
DETROIT RIVER OIL
SPILL RESPONSE
PAUL PARETE
Environment Canada
Ontario Region
Detroit River

Overview

- Detroit River Oil Spill Origin
- Shoreline Assessment
- Cleanup Methods & Criteria
- Other Response Facts
- Site Revisit
- Summary

CANUSLAK

- CCG/USCG International Joint Marine Contingency Plan for the Great Lakes
- Capability of Government and Industry agencies to provide a coordinated and integrated response to international pollution incidents, which threaten to affect their respective countries

CANUSLAK

- Exercise the plan every two years- desktop/in the field
- Included; CCG, USCG, other Fed bodies, Provincial & State Gov, Local Municipalities, Local FN groups, Industry, etc.

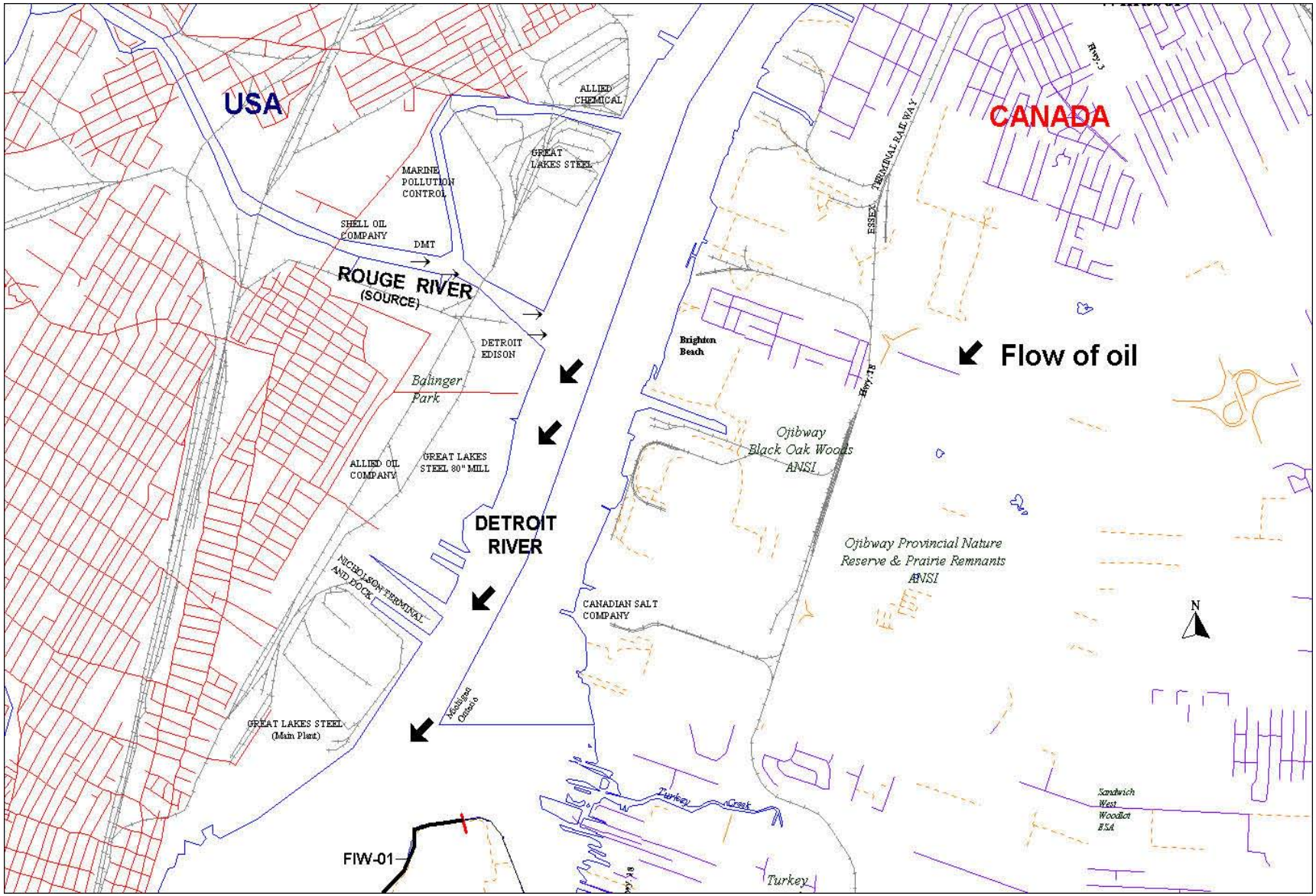
CANUSLAK 2002

exercise...

reality...


DETROIT RIVER OIL
SPILL RESPONSE
Sarnia
Detroit River

Incident Origin



Shoreline Assessment

Shoreline Survey

- Over 41 km of total shoreline oiled
- Aerial Observations
  - Video Documentation
- Water Craft Observations
- Walked the Shoreline
  - Photo Documentation

Shoreline Assessment

Shoreline Types

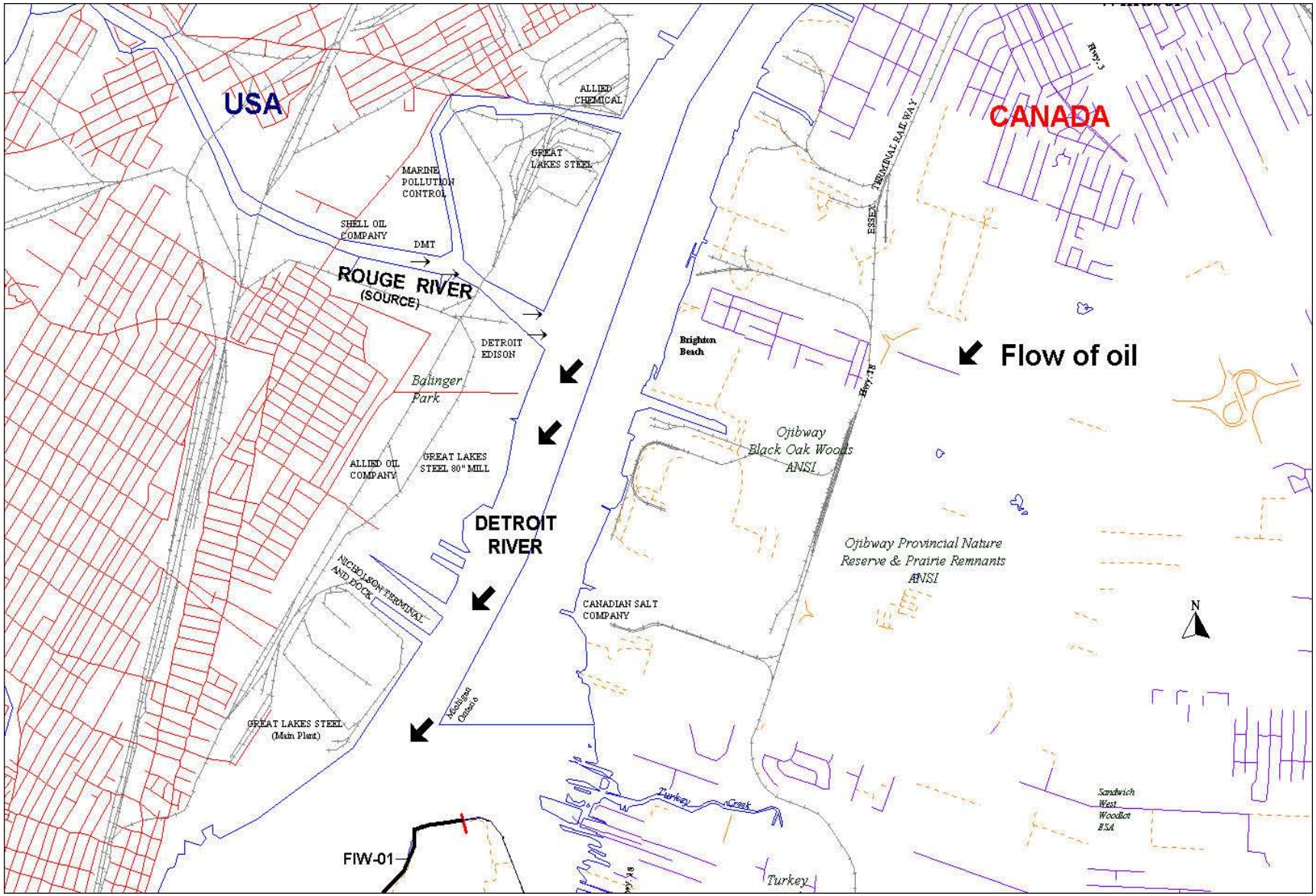
- Rip Rap
- Pebble
- Cobble
- Boulder
- Sand
- Fringing Wetland
- Mixed Shoreline
- Shoreline Uses

Shoreline Assessment

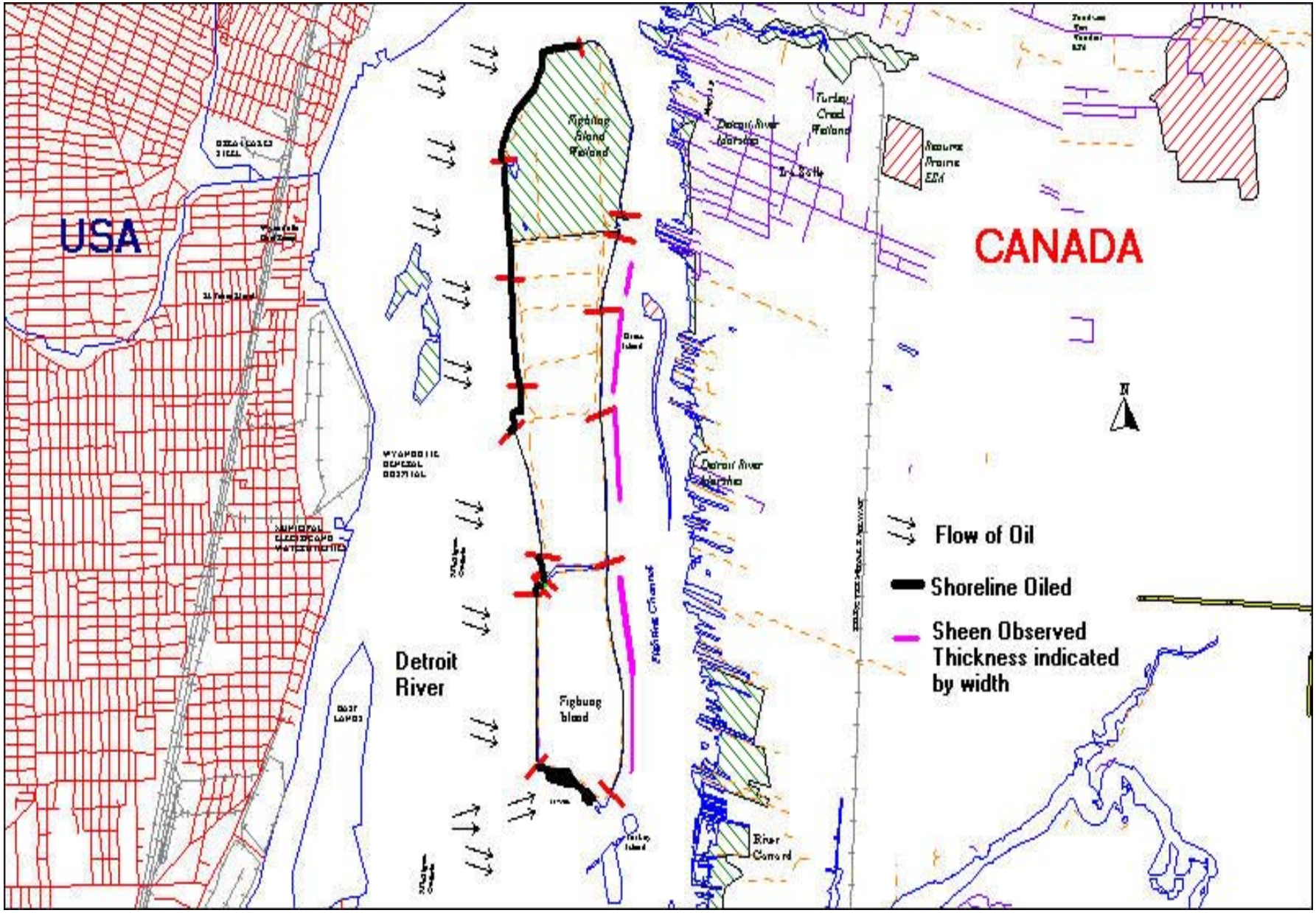
Oiling Conditions

- Approx 18 km of Canadian Shore Oiled, Est 10,000L(2600gal)
- 0.5 to 1 mm Thick
- 50 - 75mm from Waterline
- Slightly Weathered
- Pooled Oil (75mm)
- Oiled Reeds (152mm)
- Stained Rocks
- Sheen

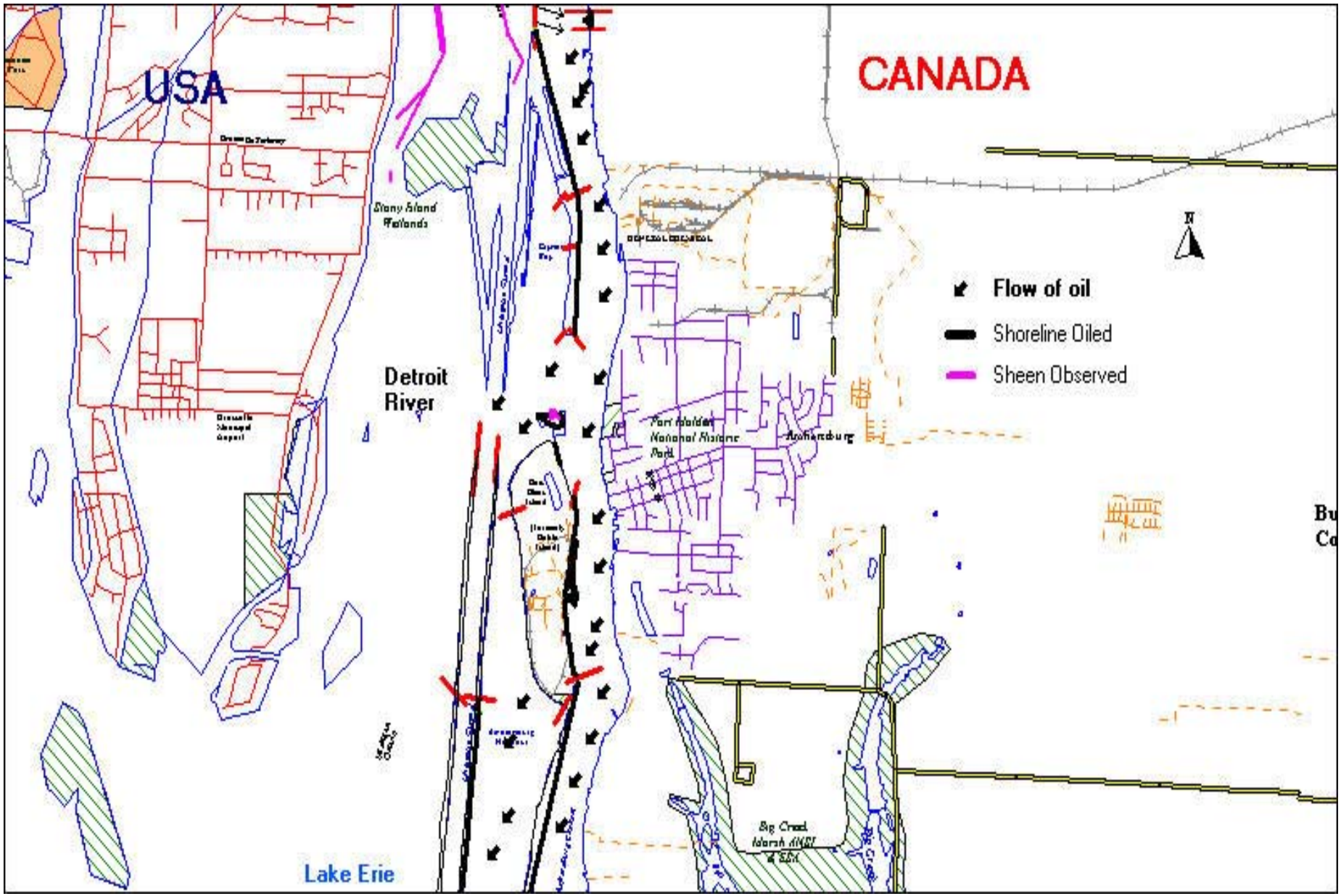
Shoreline Assessment



Shoreline Assessment



Shoreline Assessment



Cleanup Methods & Criteria

Methods

- Different Methods According to Shoreline Type
- Manual Removal of Oiled Debris
- Low Pressure Wash

Cleanup Methods & Criteria

Methods

- Flooding (deluge)
- Contained High Pressure Wash
- Cutting of Vegetation/Reeds
- Natural Recovery

Cleanup Methods & Criteria

Criteria

- Different Criteria According to Land Use
- Was Any Oil Product Recoverable
- Was There Potential for Oil to Remobilize

Cleanup Methods & Criteria

Criteria

- Any Pooled Oil Visible in Water or on Shoreline
- Does Oil Become Visible When Sediments are Mixed/Stirred
- Keeping in Mind More Harm Than Good May Occur in Some Areas

Other Response Facts

- US source, CANUSLAK invoked by USCG
- Total volume spilled was approx 1.2 mil litres(326, 000 gal)
- US investigating possible sources (still unknown)

Other Response Facts

- Stakeholders Included, Canadian Coast Guard, Environment Canada, MOE/MNR/EMO, Conservation Authority, USCG(liason officer)
- Four Private Shorelines Oiled Cleaned

Other Response Facts

- No Active Bird Migration or Fish Spawning Common to the Area (nesting in progress)
- Five Oiled Birds Were Captured/Cleaned, Four Survived & Released
- No Reports of Any Fish Kill

Site Revisit - 1

- area Revisited June 4/02 - June 6/02
- Video & Photo Documentation
- No Visible impact on shoreline
- New Vegetation Growth
- Wildlife Vibrant on all Shorelines
- Will be Revisiting in Spring of 2003

Site Revisit - 2

- area Revisited April 2003
- Video & Photo Documentation
- No Visible impact on shoreline
- New Vegetation Growth
- Wildlife Vibrant on all Shorelines
- Will not be Revisiting

Summary

- Importance of Shoreline Assessment/Observations to Determine Cleanup Strategy
- Issue Surrounding “How Clean is Clean” is Subject to Specific Circumstance
- Natural Recovery is Going to Occur on Most Areas Where Significant Wave Action is Present (Shipping Channel)

Summary

- Importance of cross border coordinated response
- exercising pollution response plans to ensure efficiency
- Importance of good working relationships with all agencies involved on both sides of the border

Questions?