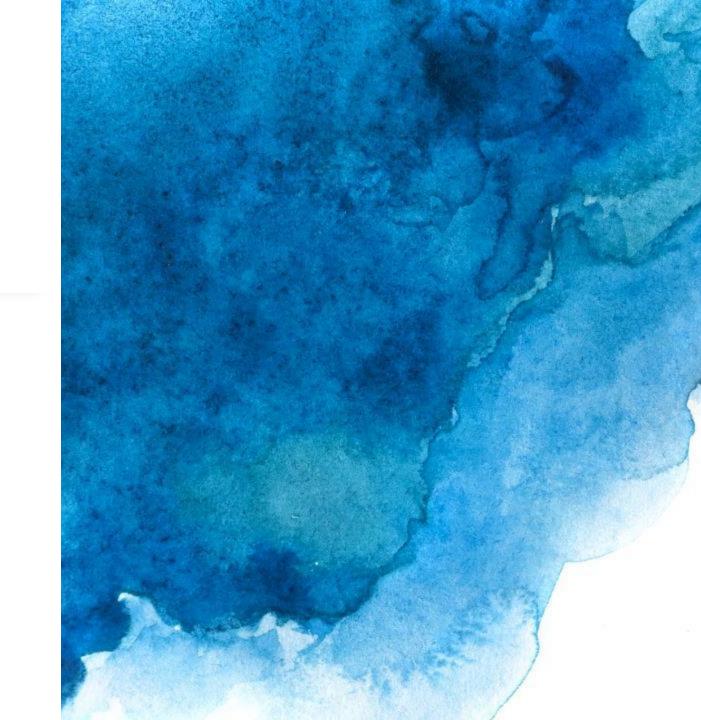
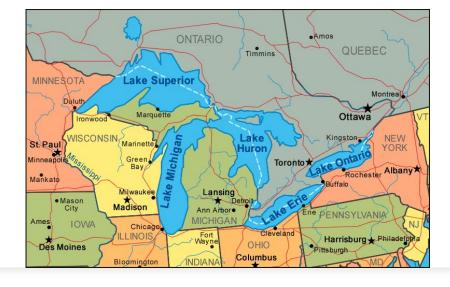


International Collaboration

NOAA and the Port of Windsor



International Influence / Partners



With exception of Lake Michigan the Great Lakes are a shared waterway and as such a shared resource

US and CANADA share the responsibility for the environmental protection of this resource

Dredge planning is a significant collaboration involving numerous agencies such as NOAA, the US Army Corps of Engineers, US Coast Guard, Canada Coast Guard, Environment Canada and Transport Canada.

Dredge dump areas in Canada are full and creates delays in necessary dredging

Monitoring of water quality related to pollution response

Joint protection of the waters, shorelines and habitats



Economic Importance of the Great Lakes

The Great Lakes contain about 21% of the world's fresh surface water and 84% of the US fresh surface water

The Saint Lawrence Seaway jointly managed by the United States and Canada connected the Great Lakes to the Atlantic Ocean and thereby the world.

The Great Lakes are their own economy facilitating billions of trade both domestically and internationally.

Almost 65% of both nations' grain, wheat and seed products move internationally out of the Great Lakes.

Commerce transiting the binational St. Lawrence Seaway waterway and lock system supported 356,858 U.S. and Canadian jobs and \$50.9 billion/C\$66.1 billion in economic activity





Economic Impact of Great Lakes St. Lawrence Seaway System

The resulting deep-draft inland navigation system is the longest in the world, extending 3,700 kilometers (2,300 miles) into the North American heartland.

This bi-national trade corridor complements the region's rail and highway network and offers customers a cost effective, safe, reliable, and environmentally smart means of moving raw materials, agricultural commodities, and manufactured products to and from domestic and global markets

Three distinct vessel-operator communities serve the waterway.

These include U.S. domestic carriers ("U.S. Lakers") transporting cargo between ports on the Great Lakes, Canadian domestic carriers ("Canadian Lakers") operating between ports on the Great Lakes and the St. Lawrence River and Canadian coastal waters, and oceangoing vessel operators ("Salties"), which operate between the region's ports and overseas destinations.

These carriers serve more than 110 system ports located in each of the eight Great Lakes states and the provinces of Ontario and Quebec

Additional Impacts



The Great Lakes commercial, recreational, and tribal fisheries are collectively valued at more than \$7 billion annually and support more than 75,000 jobs.

Significant is the need to protect the fish stocks, habitats, water quality, and shorelines.

Data related to the wakes of both commercial AND recreational boating is needed to assist in the responsible development of shorelines including the planting of riparian vegetation and engineered fish habitats.

Research into options for ballast water treatment to prevent the spread of invasive species continues as a significant need for the Great Lakes

Bi-national water quality agreements define the standards and there is a need for ongoing data.

Port of Windsor / Detroit River



- 1997, the liberal government conducted a review of the port system in Canada to determine if the Federal government could fully divest itself from the management of the port systems.
- Canadian government "divested" itself from all but 17 commercial ports
- Windsor Port Authority was retained as a federal port due to its importance as the center of bi-national trade.
- Port Windsor is the 10th largest port in Canada with over 5 million tons of cargo carried by over 800 vessels
- Approximately 6000 ships transit annually past the Port of Detroit/ Port of Windsor along the Detroit
 River.
- Critical to both nations economy that this corridor remains open for safe and secure vessel traffic
- Future economy is short sea shipping supported containerized cargo



Emergency Management Resources

NOAA data is vital in marine domain emergency management

Search and rescue operations review several factors such as wind speed and direction, current flow and water temperature.

Water temperature is used to determine the amount of time a casualty would have in the water before hypothermia takes over the body.

In the winter months, ice flow thickness and direction is also used to track cases

Every case has the potential to involve an international command and control structure



Critical Incidents M/V Tecumseh – Engine Room Fire









Critical Incidents

M/V Harvest Spirit loses engine runs aground Livingston Channel

M/V Mark Barker loses propulsion runs aground Belle Isle



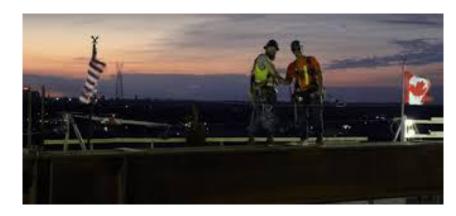


Gordie Howe International Bridge

- Longest cable stay bridge in North America at 1.5 miles long
- Cost \$6.4 B Canadian Government
- 84 construction months
- 6 traffic lanes (3 each way) and 1 multi use path
- Piers 722 ft high with 150 span between
- Renaissance Center is 727ft high
- US Port of Entry 167 acres/ CDN POE 130 acres









Partners



Canada and the United States enjoy a unique relationship.

The Canada-U.S. partnership is forged by shared geography, similar values, common interests, strong personal connections and powerful, multi-layered economic ties.

Our two countries share a deep and longstanding defense and national security partnership, providing both countries with greater security than could be achieved individually.

Trade and investment between Canada and the U.S. supports millions of jobs and helps ensure the secure and flow of goods and people across the border that is vital to both countries' economic competitiveness and prosperity.