

**ST. MARYS RIVER**



# The St. Marys River Remedial Action Plan:

## A Community Perspective

Binational Public Advisory Council for the St. Marys  
River Remedial Action Plan

Making A Great Lake Superior Conference

October 30, 2007

# St. Marys River

Binational Public Advisory Council



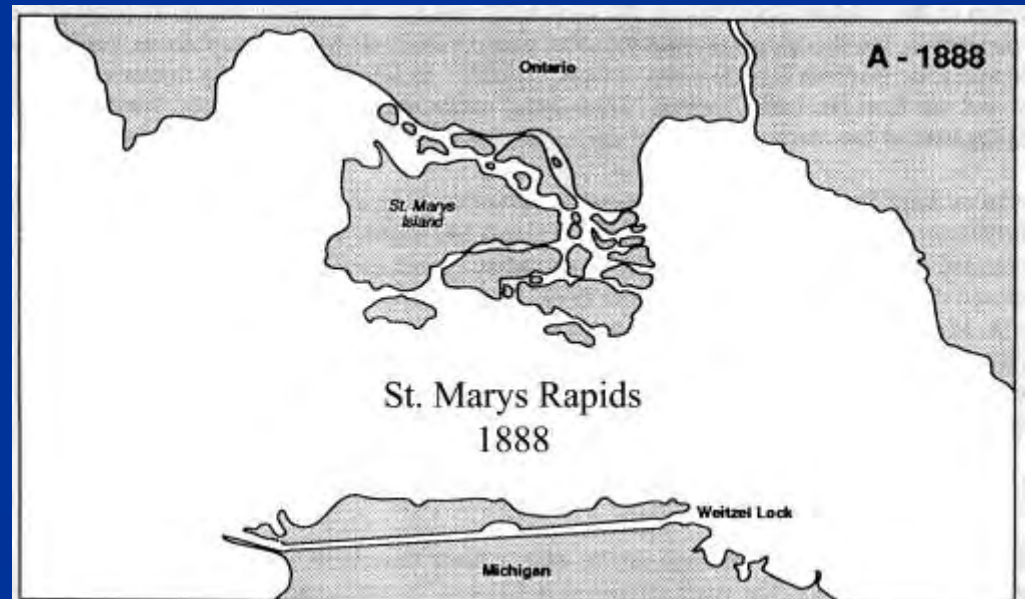
The St. Mary River BPAC is composed of Stakeholders and Citizens from Both Countries Including:

- The Cities of Sault, On and Michigan
- American Indian Tribes
- Public Health Agencies from MI and ON
- Private Industry
- Lake Superior State University
- Waterfront Property Owners
- Environmental Groups

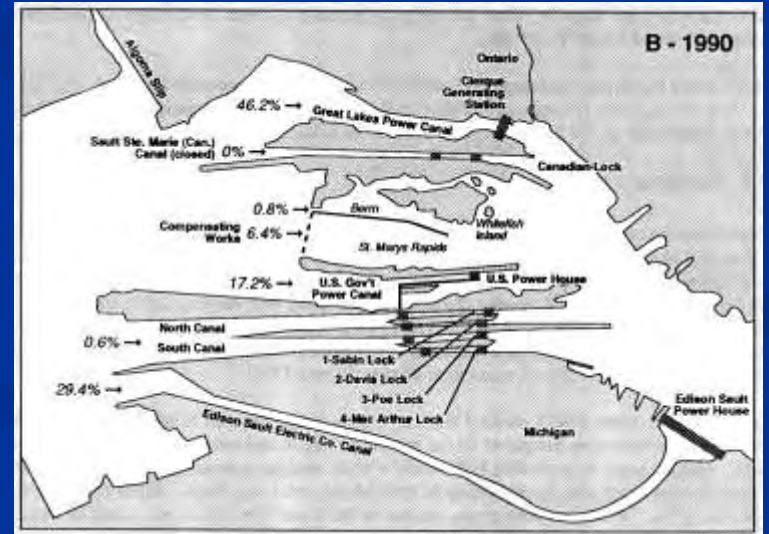


# Historically, the River Flowed Freely over the Rapids (*Bawaakting*)

- Supported a remarkable fishery making Bawaakting one of the most important gathering places for the Anishinabe



Today, 80% of the water from Lake Superior flows through two hydroelectric Power Plants while the rest is controlled by compensating gates



# St. Marys River Listed as AOC Due to 11 Beneficial Use Impairments (BUIs)



# Beneficial Use Impairments

- Restrictions on Fish Consumption



- Fish Tumours and Other Deformities



# Beneficial Use Impairments

- Degradation of Fish and Wildlife Populations



- Degradation of Benthos



# Beneficial Use Impairments

- Beach Closures

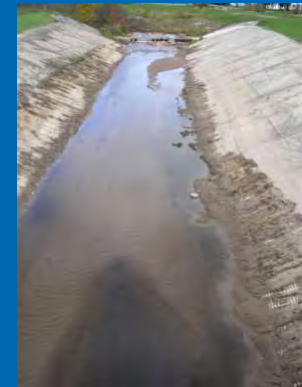


- Restrictions on Dredging Activities



# Beneficial Use Impairments

- Loss of Fish and Wildlife Habitat

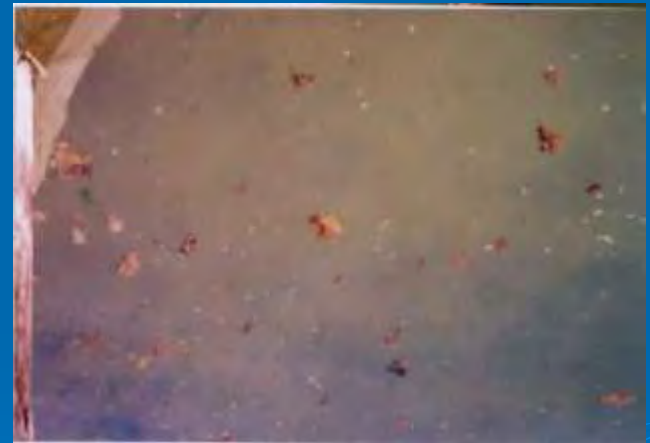


- Eutrophication and Undesirable Algae



# Beneficial Use Impairments

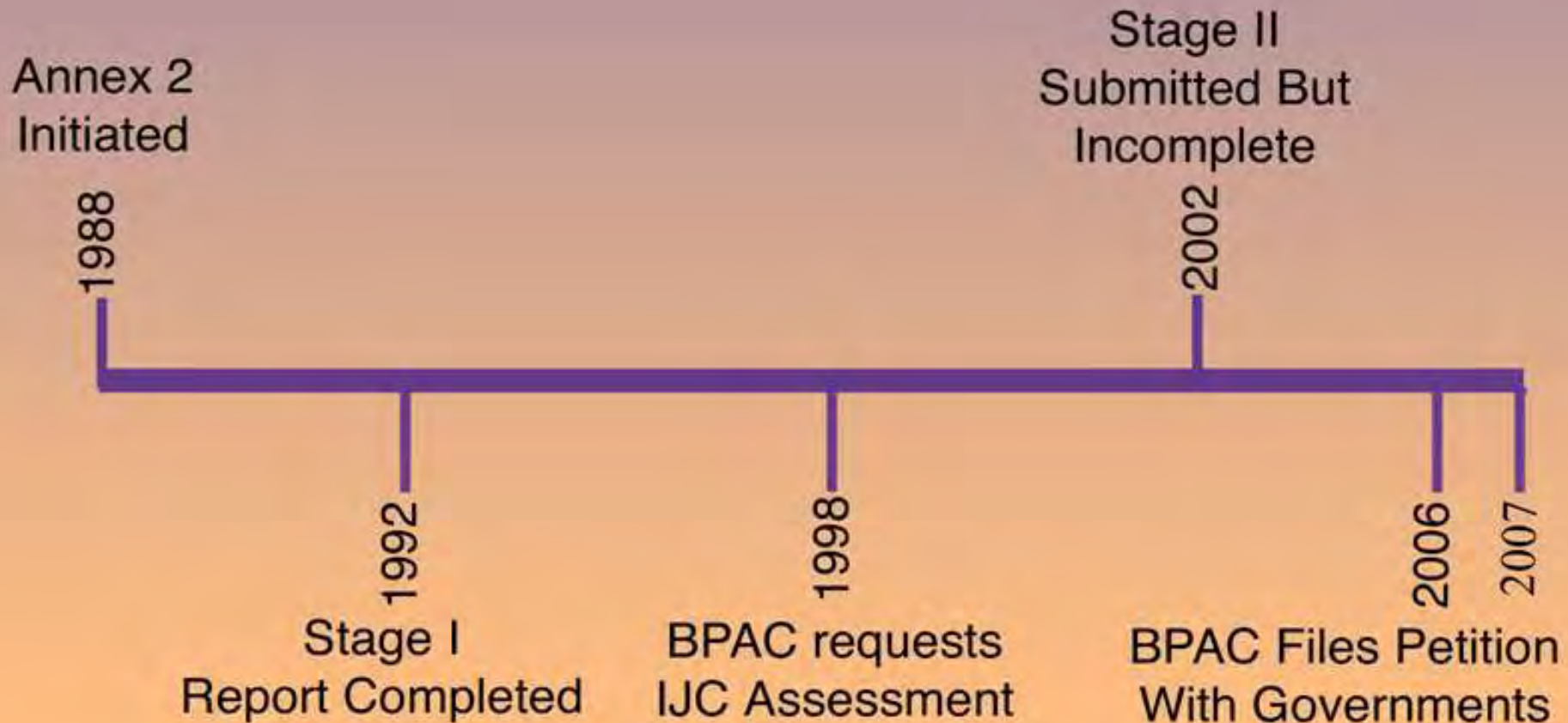
- Degradation of Aesthetics



# Timeline

19

~~18~~ Years Since RAP Process Started



# BPAC Achievements Since 1988

- Identification of Impairments and Conditions
- Development of Water Use Goals
- Identification of Remediation Needs and Options
- Assessment of Community Programs and Projects
  - Development of Delisting Criteria
- Establishment of BPAC Office at Lake Superior State University



# Annual Environmental Summit Since 2003 Has Been Successful in Engaging the Community





BPAC Has Participated in Many  
Community Activities Related  
To Improving Watershed  
Ecology

Through the BPAC Office  
Community Volunteers Have Participated  
In Stream Cleanups and Monitoring  
Projects



# Both Saults Have Invested in Improvements To Sanitary Sewer Systems

- City of Sault Ste. Marie, Michigan, is in process of separating sanitary sewers from storm sewers over ten year period.
- City of Sault Ste. Marie, Canada has constructed overflow tanks at problem areas in city, also routed sewage away from East End
- Sault, ON also constructing secondary treatment facilities at East End plant



# Pressure from BPAC Helped Lead to Upgrades in Sewage Treatment Plant



## Bacteria closes north shore of Sugar Island to swimmers

By SCOTT BRAND

The Evening News

**SUGAR ISLAND** — Residents and visitors to the north shore of Sugar Island should refrain from swimming in those waters due to the presence of high bacteria levels, according to an advisory issued by the Chippewa County Health Department.

"It appears there have been at least two episodes of elevated coliforms this spring," said Dr. James Terrian of the Chippewa County Health Department.

The latest readings have caused the health department to issue a "no-body contact" advisory for the areas of Sugar Island off of Westshore Drive, Williams Drive and Village Road.

Terrian explained *E. coli* bacteria is an indicator bacteria and tests can be done simply and inexpensively to determine its presence. While it is not always harmful, the presence of *E. coli* clearly indicates that conditions are right for other, more harmful, bacteria to thrive.

Most mammals and many birds carry the *E. coli* bacteria in their intestinal tracts, but Terrian expressed the belief that the levels appearing on Sugar Island's north shore are coming from the concentrated dumping of raw sewage and not as a result of animal scat.

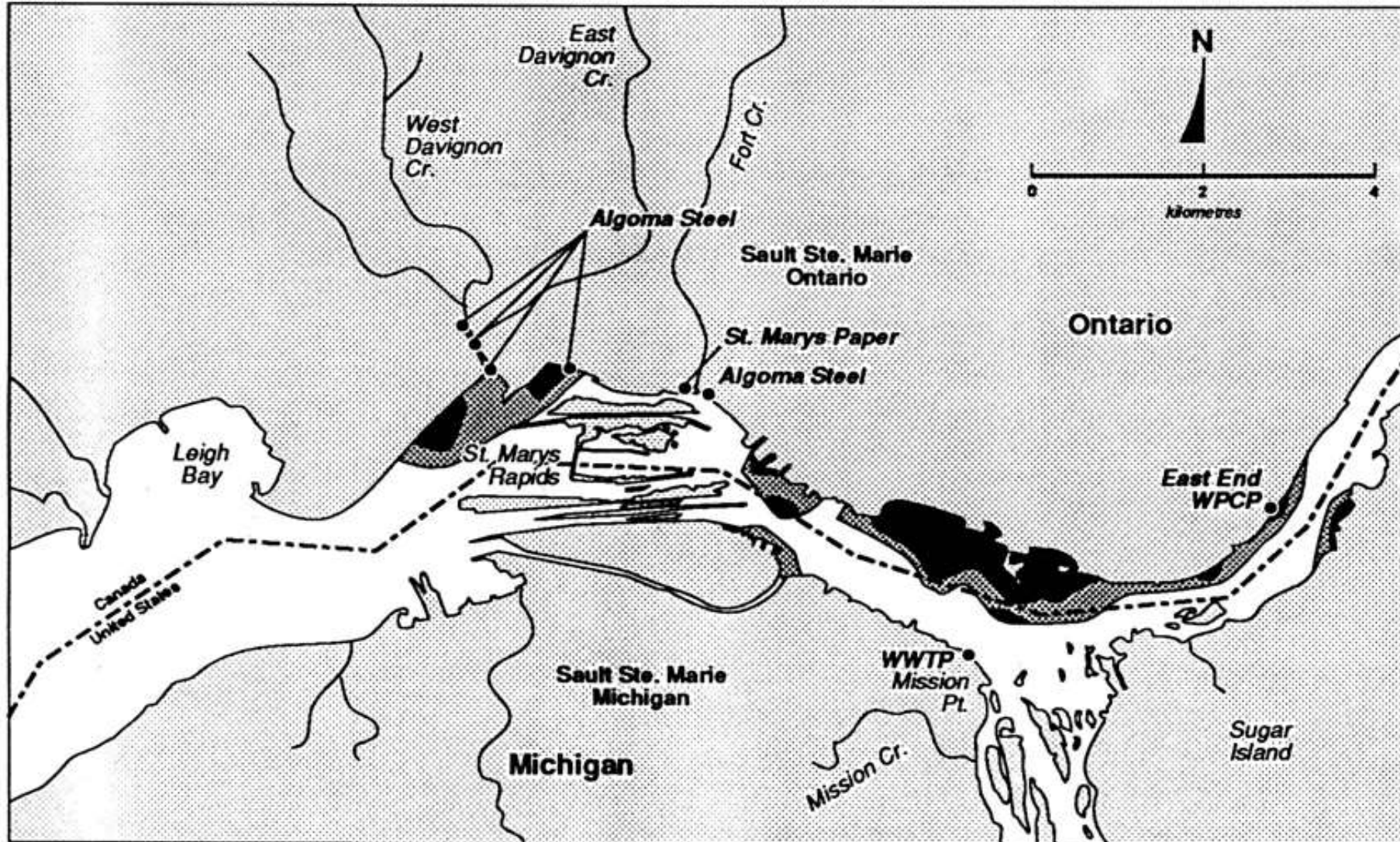
"Based on the pictures I've seen, that looks beyond what a family of beavers could cause in one evening," said Terrian dismissing the animal theory.

Terrian speculated that raw sewage is being pumped into the river from the Sault Ste. Marie, Ont. discharge, adding it is not far from the north shore of Sugar Island. If that is not the case, Terrian offered up another explanation.

"It would suggest the smuggling of sewage — or the illegal importation — and maybe we should get the Border Patrol involved," he said quickly adding he was only being fictitious.

Terrian also addressed the possible explanation that the periodic pollution of the north shore is not the result of recent sewage discharges, but comes from the river flushing out materials that were dumped decades ago. He expressed the belief that it might theoretically be possible for bacteria to live in the St. Marys River, before adding there is other evidence — particularly the presence of condoms and tampons — which suggests the discharge is more recent.

Bacteria can cause a wide range of ailments including cholera, diphtheria and dysentery. The health department will notify the public once the *E. coli* readings have fallen to acceptable levels and the "no-body contact" advisory is removed.



Zone (mg/kg)

Range (mg/kg)



&lt; 1,000

210 - 930



1,000 - 2,000

1,050 - 1,870 (moderate)



&gt; 2,000

2,050 - 17,630 (heavy)

• point source discharge location

# Other On-Going Issues Include Highly Degraded Urban Tributaries



# These Are the Same Streams as They Flow Through the City of Sault Ste. Marie

