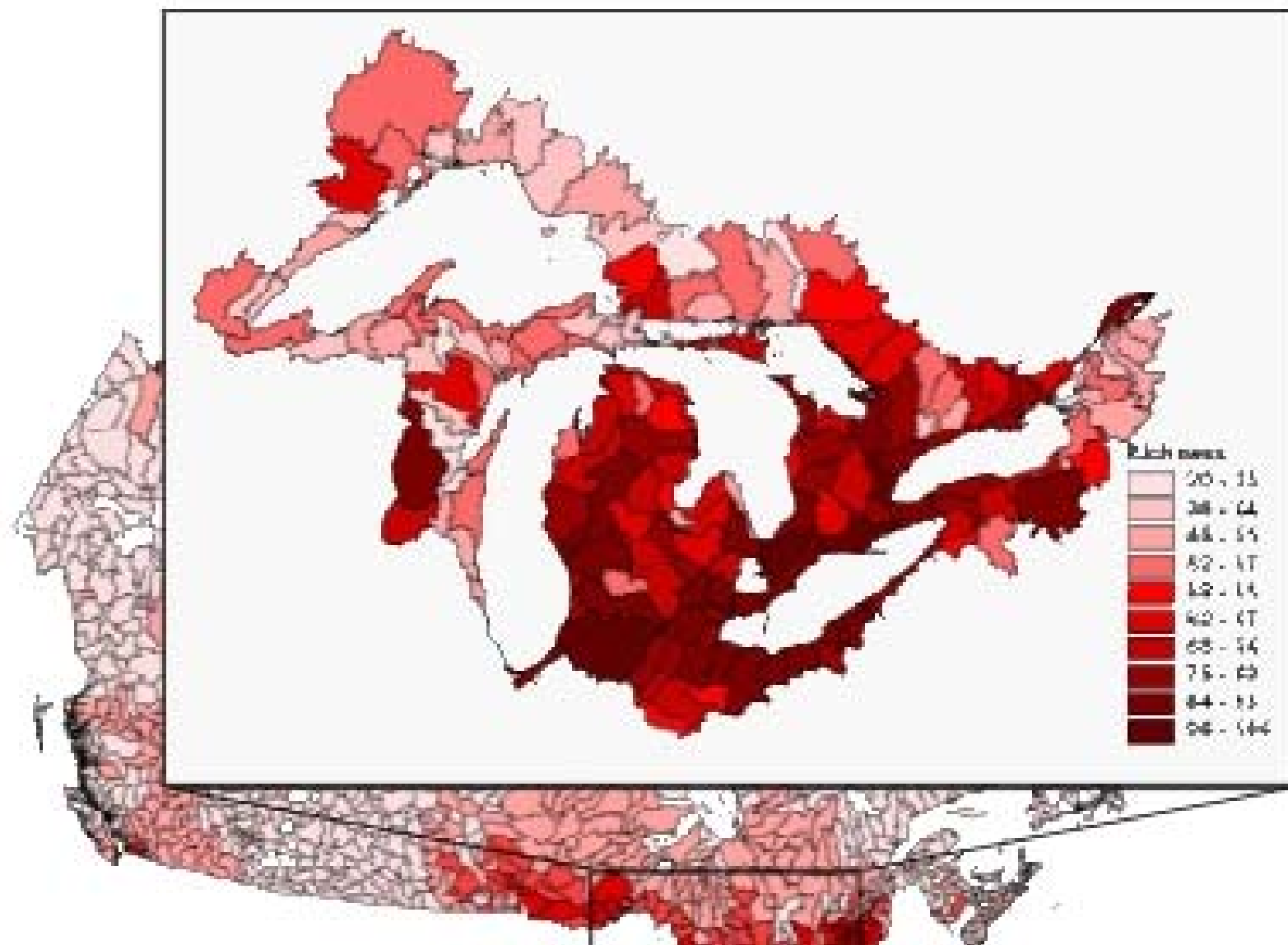


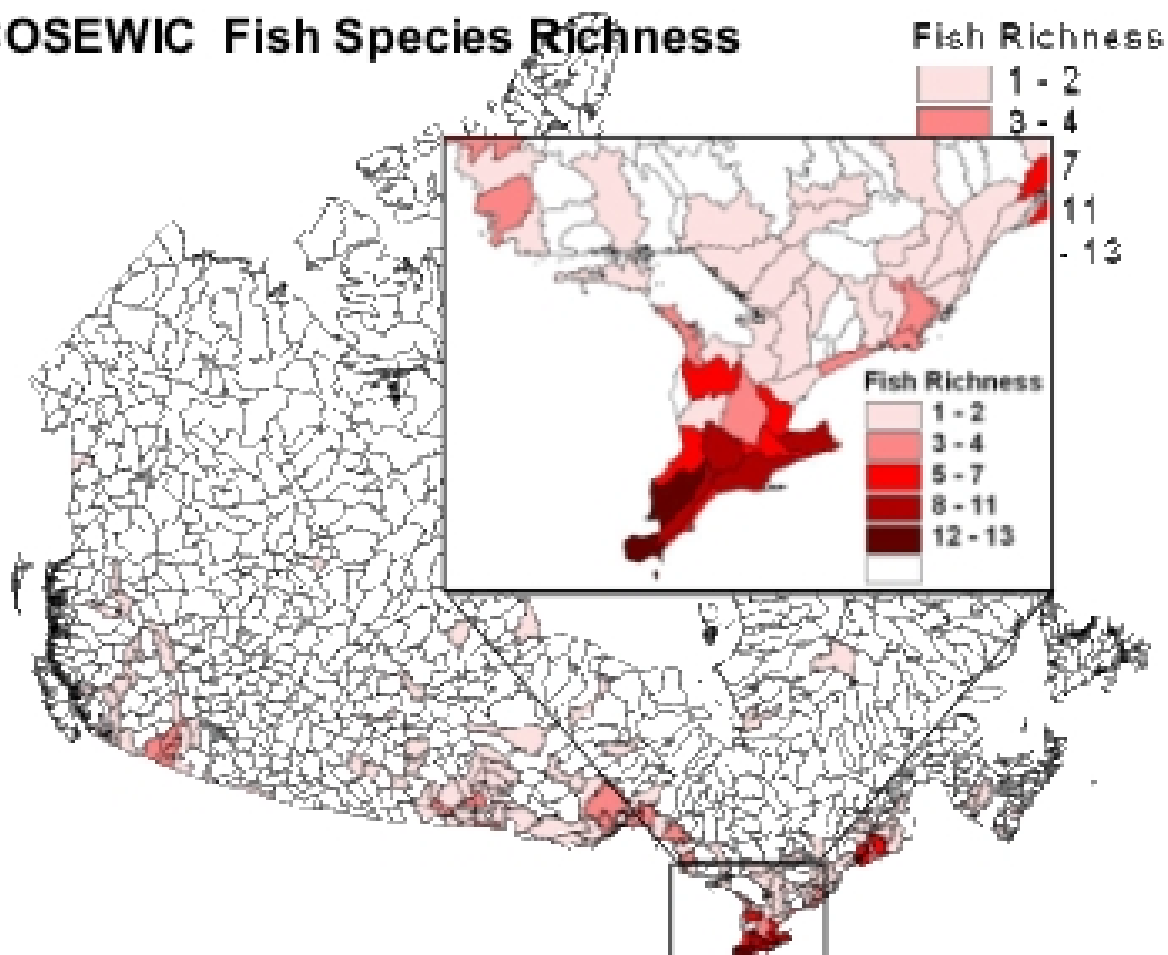
Recent DFO Activities in the Huron-Erie Corridor

Nicholas E. Mandrak
Great Lakes Laboratory for
Fisheries and Aquatic Sciences
Fisheries and Oceans Canada
Burlington, ON Canada

*images resolution has been reduced considerably
to reduce file size



COSEWIC Fish Species Richness





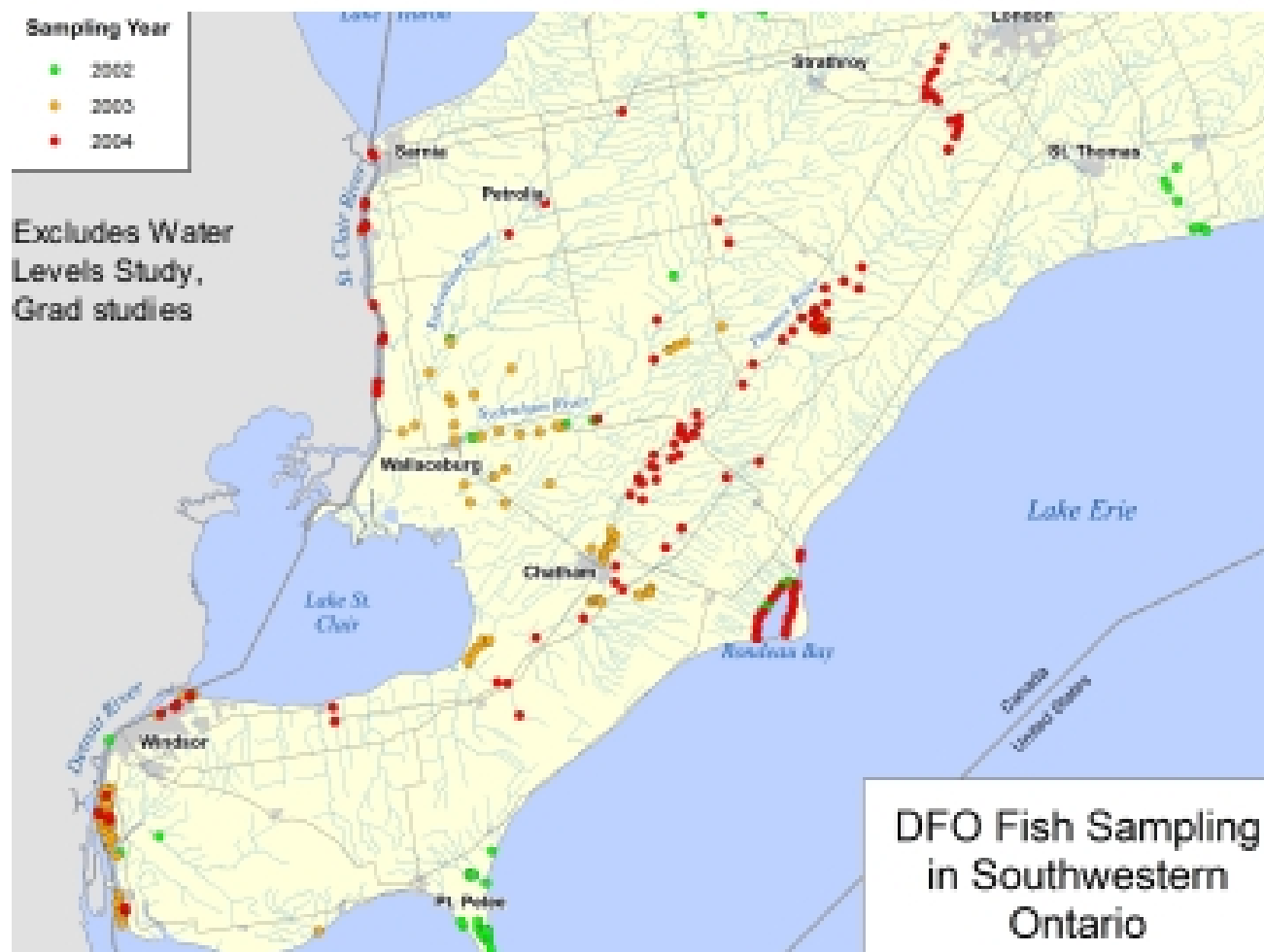
Notropis formicaria
northern madtom
ENDANGERED

Outline

- DFO-Partner Sampling
- Graduate Student Studies
- Recovery Planning
- Other Studies

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DFO-Partner Sampling

- Fish sampling using electrofishing, hoopneting (fine mesh), seine netting.
- General habitat sampling – depth, width, current, substrate, secchi, temperature, conductivity, riparian cover.

DFO-Partner Sampling

- Detroit-St. Clair AOC
 - Funded by MNR COA
 - Repeat sampling of 1989-1990
 - Random sampling



bigmouth buffalo, Special Concern

D F O - P a r t n e r S a m p l i n g

Lower Thames River

Funded by MNR COA, Interdepartmental
Recovery Fund (IRF), DFO

Mainstem, tributaries, ESD mark-recapture



eastern sand darter, Threatened

DFO-Partner Sampling

- Sydenham River, NWA
 - lower mainstem, tributaries
 - Partner - CWS



blackstripe topminnow, Special Concern

DFO-Partner Sampling

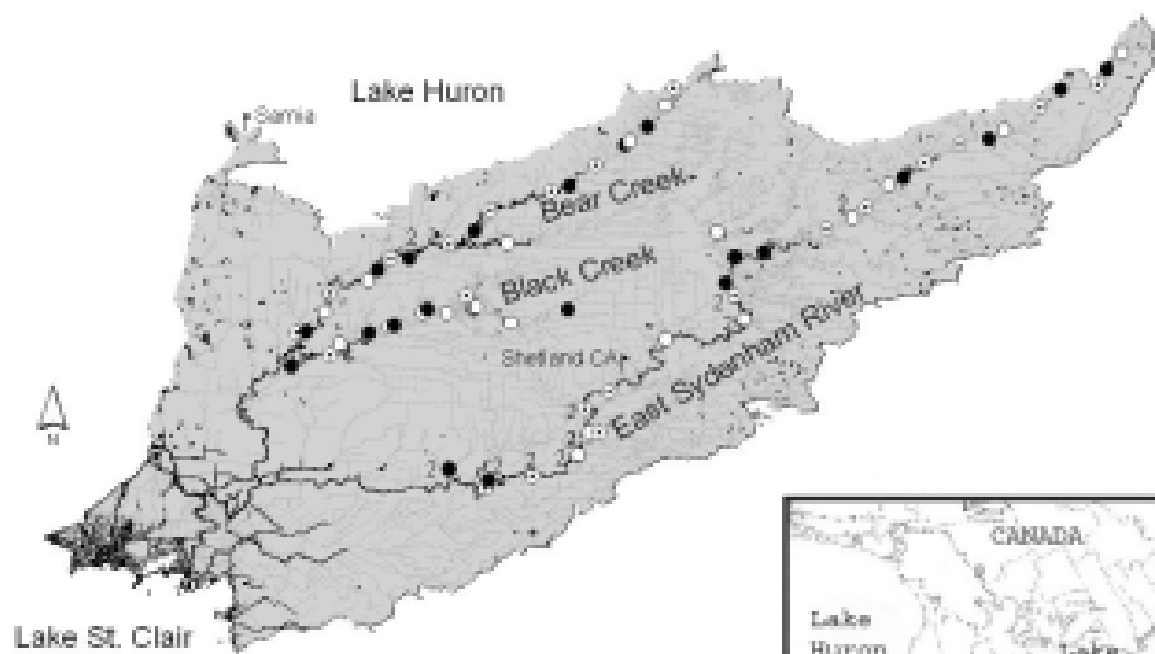
- Sydenham River, NWA
 - lower mainstem, tributaries
 - Partner - CWS



blackstripe topminnow, Special Concern

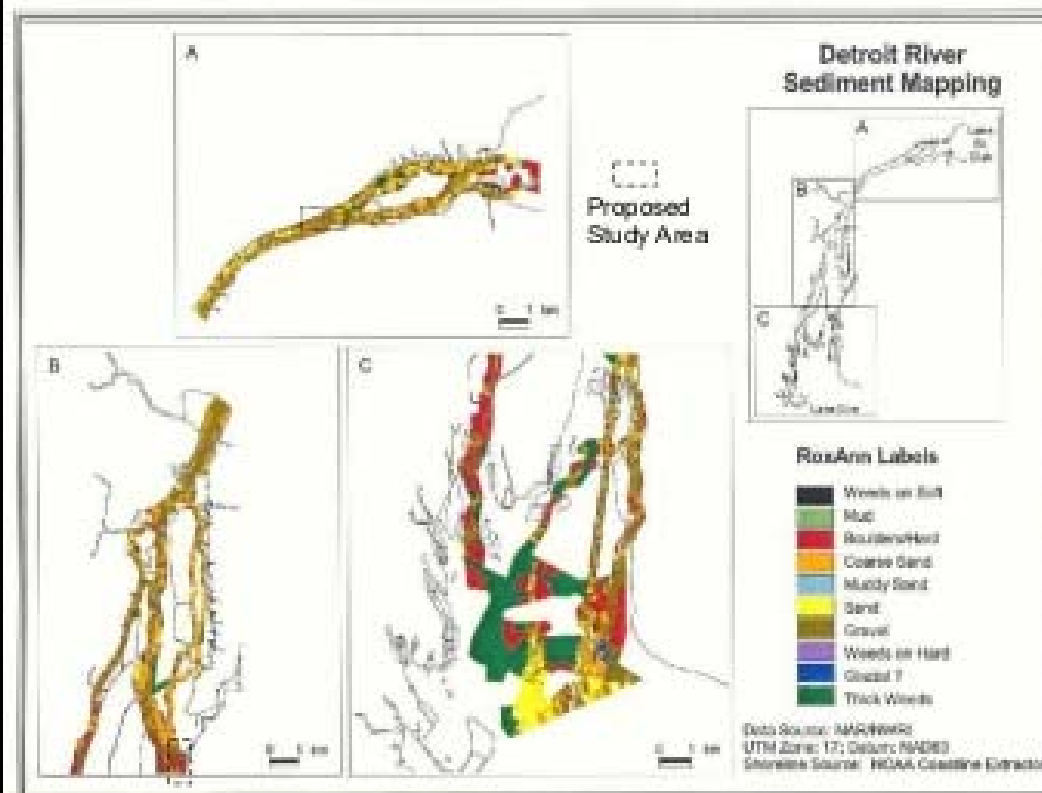
Fish SAR- Habitat Associations in Sydenham River

- Mark Poos, University of Guelph
- Sampled 75 sites in 2002/3, 25 sites in both years.
- b/p electrofishing, seining, various traps.
- Characterized habitat using Ontario Stream Assessment Protocol (OSAP).
- Funded by DFO.



Fish-Habitat Associations in the Detroit River

- Nick Lapointe, University of Windsor
- Habitat-stratified fish assemblage survey at 32 sites (2003) and 60 sites (2004).
- Boat electrofishing, seining, hoopnetting, trawling, various traps.
- Habitat: NWRI, CHS data; field data.
- Funded by DFO, Windsor.



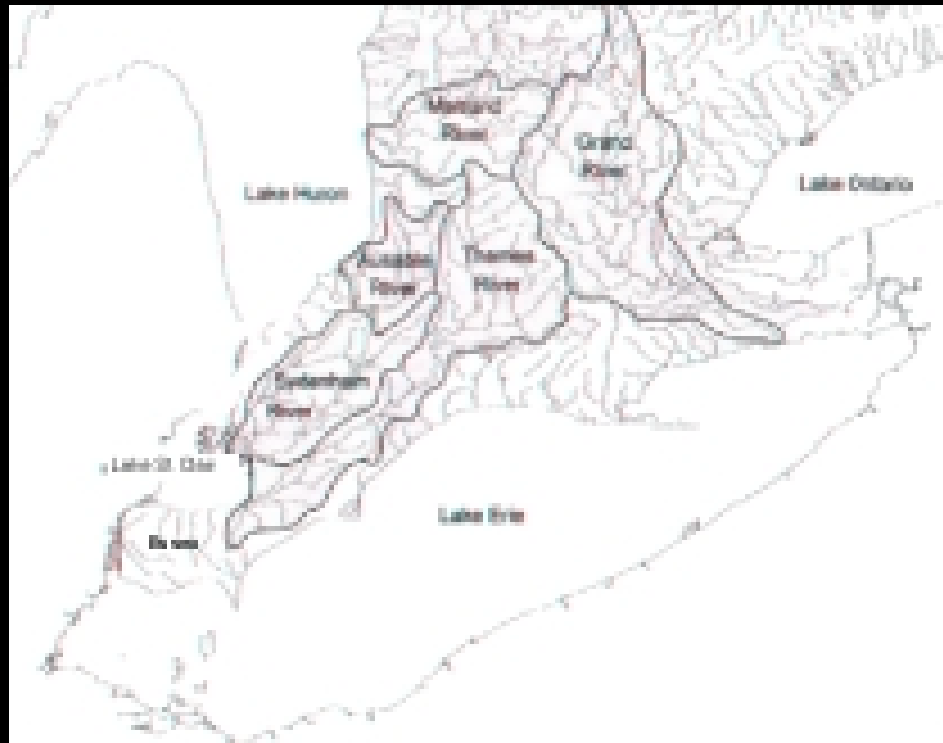
Fish Assemblages in Agricultural Drains

- Katie Stammler, University of Guelph
- Do drains act as natural systems?
- 30 pairs of drains in SW Ontario including Essex County.
- b/p electrofishing, seining.
- General habitat sampling – depth, width, current, substrate, secchi, temperature, conductivity, riparian cover.

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Multi-species/Ecosystem Recovery Strategies



Completed

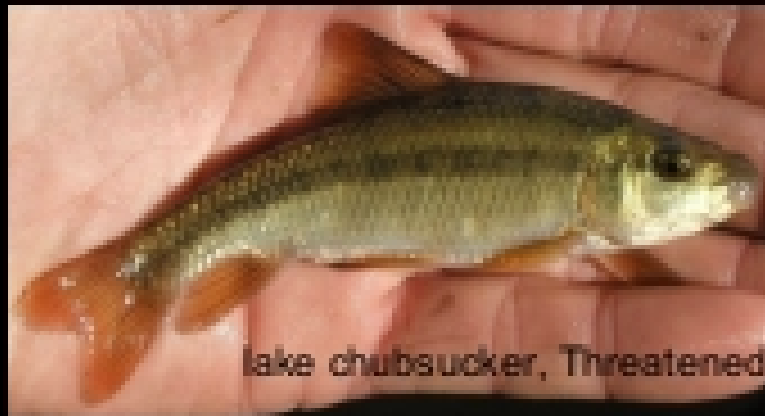
- Ausable River
- Grand River*
- Sydenham River

In Prep.

- Thames River
- Essex County
- Mussels

* Fishes only

Species Recovery Strategies



lake chubsucker, Threatened



channel darter, Endangered

Completed

- Aurora trout*

In Prep.

- Redside dace*
- Channel darter
- Wavy-rayed Lampmussel
- Eastern sand darter
- Lake chubsucker

* MNR lead, DFO contributed partial funding

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Other Studies

- Walpole Ecosystem Recovery Strategy
 - Walpole FN, EC, OMNR
- GL Atlas - GLFC
- TNCC Aquatic Blueprint Project
 - Habitat classifications for streams (by segment), inland lakes, GL nearshore, wetlands (inland).
 - Cdn GL basin.
 - Classifications currently being tested by PhD student, Mark Poos, University of Toronto.