

# The River Bottom

## Summary and Accomplishments

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St. Clair River RAP Coordinator

St. Clair River AOC Symposium  
“The Path to a Healthy River”  
Working Towards Delisting the St. Clair  
River

June 7, 2012  
Sarnia, Ontario



# Related Beneficial Use Impairments (BUIs)

Degradation of Benthos

Restrictions on Dredging Activities



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# Degradation of Benthos

Canadian Status  
IMPAIRED

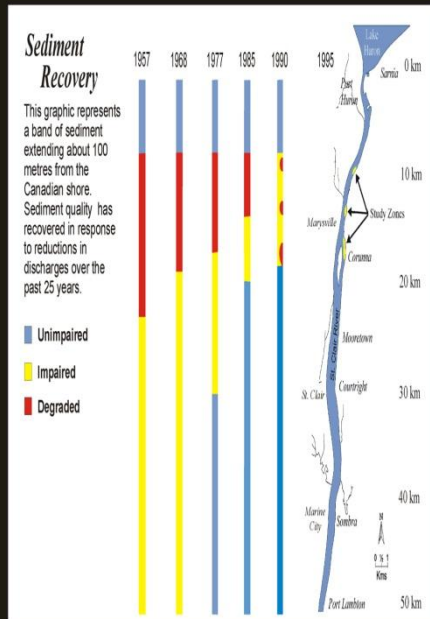
## Canadian Delisting Criteria

*“When the benthic community structure, diversity, and abundance are not significantly different to suitable, un-impacted reference sites; and*

*When benthic invertebrates tissue contaminant concentrations (body burdens) are comparable to, un-impacted reference sites within the AOC, or*

*When all remedial options for contaminated sediment, have been completed and follow-up monitoring confirms their effectiveness.”*

Canadian Status Review in 2012-2013



Sediment Quality  
in the St. Clair  
River (provided by  
SLEA)



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# Restrictions on Dredging Activities

Canada

IMPAIRED

Status assessment to be conducted in  
2012-2013



Dredge spoils will  
continue to require  
testing and proper  
disposal regardless.

United States

NOT IMPAIRED

Official re-designation in May 2010



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# Historical Contaminated Sediments

Between 2007 and 2010, four major steps were completed in addressing the contaminated sediments on the Canadian side of the St. Clair River

2007 – Technical Steering Committee established

- Assess sediments
- Ecological Impacts of COCs
- Management options

Contaminated Sediment Technical Steering Committee:

Environment Canada  
Ontario Ministry of the Environment  
St. Clair Region Conservation Authority  
Sarnia-Lambton Environmental Association  
Walpole Island First Nation  
Aamjiwnaang First Nation



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# SMO Information Gaps - Geophysical

Geophysical - What is on the bottom of the river (including pipelines) that could interfere with remediation options.

→  
Target areas at Site 2  
for Geophysical  
assessment



COMPLETED IN 2011

←  
Equipment used to  
conduct the Geophysical  
study



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# Information Gap – Geochemical and Geotechnical

Geochemical – Areas, volumes and disposal characteristics of sediment requiring remediation and potential costs

Geotechnical – Is the river bottom sediment stable enough to support capping?

REPORT PENDING  
SUMMER 2012



↑ Sediment coring conducted by  
Pollutech EnviroQuatics Ltd. →



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# Questions and Discussion

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Lisa Richman – Ontario Ministry of the Environment

Tim Moran – Pollutech EnviroQuatics Limited

Roger Santiago – Environment Canada

Claude Lafrance – RAP Coordinator



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