

# Water and People

## 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)



Restrictions on Drinking Water  
Consumption or Taste and  
Odour Problems

Beach Closings

Degradation of Aesthetics

Added Cost to Agriculture and  
Industry

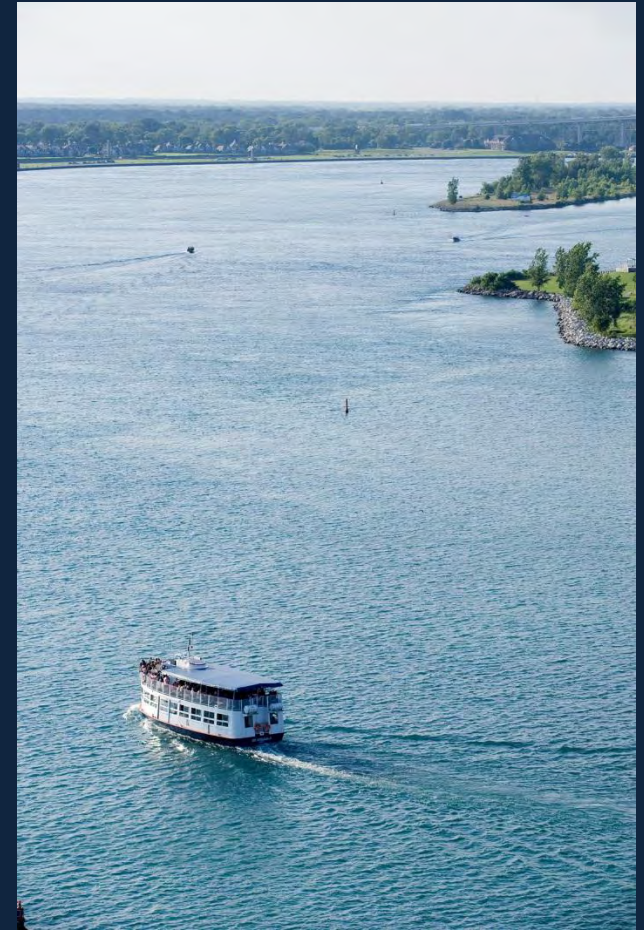


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# Causes

## Causes:

- Combined Sewer Overflows (CSOs)
- Spills (Industrial and Municipal)
- Discharges (Industrial and Municipal)



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# Combined Sewer Overflow (CSO) Improvements and St. Clair Sewage Treatment Plant (STP) Upgrades



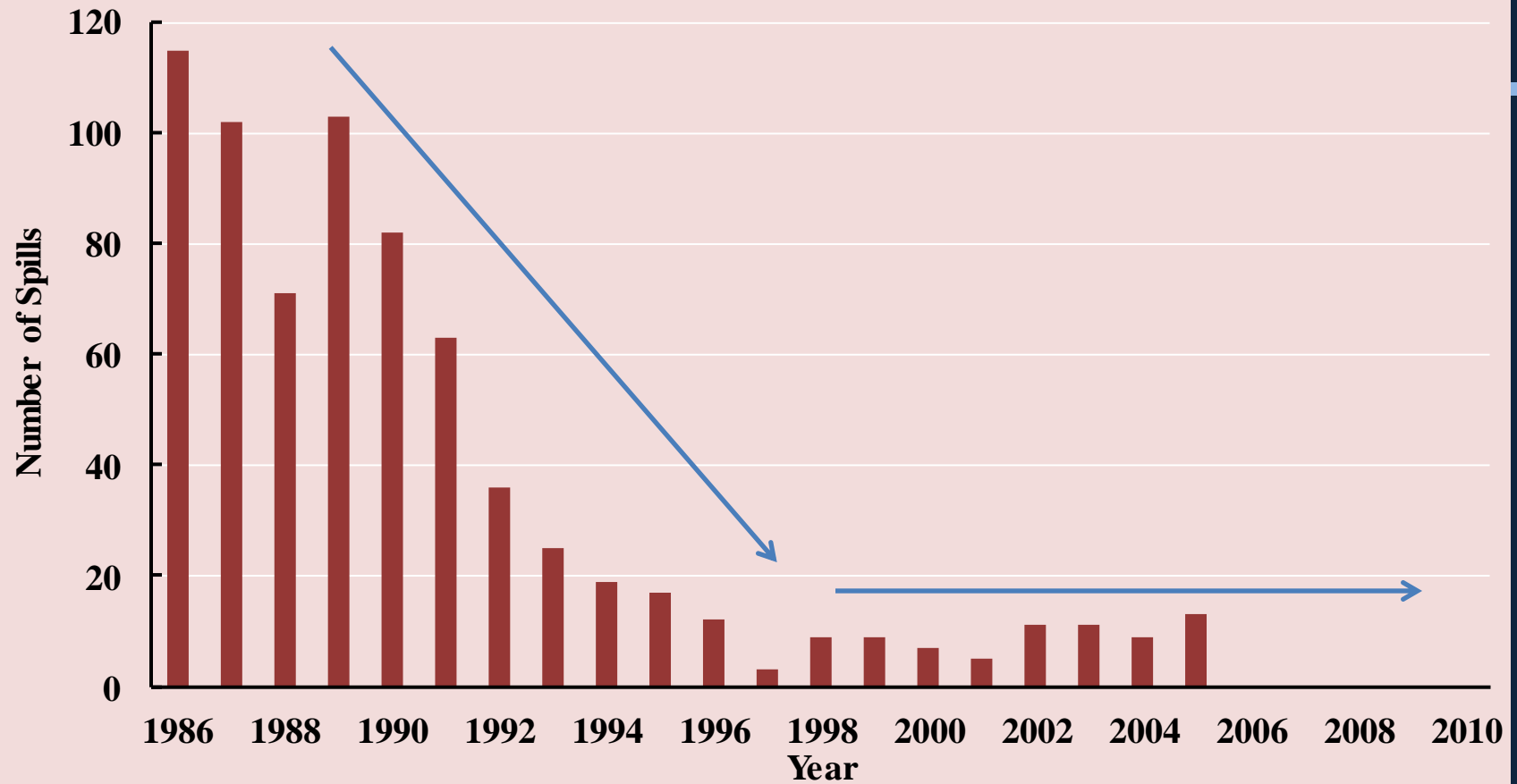
## Courtright Sewage Treatment Plant in St. Clair Township



## Devine Street Construction in Sarnia, Ontario



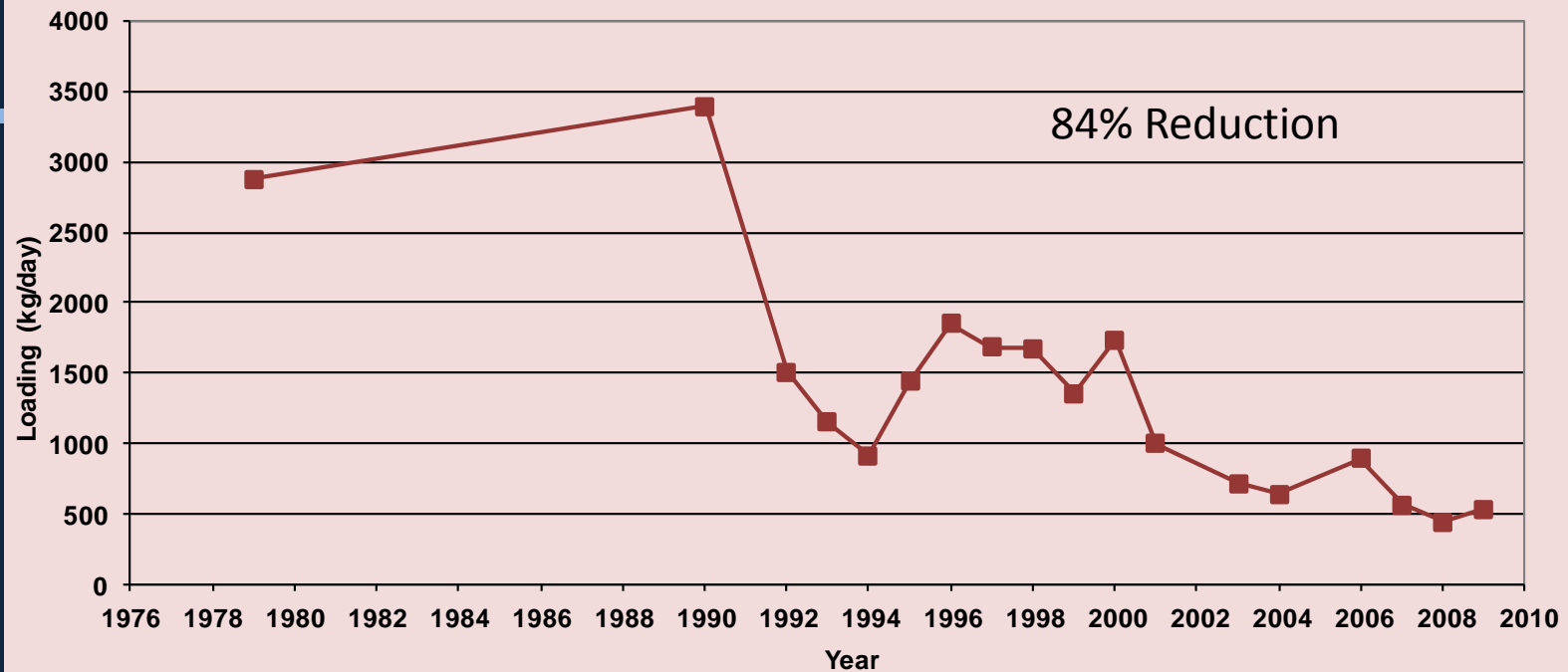
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Spills to the St. Clair River from Sarnia-Lambton Environmental Association (SLEA)  
Member Sites (1986-2005)



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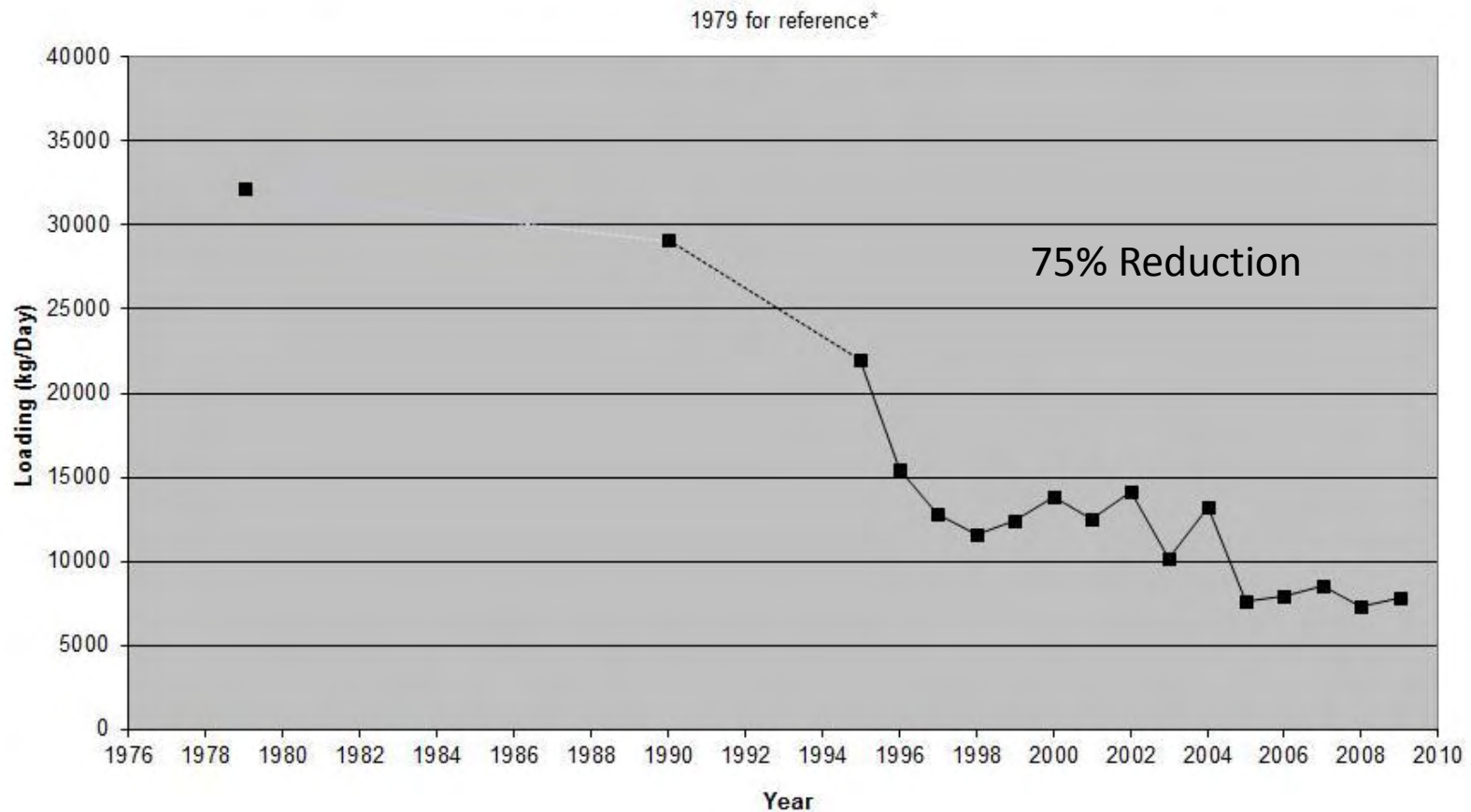
## Canadian Municipal Point Source Dischargers to the St. Clair River AOC (1990-2009)

Three parameters: BOD5, Suspended Solids, Total Phosphorus for 7 facilities with point source discharge to the St. Clair River AOC



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## Industrial Point Source Dischargers to St. Clair AOC (1990-2009)



## Municipal Industrial Strategy for Abatement (MISA)

Chemical loadings of 19 parameters between 1990 and 2009 for 17 facilities with point source discharges in the St. Clair River Area of Concern



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# Restrictions on Drinking Water Consumption or Taste and Odour Problems

## Recent Achievements:

- ↓ spills since 2000
- Elimination of CSOs in Michigan; 50% ↓ in CSO volume in Sarnia, Ontario
- Improved monitoring and source water protection policies
  - E.g., St. Clair River-Lake St. Clair-Detroit River Drinking Water Protection Network



13 water intakes; 32 monitoring instruments installed in 2007



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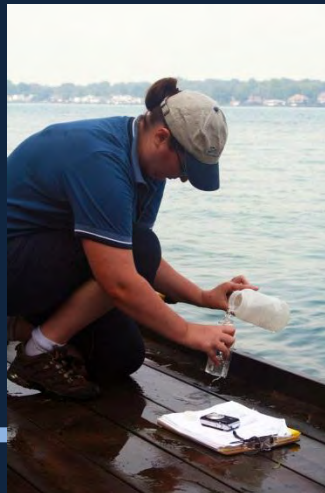


# Beach Closings

## Canadian Beaches

- Revised Delisting Criteria
  - Adapted Blue Flag Criteria
- Enhanced Beach Monitoring
  - Additional sites along river and on Walpole Island
- ↓ *E. coli* at Centennial Park following CSO improvements

Future Work  
DNA Identification?



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# Beach Closings



Chrysler Beach, Marysville, Michigan



## United States Beaches

- Three beaches
- Port Huron/Marysville
  - Decreased CSOs = ↓ *E. coli* levels
- Chrysler Beach
  - Increased monitoring
  - Stormwater source determination
  - Manage goose population
  - Landscape redevelopment

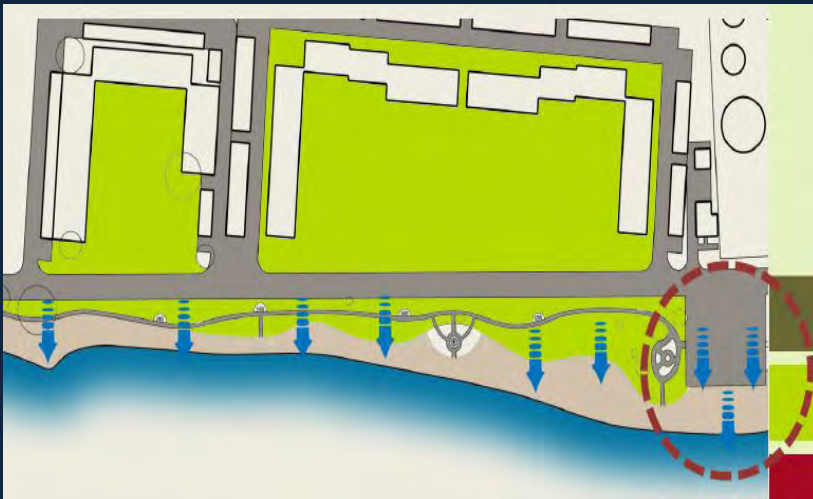


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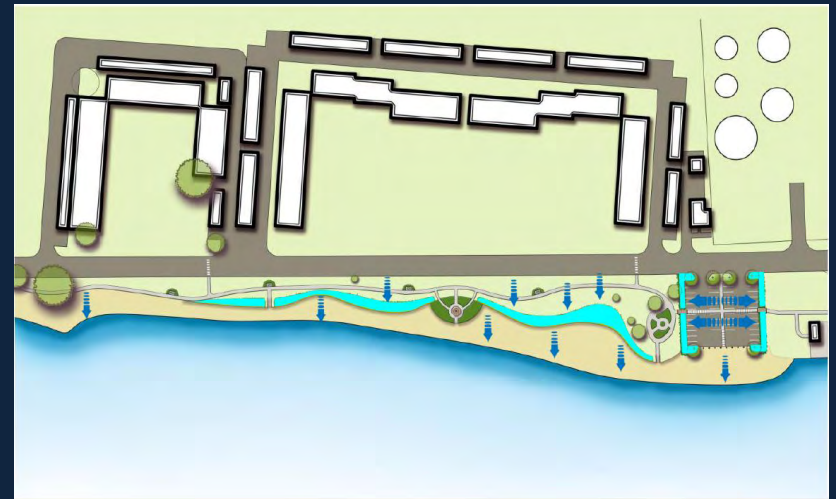
# Beach Closings

## Chrysler Beach

Current Landscape



Future Landscape



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# Beach Closings

## Parking Lot North of Chrysler Beach

Current Landscape



Future Landscape



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# Degradation of Aesthetics



## Canada

- Surveys – 2007-2010
  - Anglers
  - First Nations
- Monitoring
- Status Assessment in 2012-2013

United States  
Recommended Re-Designation to  
Unimpaired in 2011



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# Added Cost to Agriculture and Industry

## Cause of Impairment

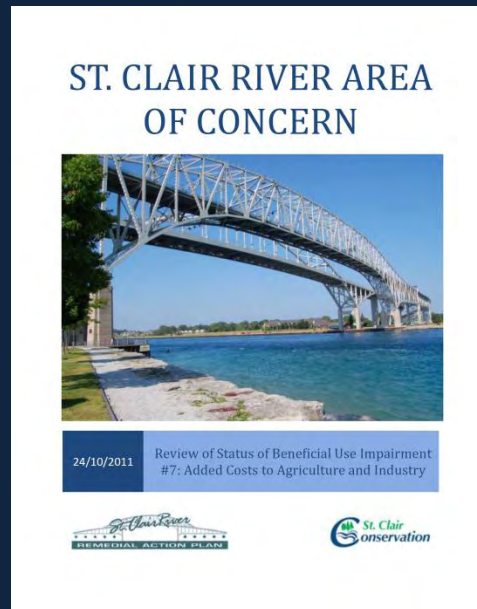
Commercial facility closure  
due to spills

Canada and U.S.  
Recommend NOT  
IMPAIRED

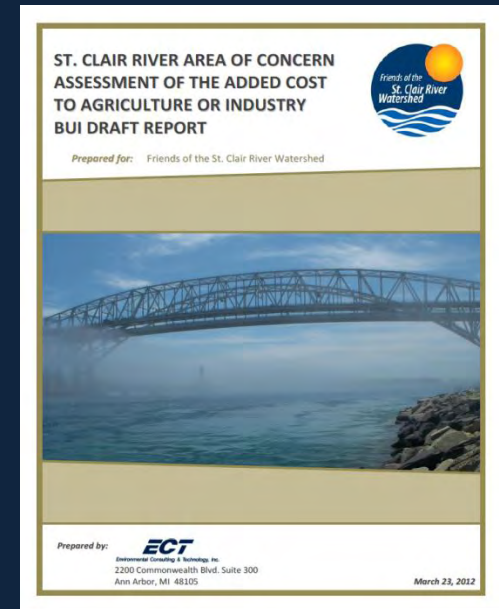
Re-designation  
Announcement Expected  
in 2012



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Canadian Final Report



United States Final Report

# Questions and Discussion

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Mike Moroney – Ontario Ministry of the Environment

Fred Kemp – City of Port Huron

Claude Lafrance – RAP Coordinator



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