (OSAP), crews set out to complete two objectives: first, to establish a set of monitoring sites to be used in future monitoring efforts; and second, to gather data baseline on the water chemistry, fish community, benthic invertabrate composition and channel morphology of the chosen sites. McInnis Creek Site 1 is located on the north shore of Lake Nipissing. McInnis Creek Site 2 is located approximately 1.5 km upstream from Site 1. A water temperature



Largemouth Bass



Brown Bulklhead catfish

logger was placed in McInnis Creek from September 1—November 26, 2015.

RESULTS

Fish communities at the two sites varied greatly. Site 1 located near the mouth of McInnis Creek possessed a fish community typically associated with lakes. Species captured at Site 1 included Central Mudminnow, White Sucker, Burbot, Smallmouth Bass, Largemouth Bass, Perch, Johnny Yellow Darter, Logperch, Slimy Sculpin and the Northern Redbelly Dace. Due to its close proximity to Lake Nipissing, this site may offer shelter from predators and provide nursery habitat for young of the year lake species.

Site 2 consisted of more minnow species such as Central Mudminnow, White Suckers, Northern Redbelly Dace Golden Shiner, Common Shiner, Creek Chub, Northern Pearl Dace, Brown Bullhead and Brook Stickleback.

Water temperatures recorded using the temperature logger indicated a range from 17.5° C - 0.4° C.



Young Burbot captured at Site 1

CONCLUSION

Overall, 64 fish were captured in Site 1, and 165 fish were captured at Site 2. Preliminary results from site investigations and data from the temperature logger suggests that McInnis Creek is a cool water stream. This is also validated by the presence of cool water fish species such as Johnny Darter, Central Mudminnow, Creek Chub and Slimy Sculpin. Groundwater infiltration into the stream as well as the presence of watercrest and steep shady hills also support this conclusion. A full technical report is slated to be completed by February 2015.

