SHIPPING REGULATIONS IN NUNAVUT:

A GUIDEBOOK



ABOUT THE PROJECT

This guidebook shares just a few of the many regulations, policies and programs governing commercial vessels operating in Nunavut waters and adjacent marine areas. Understanding the legal framework for commercial vessels will support ongoing dialogue on the regulatory gaps and risks impacting communities and local coastal activities. Priorities for shipping legislation and coastal co-management must be reflective of and responsive to community concerns and livelihoods and the long-term health of marine species and their habitats.

The five posters highlight issues that emerged as recurrent themes or information requests during Coastal Restoration Nunavut (CRN) engagement sessions. Prior to publication, the research team held a teleconference with Hunters and Trappers Association (HTA) members from across the territory to review the relevance, usability and utility of the posters and guidebook. In addition to the posters enclosed, participants suggested infographics on the impacts of noise pollution and anchorage, and ways other jurisdictions have identified and addressed those impacts through legislation, recommendations or significant area designations.

We would like to thank Clear Seas Centre for Responsible Marine Shipping for funding support and guidance during the delivery and development of our knowledge mobilization activities and materials. CRN is funded by Fisheries and Oceans Canada and delivered by Dalhousie University in partnership with the Government of Nunavut. We would especially like to thank the many Inuit knowledge holders and artists who provided their time and expertise to the project.

ABOUT THE ARTISTS

Elaine Sulak is a youth artist from Arviat, Nunavut. Now 22, they started practicing art in middle school. When asked why marine areas are important to them, Elaine replied, "Coastal waters are important to us because it's our home; home is where we belong." Elaine designed the artwork on pages 12 to 15.

Instagram: @nurrahaq01

Aija Komangapik is a visual artist who works primarily in digital media but also loves to paint and draw with anything she has on hand. Komangapik was born and raised in Iqaluit, Nunavut until she moved to Gaspé, Quebec where she attended Cégep. Komangapik is currently apprenticing under her father as a stone sculptor. Komangapik is the winner of the 2019 Indigenous arts and stories award and has done illustration and graphic design freelance work since 2018. Examples include the 2020 Canadian Indigenous History Month emoji for Twitter and the illustrations for the 2019 book Country Food published by Inhabit Media. Aija designed the cover art and the artwork on page 25.

Instagram: @aija_komangapik

The cover art depicts the story of Sedna in Inuit mythology. She is the goddess of the sea and all the marine mammals contained within it. Harvesters depend on her goodwill to provide bounty from the ocean depths.

FOREWORD

The open-water season is an exciting time in Nunavut, welcoming the seaward migration of arctic char and many summering marine mammals, like beluga, bowhead and narwhal. Walrus are often found basking along islands and shallow coastlines under the midnight sun, while ringed seal forage throughout the open water. For many Nunavummiut, the open-water season means long days but short months spent fishing, harvesting, clam-digging, berry-picking and boating with family and friends.

An ice-free ocean also means increased marine traffic, some expected and others not. Sealift vessels bring much-needed supplies to Nunavut communities, all 25 of which are only accessible by air (or snowmobile) during the Arctic winter. Cruise ships, general cargo, tanker ships, sailboats and pleasure craft are seen in and around the territory as early as June and as late as November. Commercial inshore and offshore fishing vessels, as well as government vessels like ice-breakers and coast guard ships, are also familiar fixtures north of 60. These ships "support community re-supply (food, fuel, and goods), construction (community-based and mines), local economic activities (tourism, mining, fishing), and cultural livelihoods (traditional activities and [small-scale] harvesting)."

As declining sea ice extends the open-water season and more ships steer northward, many communities are worried about the impacts on their pristine, productive waterways. Residents want more input on shipping activities and regulations in the Nunavut Settlement Area and adjacent marine boundary. This guidebook provides an overview of the existing governance framework for polar shipping and shares some of the ways various vessels are governed in the Canadian Arctic.

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1. OIL SPILL RESPONSE

The Canadian Coast Guard is the lead agency responsible for oil spill response and preparedness in the Arctic. Emergency planning and risk management, however, requires coordination between municipal (Hamlet), territorial and federal representatives.²

In the interim, communities may:

- Advocate for a Shipboard Arctic Spill Response Plan aboard all commercial vessels navigating the region
- Map and/or document available response options and vessels
- Develop local Oil Pollution Emergency Plans

Currently, the primary oil products carried as cargo in the Arctic are marine diesel, gasoline and jet fuel, all of which are non-persistent oils (non-persistent oils often evaporate within one to two days and many do not leave a residue after evaporation). Crude oil is not transported as cargo in the Arctic.

Because there are no operational deep-water ports in Nunavut communities to date, fuel supplies are transferred from tankers to land-based storage tanks via floating fuel hoses or barges. Barges are then beached during the transfer of fuel to on-land storage tanks and tank farms.

REPORTING A MARINE SPILL (FEDERAL)

Central and Arctic Region

Toll-free: 1-800-265-0237 (24 hours/day)

In all regions, marine pollution incidents may also be reported by contacting a Marine Communication and Traffic Services (MCTS) office on VHF channel 16. For areas not covered by VHF channel 16, such as the high arctic, incidents may be reported through MF (medium frequency) and HF (high frequency) communications.

REPORTING A SHORELINE SPILL (TERRITORIAL)

If you encounter evidence of a fuel or other contaminant spill, report it to the 24-hour spill line.

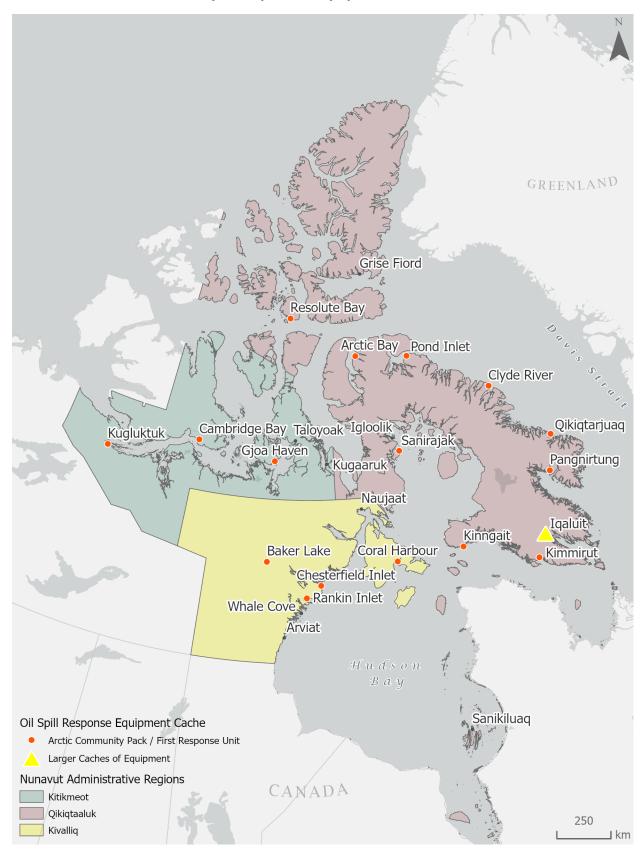
If you are responsible for a fuel or contaminant spill over 100L, or if you do not know how much has spilled, you are legally required to report it.³

To report a spill, call 867-920-8130, 24 hours/day. You may also complete the form available on page 24 of this guidebook (Appendix 1) or at https://www.gov.nu.ca/environment/documents/spill-response.

Fax the completed form to 867-873-6924 or e-mail spills@gov.nu.ca.

In addition, you may contact the Conservation Officer in your community for assistance.

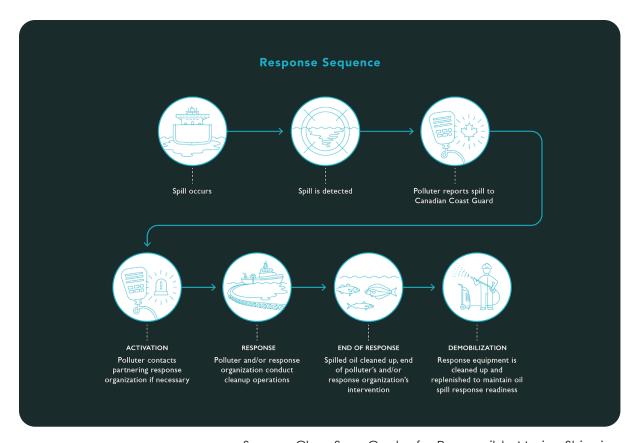
Locations of land-based spill response equipment



In Canada, most ship-source oil spills are from fuel oil, not cargo oil.⁴ While in transit, vessels may burn heavy fuel oil, intermediate fuel oil, marine diesel and/or marine gasoline.⁵

BARRIERS TO A SUCCESSFUL EMERGENCY RESPONSE

- Communication
- Arctic environment / weather
- Inadequate equipment / Maintenance
- Access / transport to spill site
- Storage and disposal



Source: Clear Seas Centre for Responsible Marine Shipping

OPPORTUNITIES FOR A SUCCESSFUL EMERGENCY RESPONSE

In 2021, eight Canadian Coast Guard (CCG) vessels patrolled the Arctic⁷. All CCG icebreakers working in Nunavut and adjacent waters are equipped and ready to deal with emergencies, including marine pollution incidents.

A successful emergency response will rely on effective communication and site accessibility. With regional waters spanning the Arctic Archipelago, Hudson Bay, James Bay and Ungava Bay, federal response times may be inadequate. To address this reality, the Canadian Coast Guard is bolstering the local capacity to respond to emergencies and pollution incidents across the territory.

A Coast Guard Auxiliary is made up of local volunteers who use their own vessels to respond to open-water emergencies and marine search and rescue efforts. They receive training and equipment from the CCG. An inshore rescue boat station is equipped with a seven or eight metre fast rescue craft capable of operating at speeds of over 24 knots.

CCG AUXILIARY PROGRAM

- Kugluktuk, NU
- Cambridge Bay, NU
- Gjoa Haven, NU
- Arviat, NU
- Rankin Inlet, NU
- Sanirajak, NU
- Igloolik, NU
- Naujaat, NU
- Pond Inlet, NU
- Clyde River, NU
- Pangnirtung, NU

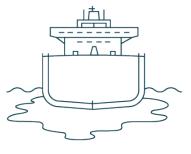
INSHORE RESCUE BOAT STATION

Rankin Inlet, NU

COMMUNITY BOAT PROGRAM

- Kugluktuk, NU
- Cambridge Bay, NU
- Gjoa Haven, NU
- Arviat, NU
- Rankin Inlet, NU
- Sanirajak, NU
- Igloolik, NU
- Naujaat, NU
- Pond Inlet, NU
- Clyde River, NU





Graphic: Clear Seas





2. SEARCH AND RESCUE

The Canadian Coast Guard (CCG) is the lead agency responsible for marine search and rescue (SAR) and maritime incident response, with the support of the Department of National Defense (DND) and the volunteers of the Coast Guard Auxiliary.¹⁰

The territory's Marine Communications and Traffic Services (MCTS) office, which is based in Iqaluit, "monitors all Arctic shipping, receives all marine communications (including distress calls), and must inform all responsible parties in the event of a marine disaster."

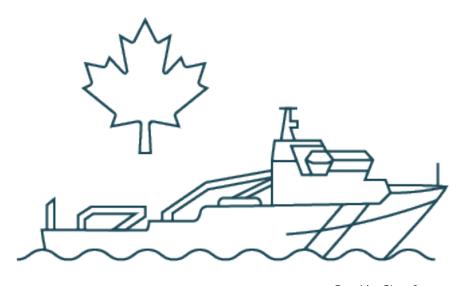
When a distress incident occurs, the MCTS then follows a very precise communications plan.

When asked who in the respective community MCTS would contact, MCTS identified the RCMP, the Hamlet (senior administrative officer and/or mayor), and the Hunters and Trappers Association (HTA).

If a community is notified of a distress incident prior to MCTS, the Hamlet and/or HTA is responsible for contacting the appropriate authorities.

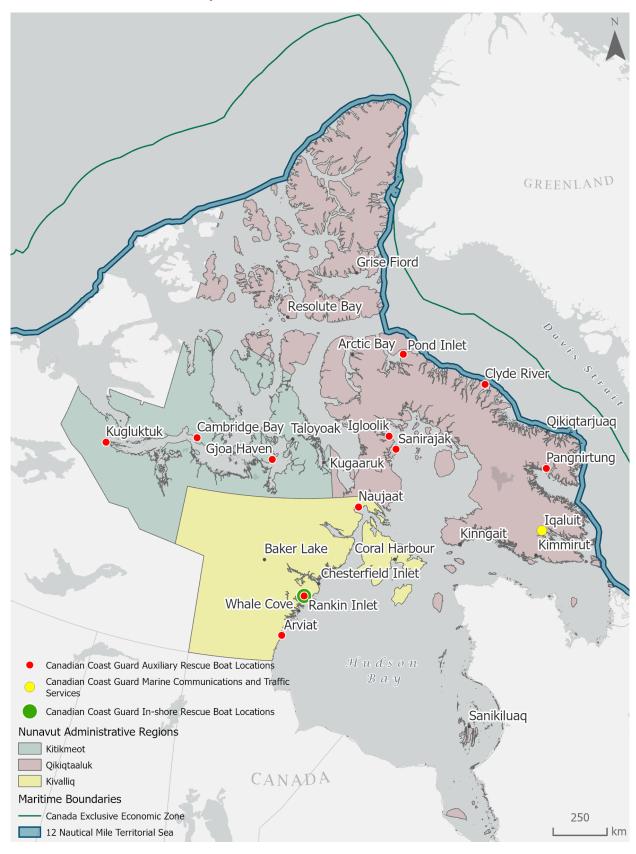
IN THE INTERIM, COMMUNITIES MAY:

- Advocate for an in increased number of Canadian Coast Guard Auxiliary units in Nunavut
- Mandate annual SAR training for Hamlet staff and HTA members



Graphic: Clear Seas

Locations of CCG Auxiliary Coast Guard Units



3. VESSEL ANCHORAGE

An anchorage is a suitable area in which to anchor a vessel. The right to anchor a vessel is part of the common law right of navigation.¹²

Vessels are free to anchor temporarily wherever it is safe and for a reasonable period of time in any appropriate location, unless specifically prohibited by statute or regulation.¹³ The limits of "temporarily" and "reasonable" are not defined or mandated by Transport Canada.

The Canada Shipping Act, 2001 and its regulations govern vessels at anchor. Transport Canada enforces these regulations.

THE CAPTAIN OF THE VESSEL IS RESPONSIBLE FOR:

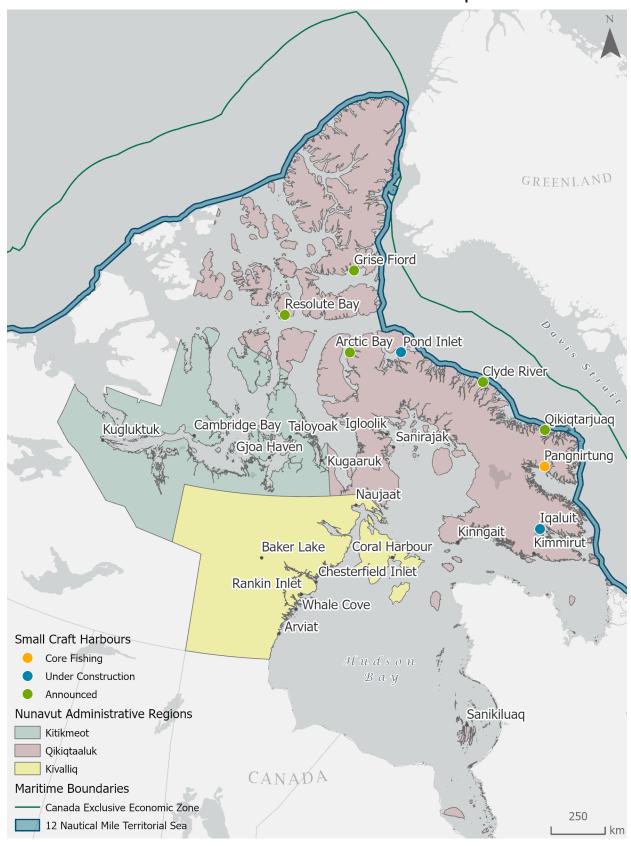
- selecting a safe anchorage
- ensuring the vessel's safety at all times

Within a port boundary, Canadian Port Authorities direct vessels where to anchor, and for how long, within their jurisdictions. Currently, no Port Authorities exist in Nunavut. As such, Canada has no formal process to identify anchorages and guide the behaviour of vessels anchored outside port boundaries in the territory.

IN THE INTERIM, COMMUNITIES MAY:

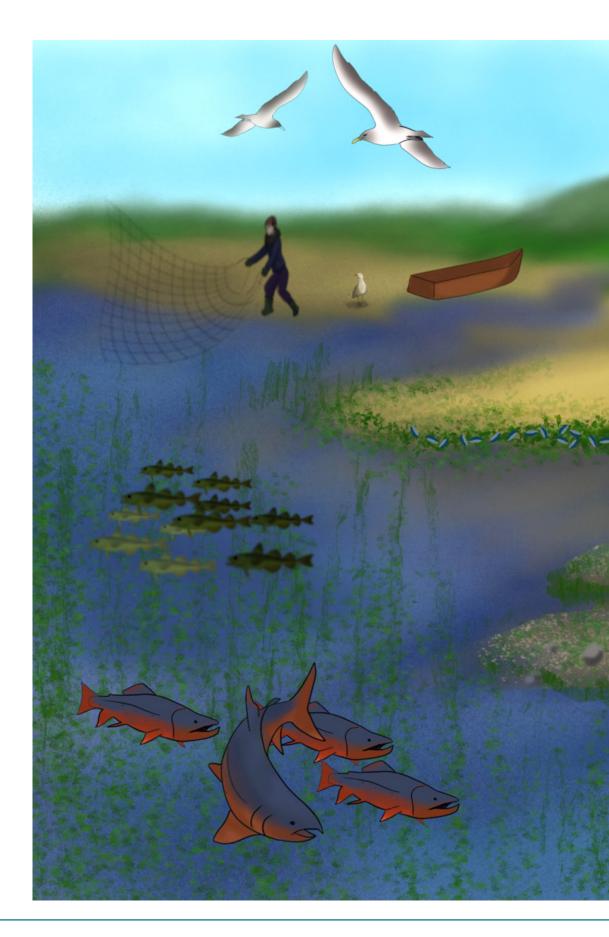
- develop a process to identify recommended anchorage sites
- analyze and respond to environmental, economic and cultural concerns and impacts from non-local anchorage
- draft a manual of best practices for ships at anchor
- propose oversight/management options for non-local anchorage
- Identify which conditions deem anchorage unsafe and/or temporary

Locations of active or announced small craft harbours and ports











Artist: Elaine Sulak

4. VESSEL DISCHARGES

SEWAGE

Canada's Arctic Shipping Safety and Pollution Prevention Regulations ban the discharge of any waste into Arctic waters except untreated sewage. The Act applies to waters north of 60 and up to 200 nautical miles from the shoreline. Untreated sewage cannot be discharged within 12 nautical miles from any ice-shelf or fast ice (ice attached to land), whereas treated sewage cannot be discharged within 3 nautical miles. No sewage can be discharged if the ice coverage exceeds 10% of open waters.

GARBAGE

Garbage is considered a waste stream and discharges are prohibited. Discharges of broken up or ground food waste (particles must be finer than 25 mm, or one inch - the size of a loonie or bottle cap) are permitted if 12 nautical miles or more from the nearest land, iceshelf or fast ice and must not be mixed or contaminated with other garbage.

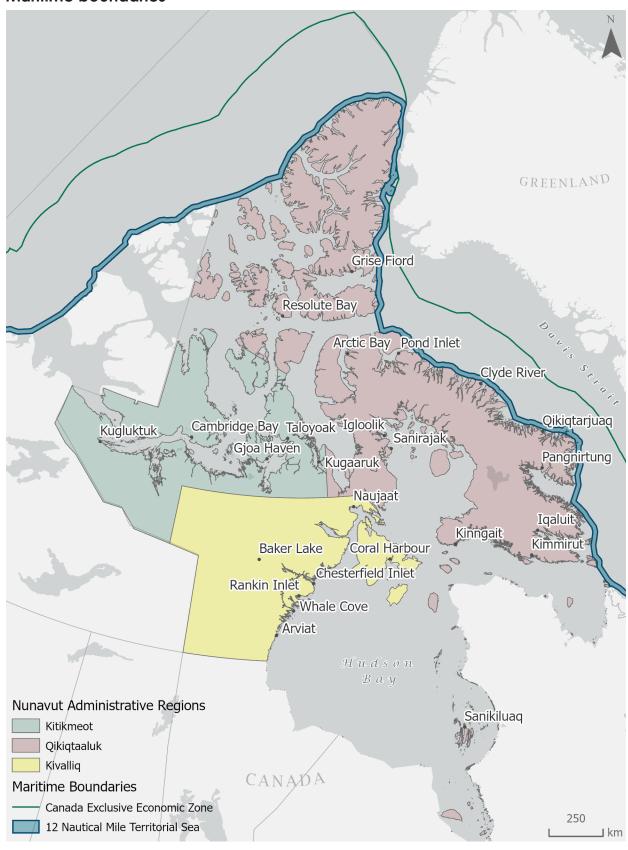
OTHER DISCHARGES

Most visible water discharges are part of regular operations and are permitted, including cooling or recirculation water (such as water used to cool the engine) and/or bilge water, the latter of which is any fluid that collects in the bilge of a ship. Discharges of deck and external surface wastewater and cargo hold wastewater are also permitted.

Grey water is any domestic wastewater (drainage from sinks, laundry machines, bathtubs, shower stalls or dishwashers) with the exception of sewage and drainage from machinery spaces or workshop areas. Grey water discharges are not explicitly defined in Arctic regulations as a waste stream and are thus not explicitly prohibited either.¹⁴

The federal government has limited vessel capacity to enforce the prevention of ship-source discharges in Nunavut. Illegal or suspicious discharges, such as oil or oily water, may be reported to your local conservation officer or the RCMP.

Maritime boundaries



WHAT IS BALLAST WATER

Ballast is any substance used onboard a vessel to regulate stability and movement. To achieve a safe weight-to-volume ratio, unloaded vessels will pump water from one port into ballast water tanks onboard, and then release the ballast at a receiving port to adjust for cargo gains. Thousands of aquatic species may reside and survive in ballast water, including bacteria and other microbes, micro-algae, and various aquatic plants and animals. These foreign species can cause permanent damage to local marine ecosystems and economies as well as the many coastal resources and services valued by communities.

CURRENT REGULATIONS

Canada's *Ballast Water Regulations* (updated in June 2021) restrict ballast water discharges to prevent the introduction of harmful aquatic species to local marine ecosystems. Ballast water introduces and transfers a third (at minimum) of all known marine invasions in Canada and abroad. The new regulations mark a transition from the traditional method of ballast water management (the exchange of ballast water in mid-ocean, or more than 200 nautical miles from shore) to the use of a modern ballast water management system and an approved ballast water management plan.

BALLAST WATER USE IN NUNAVUT

Merchant vessels (bulk carriers, cargo ships, oil tankers) are the only vessels with regular ballast discharges in Nunavut waters.¹⁷ Few foreign species have been detected in the marine environment to date, even though several have been documented in the ballast tanks of vessels that transit the Canadian Arctic.

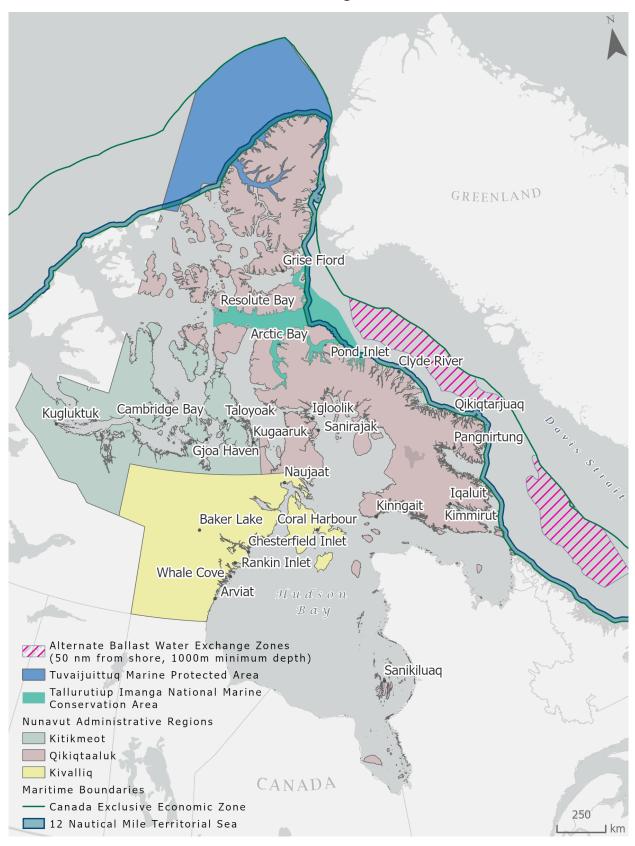
By September 2024, all vessels operating exclusively in Canadian waters (if 50 metres in length or longer and built after 2009) must install a ballast water management system onboard, which cleans ballast water of foreign species prior to release. Older, non-transoceanic vessels are exempt until 2030.

EXCHANGE LOCATIONS

If harsh weather or other safety concerns prevent mid-ocean exchange offshore, ships may conduct their exchange in an alternate ballast water exchange zone (ABWEZ) within the exclusive economic zone (EEZ) of Canada.¹⁸

If a vessel enters the Eastern Arctic, ballast water must be exchanged in an area where the water is more than 1,000 metres deep and 50 nautical miles or more away from shore. If a vessel enters the Western Arctic, ballast water must be exchanged in an area where the water is more than 100 metres deep and as far away from shore as possible.

Locations of alternate ballast water exchange zones



5. NAVIGATION RIGHTS

Federal maritime law protects the public right of navigation, which gives people free and unobstructed passage through navigable waters.

In accordance with international law¹⁹, foreign-flagged vessels enjoy the right of innocent passage through Canada's territorial sea, and the right of freedom of navigation seaward of this 12-nautical mile limit.

Under innocent passage, vessel activities must not impact the peace, good order or security of the coastal state, and foreign fishing, research, resource extraction, and acts of willful and serious pollution are prohibited.

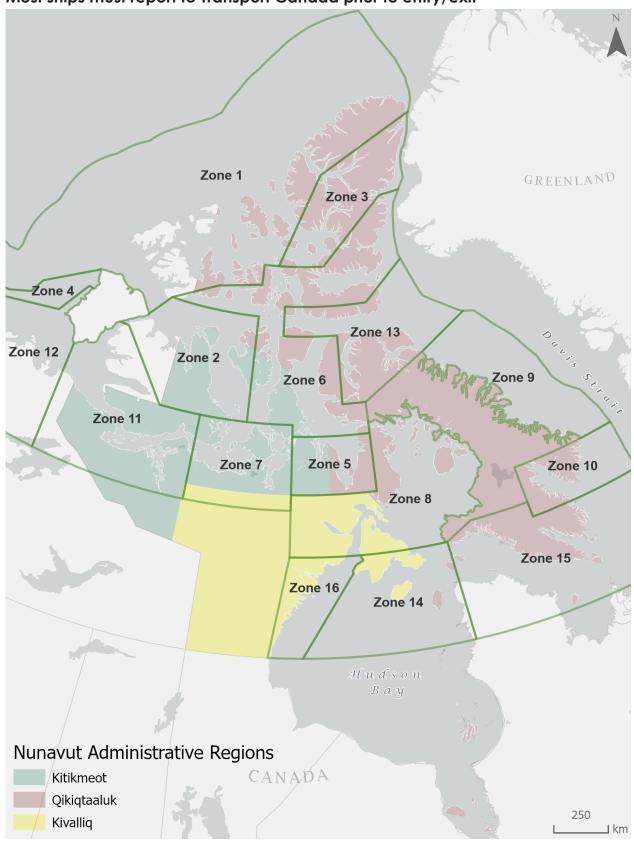
Under transit passage, submarines and other vehicles may also operate underwater rather than above the surface. Passage under both must be "continuous and expeditious," even though stopping and anchoring outside internal waters is permitted if necessary for safe voyage and navigation.

The NORDREG zones were established under the *Northern Canada Vessel Traffic Services Zone Regulations* and extend to the seaward 200-nautical mile limit of Canada's Exclusive Economic Zone (EEZ). Under these regulations, certain vessels must report information before entering, while navigating within, and upon exiting Canada's northern waters. Information reported includes current position, course, speed, ice encounters, intended route and compliance with pollution prevention regulations, including ballast water.

Ships of all nations must meet Canadian standards for hull strength and engine power before entering a NORDREG zone, and compliant ships often leave the NORDREG zone within the time period set for safe navigation.

The Marine Safety Branch of Transport Canada also requires proof of insurance coverage for ships carrying any form of pollutant in large quantities, whether as cargo or fuel. This insurance is in addition to the international regime that provides insurance coverage for tankers laden with cargo.

Northern Canada Vessel Traffic Services Zone: Most ships must report to Transport Canada prior to entry/exit



CANADA BORDER SERVICES AGENCY (CBSA)

Foreign Pleasure Craft: Entry into Canada via remote Nunavut communities²⁰

- If a foreign pleasure craft (or Canadian pleasure craft returning from out of country) arrives in your community, contact the CBSA Igaluit office.
- If the Captain and/or other crew members are encountered in the community, ask if they have received their clearance with CBSA. The Captain should have documented proof of their clearance (such as a passport stamp or CBSA report number).
- If they have not received clearance from the CBSA or the RCMP (in a community outside Iqaluit) ask the Captain and all crew members to report to the RCMP with all required information (such as passports, routing and vessel registration).
- CBSA Iqaluit will conduct a telephone interview with the Captain of the vessel as soon as possible.
- The Captain will be asked details about the people and goods onboard, the vessel, trip routing, and the reason for travel to Canada.
- All foreign firearms must be declared and registered.
- All vessels anchored in Canadian waters must adhere to federal discharge and ballast water regulations.

CBSA CONTACT INFORMATION IN IQALUIT:

Office: 867-979-6714 Cellphone: 867-975-1584

Fax: 867-979-2857

Email: igaluit@cbsa-asfc.gc.ca



Artist: Isaac Demeester

APPENDIX 1





NT-NU SPILL REPORT OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130 FAX: (867) 873-6924 EMAIL: spills@gov.nt.ca

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FIRST SUPPORT AGENCY												
SECOND SUPPORT AGENCY												

PAGE 1 OF

THIRD SUPPORT AGENCY

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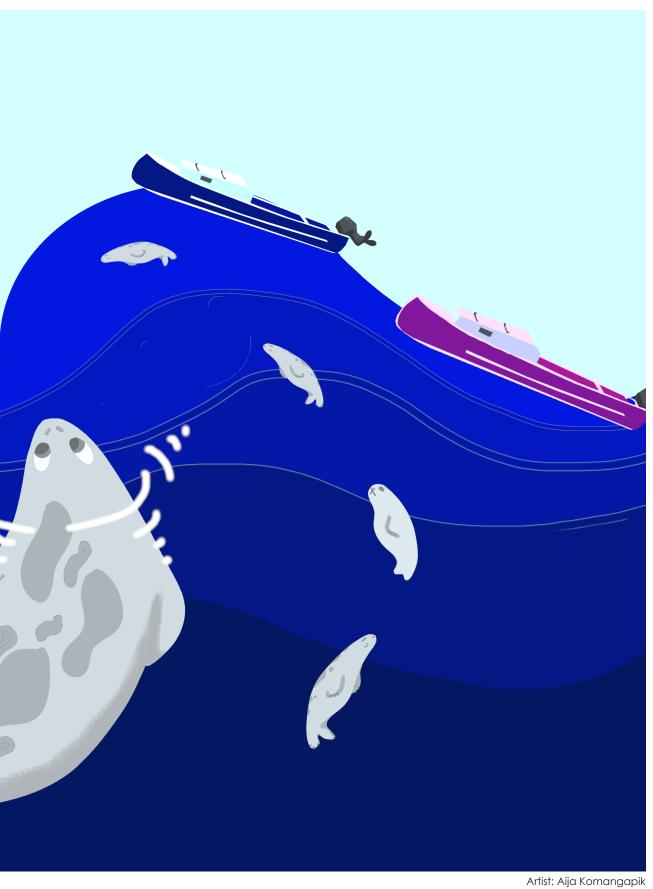
Ballast Water Regulations (SOR/2021-120)

Canada Shipping Act, 2001 (S.C. 2001, c. 26)

Northern Canada Vessel Traffic Services Zone Regulations (SOR/2010-127)

Shipping Safety Control Zones Order (C.R.C., c. 356)





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