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SAFE AND SUSTAINABLE ARCTIC SHIPPING



Arctic Marine Shipping Assessment

The Arctic Marine Shipping Assessment (AMSA) of the Arctic Council provides a policy framework for how the Arctic states intend to protect Arctic people and the marine environment in an era of expanding use of polar waters. AMSA is also a baseline assessment of Arctic marine traffic and a strategic guide to a host of stakeholders and actors.

The Arctic will see more ship traffic; that much is certain. The question is what measures, precautions, regulations, and best practices will be in place to address environment and safety concerns, so as to maximize the benefits of development for northern peoples who rely on healthy Arctic ecosystems.

As summer sea ice retreats in the Arctic, new shipping routes are opening up. And as the demand for resources continues to grow, new development opportunities arise in the Arctic, with new stresses that, if not properly managed, could put northern ecosystems and cultures at risk. Shipping brings impacts like noise, and potential risks from oil spills; these impacts are experienced most directly by the whales that share these Arctic waters – including narwhal, beluga and bowhead whales.

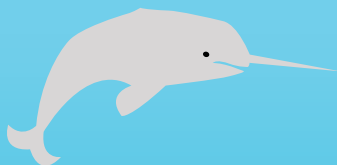
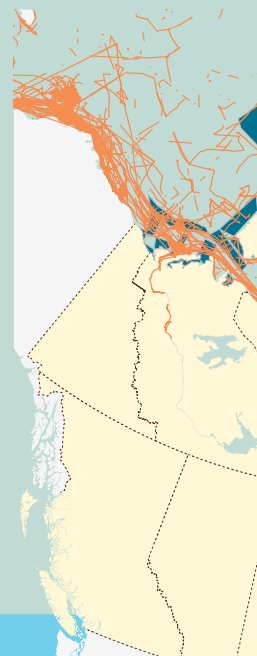
Conditions are harsh, search and rescue capacity is limited, and support infrastructure is relatively scarce in Arctic waters, so it's critically important to avoid accidents and spills. Ships need to use the best information, the best practices and the latest technology to avoid or minimize the effects of disruption of wildlife, introduction of invasive species, and the release of pollutants. Regular monitoring is needed to assess these impacts, and revise practices where necessary.

Growth in Canadian Arctic shipping traffic won't be dramatic or sudden, but it will steadily increase over the coming years, with the biggest driver of growth likely to come from the mining sector. Shipping is important for all current and future economic development in the region, and we have an opportunity to manage the inherent risks of this growth today, while shipping in the Canadian Arctic is low compared to other regions. Good standards and practices, if implemented today, will see benefit for years to come by helping to ensure responsible Arctic development for decades to come.

BEST SHIPPING PRACTICES FOR A SAFE AND ENVIRONMENTALLY RESPONSIBLE ARCTIC

POLAR CODE

The International Maritime Organization is developing a Polar Code. To effectively contribute to a safe Arctic shipping environment, the code must be mandatory, meet or exceed the high standards of Canadian regulations, include all ships navigating in Arctic waters and be subject to regular review and improvement. With interest in Arctic shipping growing rapidly, many new entrants lack the experience or capacity to carry out shipping operations safely. We urgently need a mandatory Polar Code for shipping that addresses environment and safety concerns, together. It will require ice-strengthened hulls, measures to avoid harm to Arctic ecosystems and species, qualified on-board ice navigators, and capacity to participate in search and rescue and spill response operations.



SAVE THE WHALES:

Voyage planning should consider wildlife and sensitive areas to minimize the risk of the impact of vessel noise and conflicts with whales.

NO OUTSIDE SPECIES:

Treat and monitor the discharge of ballast water and reduce the likelihood of hull fouling to minimize the risk of invasive species being introduced to the sensitive Arctic ecosystem.

KEEP IT CLEAN:

Eliminate the discharge of garbage, sewage and other oily or harmful substances from ships in sensitive and biologically rich areas, and improve the availability and use of waste reception facilities.



DON'T MIX OIL AND WATER:

Restrict heavy fuel oil transport in sensitive areas, increase on board spill response and improve oil salvage requirements to reduce risk of oil spills.



CLEAR THE AIR:

Phase out the use of heavy fuels, like bunker fuel, in sensitive areas and slow vessel speeds to reduce emissions of particulate matter, which have a range of impacts. Black Carbon, for example, has a significant warming effect in the Arctic when it covers bright snow and ice surfaces and some studies have shown human health effects.

Ecologically and Biologically Significant Areas (EBSAs) as identified by Fisheries and Oceans, Canada. Shipping transits for 2011 are shown for all ship types and sizes from the Automatic Identification System (AIS) data, provided by the Norwegian Coastal Administration (2012) and further processed by DNV and WWF. Data accuracy and availability is subject to signal limitations, particularly in the Bering Strait.

Shipping transits, January–December 2011  Canadian EBSAs 



RSA CANADA: Insuring Arctic Shipping



As Canada's largest marine insurer, through its MGA Coast Underwriters, RSA Canada recognizes its central role in encouraging safe Arctic shipping. This is why RSA has partnered with WWF-Canada since 2009, funding critical marine conservation projects and working to better understand the impact of a changing climate on our oceans.

Through joint research and the development of GIS maps, RSA applies critical information about Arctic wildlife and ice patterns to inform underwriting decisions for vessels and operations in Arctic waters. With a more than 300 year heritage, RSA is in the business of insuring progress, helping its customers take advantage of new opportunities but in a way that is responsible to sensitive ecosystems and vulnerable species.

As risk experts with global reach, RSA sees itself as an advocate for advancing change and influencing key stakeholders with a vision for safer Arctic shipping, balancing the needs of the environment and the economy while creating a strong Arctic future.

ARCTIC SHIPPING BY THE NUMBERS

1 Number of cargo ships to fully transit the Northwest Passage since 1969 (as of October 2013)



46 Number of cargo ships to fully transit the Russian Northern Sea Route in 2012

4.3%

amount by which ship traffic in the Canadian Arctic increased from 2011 to 2012

0

current number of mandatory, internationally accepted International Maritime Organization rules written specifically to govern ship operations in Arctic waters

3



number of ships – one cruise ship and two oil tankers – that ran aground in the Canadian Arctic during the summer of 2010

WWF'S Arctic Shipping Agenda

RESEARCH

WWF is working to better understand potential environmental and social impacts of shipping on the Arctic environment and communities.



POLICY

We are engaging the shipping industry in discussions at the International Maritime Organization to create a Polar Code for Arctic Shipping.

ENGAGEMENT

WWF is supporting an ongoing dialogue about best practices in Arctic shipping to benefit northern communities while protecting the fragile Arctic environment.



Why we are here.

We are creating solutions to the most serious conservation challenges facing our planet, helping people and nature thrive.

wwf.ca

Special thanks RSA Insurance for supporting WWF-Canada's Arctic shipping work.

For more information, please visit wwf.ca/arcticshipping or contact us at arcticshipping@wwfcanada.org.