

Transport Canada Pilot Projects in Cambridge Bay

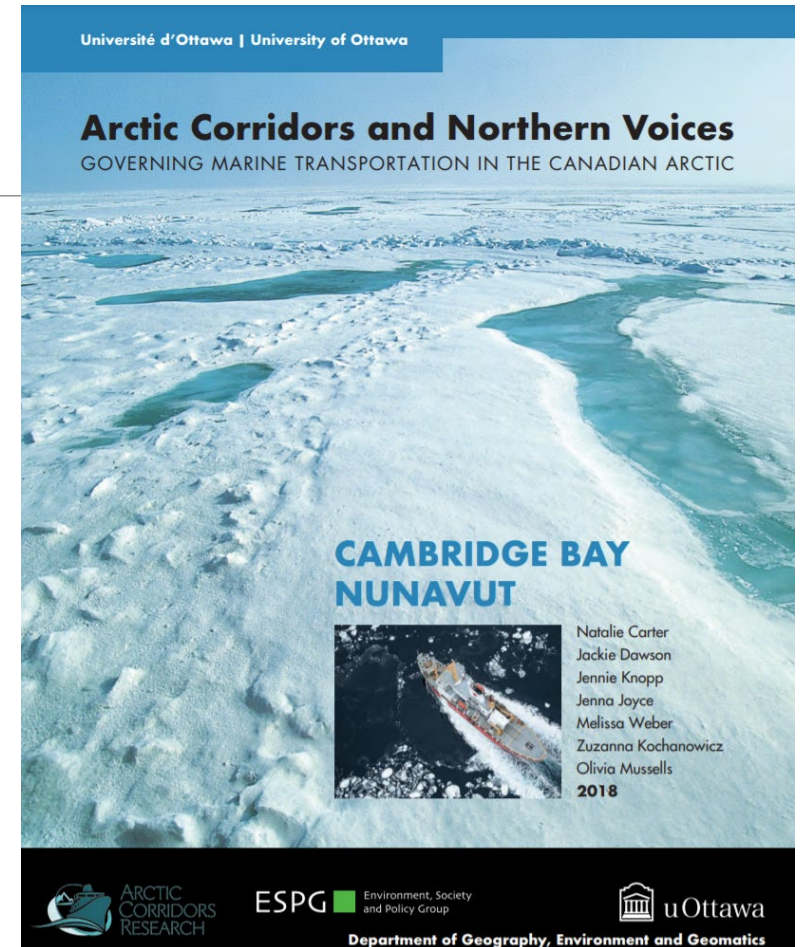
SEPTEMBER 2021

Shipping concerns

Cambridge Bay is on the Northwest Passage and has seen growing ship traffic in recent years.

The community is concerned about impacts from shipping:

- Icebreaking
- Impacts of noise on marine mammals and fish
- Impacts from potential oil spills on the environment



Transport Canada Oceans Protection Plan Pilot Projects in the Arctic

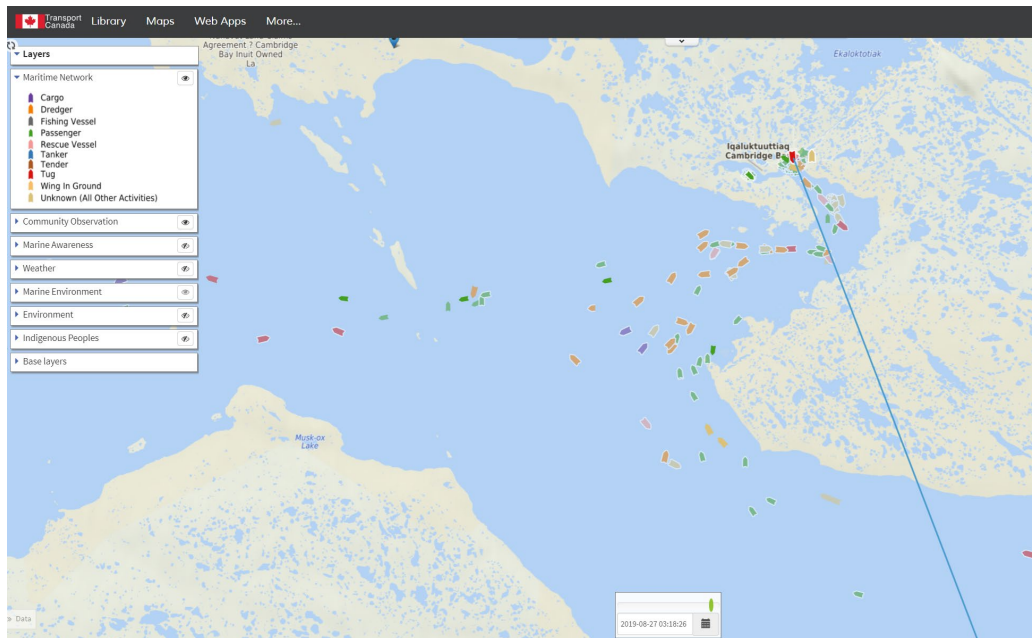
Enhanced Maritime Situational
Awareness (EMSA)

Proactive Vessel Management (PVM)

Cumulative Effects of Marine Shipping
(CEMS)



Enhanced Maritime situational awareness (EMSA)



EMSA is an online mapping program that provides access to near real-time Automatic Identification System (AIS) information

- AIS systems are carried by vessels so that they can be tracked

EMSA is being used for:

- Monitoring ship traffic
- Testing AIS devices and InReach devices to improve community safety
- Mapping travel routes and safe harbours

Screen Shot from EMSA system – Monthly Traffic September 2019

Proactive vessel management (PVM)

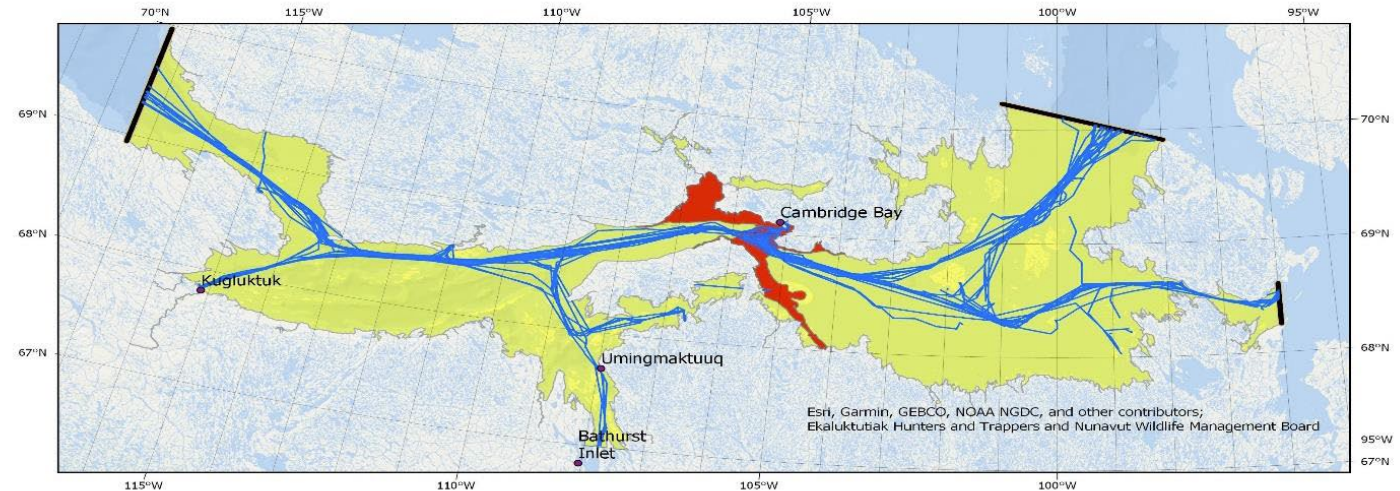
Created Victoria Island Waterways Safety Committee

Meets quarterly and includes representatives from the community and the federal government

Hosted Caribou Workshop Fall 2019

Published Notice to Mariners in December 2019

7C Vessels Intending to Navigate in Kitikmeot Region in Canada's Northern Waters



- Inuit Community
- Boundary Lines
- 2018 Track Lines
- Area of Intensive Winter Travel by Cambridge Bay Community Members
- Area of Winter Caribou Crossing

Data on this map reflects information from Automatic Information System (AIS) reports for vessels, as received both from satellite reports (space-based AIS) and radio tower reports (terrestrial AIS).

Voluntary Avoidance

Voluntary measures apply to any vessel transiting within the protection zone outlined in this notice (see yellow and red areas in map above) and should only be taken when they will not jeopardize the safety of navigation. These include:

1. Slowdown to minimum safe speed from December 1st to June 30th (Red Area);
2. Slowdown to minimum safe speed if caribou or people are encountered;
3. Use local information to avoid passing in front of caribou or people travelling on sea ice;
4. Avoid opening multiple leads.

Cumulative Effects of Marine Shipping

The purpose of Transport Canada's Cumulative Effects of Marine Shipping Initiative is to create a framework for studying the multiple effects of shipping/

Fieldwork Summer 2021

- Impacts of Ship Noise
 - Deploying hydrophones to measure acoustic impacts of ships
- Impacts of Ship Wake
 - Working with CHARS to install Trail Cameras to study shoreline erosion
- Oil Spill Risk Assessment
 - VIWSC identified high priority areas
 - Using drone to collect aerial images of the shorelines in high priority areas to document baseline conditions to measure against in case of an oil spill

Conclusions

Participating in these pilot projects with Transport Canada has:

- Improved communication between the community, Transport Canada and the Canadian Coast Guard
- Increased access to information
 - Access to ship traffic information that can be shared with the community
 - Summer 2021 fieldwork
- Allowed for investment in community safety equipment
- Supported monitoring and protecting local waters

