

# Chippewas of the Thames Fisheries UPDATE

Thames River Water / Habitat Assessment

November 2012

## INTRODUCTION

Chippewas of the Thames First Nation is looking into the development of a comprehensive land use / watershed conservation strategy. As part of this strategy, the First Nation wanted to gather baseline data in regards to the toxins flowing into the Thames River at different points.

A number of impacts occurring on the Thames River has brought concern to the First Nation. These include contamination being washed into the river during the City of London's spring flooding; the erosion effects of the flooding on the farm fields that line the edge of the river; as well as any possible toxins that the First Nation itself may be contributing. To help the First Nation manage their waterway and regulate the encroachment of it's members on the river's shoreline a Water / Habitat Assessment was completed with the Anishinabek/ Ontario Fisheries Resource Centre.



*Completing a habitat assessment on the Thames River, August 2012.*

## METHODS

The contours of the river will be mapped using a side sonar mapping unit. Shoreline and littoral studies include cruising the shoreline in a boat and recording characteristics and percentage



*Major erosion on the banks of the Thames River.*

quantities of substrate, vegetation and fish habitat in both the shoreline and littoral zones. The littoral zone is the area of the waterbody where the sun can penetrate to the bottom. Structural shoreline developments such as docks, culverts, inflow and drainage pipes, river crossings, man-made shoreline stabilizers etc. were also recorded.

## RESULTS

A crew from the A/OFRFC was on the Thames River September 11—13, 2012 collecting habitat and shoreline data. The sample area started at the Iona Road bridge and continued upstream to the Muncey Road bridge.



*Thames River shoreline.*

The water in the Thames River is characterized as turbid (not clear). This is likely due to the erosion of silt and sand into the river. A sample of the river bottom substrate was also collected and analyzed. The bottom substrate in the dredge consisted of 90% sand, 5% clay and 5% silt.

## CONCLUSIONS

All information gathered will be presented in a report to be finalized in 2013. Maps will be generated using the quantitative data for both of the shoreline and littoral zone areas. Recommendations for the possible implementation of buffer zones on the shoreline will also be included.



*Thames River bottom substrate.*



For more information on this or other fisheries projects please contact the A/OFRFC:

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