

Arctic Corridors and Northern Voices

GOVERNING MARINE TRANSPORTATION IN THE CANADIAN ARCTIC

POND INLET NUNAVUT



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2018



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**OCEANS
NORTH**



**Fisheries and Oceans
Canada**

**Pêches et Océans
Canada**



PARTICIPANT BIOGRAPHIES

Jayko Aloo served on numerous wildlife-related boards in the area and in Nunavut. Jayko enjoys working with biologists and on different research projects, especially those about species of importance to Inuit (e.g., polar bears, caribou). “Such opportunities embrace my knowledge and allows us (Inuit) to share comparable knowledge in a context in which it’s benefiting both parties. It has encouraged me to take part more inclusively, understanding that our knowledge is valuable.” Jayko does not hunt as actively as in previous years, however he still enjoys spending time outdoors and values time spent with family hunting seals, seal pups and narwhal, floe edge hunting and camping, and picking eggs.

Jake Awa grew up on the land and is very familiar with the hunting grounds around Pond Inlet, Igloolik, and Arctic Bay. Jake experienced the transition of Inuit moving into settlements. His family was among the last to move into Pond Inlet in the 1970s. Jake is known for his many skills, is very knowledgeable about hunting and surviving on the land, is an active hunter and fisherman, and an outfitting guide. He is also a very talented musician and often performs in the community and plays accordion at square dances.

Rhoda Koonoo serves on the women’s auxiliary, providing crucial services and support to the less fortunate, orphans, and grieving families by ensuring people have warm clothes, food, spiritual support, and by holding weekly sewing nights. Rhoda still actively spends hours preparing seal skins and sewing traditional clothes, and enjoys spending times outdoors, berry picking, and fishing.

Abraham Kublu is a substitute teacher and student support assistant at the elementary school, an interpreter, and does odd jobs. He is a member of the youth group committee at the church, and a Hamlet councillor. He has 6 children (5 boys and 1 girl). He loves helping others, especially elderly people, and gets along well with kids and teenagers.

Mary Muckpa grew up on the land around Pond Inlet. Now retired, she spent many years teaching kindergarten and was a great seamstress. Mary is a very knowledgeable Elder and a great story teller about the ways of life before Inuit settled in communities, and about hunting and camp life. Mary enjoys spending time outdoors with friends and family, going to the cabin, seal hunting and berry picking. Mary enjoys a great cup of tea and boiled seal meat outdoors in the summer months which she cooks with Arctic heather.

Jimmy Pitseolak is from Pond Inlet and is married with three sons. He is an active full-time hunter and a fisherman and also a member of the Hunters Trappers & Organization. He has experienced and survived near death situations while out hunting near Pond Inlet. He is a gold medal winner in sports such as ice hockey and basketball.

Caleb Sangoya is knowledgeable about the area, local hunting grounds and travel routes. An active hunter and fisherman, Caleb enjoys seal hunting and narwhal hunting and spending time with his family at their cabin in Milne Inlet. Caleb is also a Canadian Ranger and is the priest at the Anglican church in Pond Inlet.

Natasha Simonee comes from a large family and grew up spending a lot of time camping and hunting. Natasha now has her own young family and spends as much time out on the land, camping and hunting, as she can. She is an active hunter, and loves being out on the land and spending time with family. Natasha is a graduate of Nasivik high school and Nunavut Sivuniksavut and is working towards her Bachelor of Education. Natasha plays an active role in the community through her involvement with recreation and youth research programs.

Sheatie Tagak spent many years serving on governing boards within the community. Sheatie is a very skillful hunter and fisherman. He still practices the sharing of his catch with the community when he can. Sheatie is a business man and outfitter.



EXECUTIVE SUMMARY

Ship traffic in the Canadian Arctic nearly tripled between 1990 and 2015.¹ Most of that increase happened in Nunavut waters. The Government of Canada is developing a network of low-impact marine transportation corridors in the Arctic that encourages marine transportation traffic to use routes that pose less risk and minimize the impact on communities and the environment. The Low Impact Shipping Corridors will be a framework to guide future federal investments to support marine navigation safety in the North, including improved charting and increased hydrography, in partnership with Northerners. The corridors initiative is co-led by the Canadian Coast Guard, Transport Canada, and Canadian Hydrographic Service.

Key considerations in the current prioritization of the Low Impact Shipping Corridors include identification

of Inuit and Northerners' perspectives on 1) the potential impact of marine vessels on marine areas used for cultural and livelihood activities, and on community members and 2) potential management strategies for the corridors.

This report reflects opinions gathered through participatory mapping, focus group discussions, and interviews with Pond Inlet community members who were identified by local organizations as key knowledge holders. Analyses were aimed at understanding Inuit and Northerners' perspectives on the potential impacts of marine transportation on local marine use areas and community members, on identification of potential management strategies for the Low Impact Shipping Corridors and for Arctic marine vessels management. This report was validated by the research participants.

THE SPECIFIC PROJECT OBJECTIVES WERE TO...

- Describe local marine use areas including significant socio-cultural, archaeological and ecological areas, and local travel routes, for integration into the Low Impact Shipping Corridors;
- Outline the potential impacts of marine vessels on identified marine use areas and community members; and
- Provide potential strategies regarding management of the Low Impact Shipping Corridors and Arctic marine vessels.





KEY FINDINGS OF THE PROJECT ARE...

- Impacts of marine vessels transiting through the Low Impact Shipping Corridors include
 - behavioural changes in wildlife;
 - increased incidence of dangerous ice conditions;
 - decreased ability to access country food, skins, and furs;
 - increased food insecurity and dependence on store-bought food;
 - diminished physical and mental health;
 - loss of Inuit culture and disturbed cultural artefacts; and
 - financial losses and opportunities.
- Disruption of sea ice break-up and formation by icebreakers and marine vessels is especially disruptive to Inuit and Northerners' ability to use local travel routes, re-supply camps, and travel, hunt, and camp safely on ice;
- Local knowledge (e.g., ice conditions, hunting grounds, safe travel routes) will no longer apply as marine vessels cause rapid change. Acquiring new local knowledge quickly enough to enable continued cultural practices will be challenging;
- Increased likelihood of
 - Inuit and Northerners being stranded and lost on the ice; and
 - oil spills and fuel leaks occurring;
- Existing search and rescue and spills response capacity is not sufficient.

COMMUNITY-IDENTIFIED RECOMMENDATIONS INCLUDE...

- Seasonal speed limits, no-go zones, no-anchoring zones, and no ice-breaking zones;
- Narrower corridors located minimum distances from shores;
- Monitoring and enforcement of ship traffic within and outside the corridors; and
- Improved communication between government agencies, vessel operators, and the community.

Inuit and Northerners must be and wish to be included on an on-going basis in the development and management of the Low Impact Shipping Corridors.





BACKGROUND

Ship traffic in the Canadian Arctic nearly tripled between 1990 and 2015.¹ Most of that increase happened in Nunavut waters. The Government of Canada is developing a network of low-impact marine transportation corridors in the Arctic that encourages marine transportation traffic to use routes that pose less risk and minimize the impact on communities and the environment (Figure 1). The Low Impact Shipping Corridors will be a framework to guide future federal investments to support marine navigation safety in the North, including improved charting and increased hydrography, in partnership with Northerners. The corridors initiative is co-led by the Canadian Coast Guard, Transport Canada, and Canadian Hydrographic Service.

Key considerations in the current prioritization of the corridors include identification of Inuit and Northerners' perspectives on 1) the potential impact of marine vessels on marine areas used for cultural and livelihood activities, and on community members and 2) potential management strategies for the corridors.

This report documents Pond Inlet community members' knowledge and extensive year-round use of important marine areas (ecological, socio-cultural, archaeological, and travel routes), the potential impact of shipping on those areas and on community members, and potential management strategies for the Low Impact Shipping Corridors. This report was validated by the research participants.

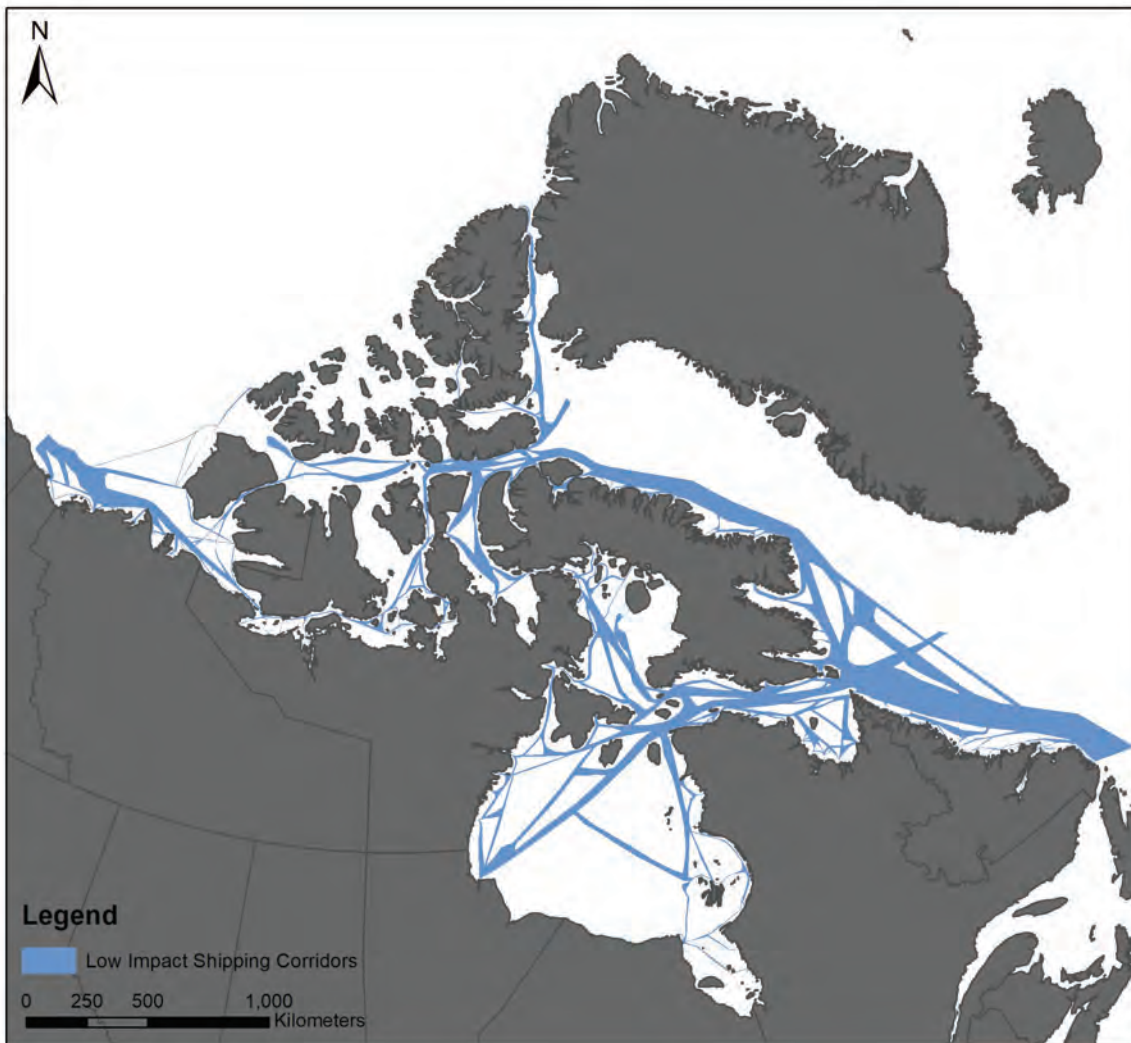


Figure 1. Example of Low Impact Shipping Corridors

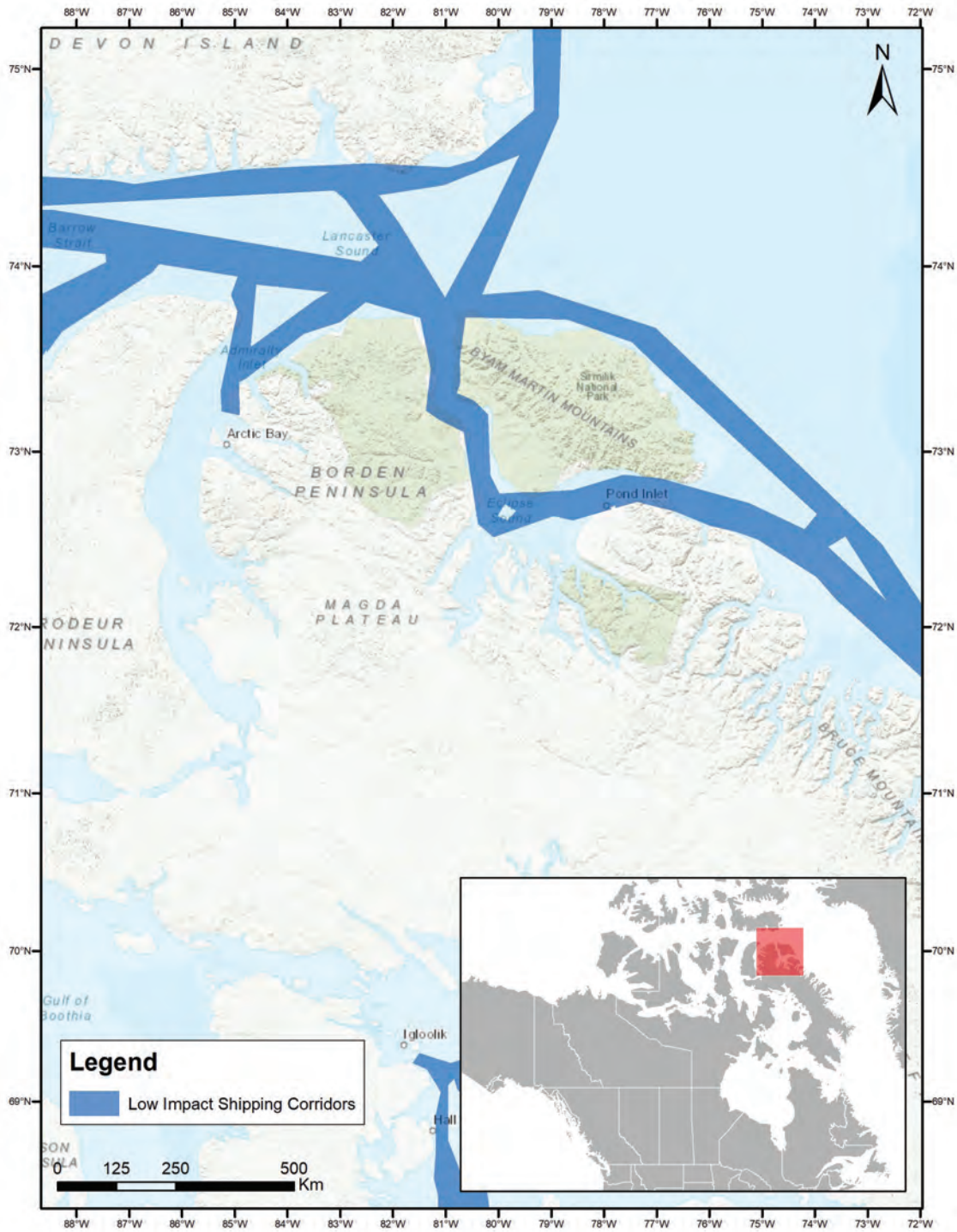


Figure 2. Example of Low Impact Shipping Corridors near Pond Inlet, Nunavut



CHANGE IN SHIPPING ACTIVITY

(1990–2000 ANNUAL AVERAGE COMPARED TO 2011–2015 ANNUAL AVERAGE)

In the Canadian Arctic, when comparing the average annual number of kilometres of shipping activity from 1990–2000 to the annual average from 2011–2015, shipping increases have been predominantly focused in the eastern Arctic, particularly around southwest Baffin Bay (e.g., Pond Inlet, Clyde River, Qikiqtarjuaq, Iqaluit), in the Queen Maud Gulf area (e.g., Cambridge Bay and Gjoa Haven), and northwest Hudson Bay (e.g., Chesterfield Inlet) (Figure 3). Changes in Hudson Strait

have been generally minor (e.g., Cape Dorset, Kimmirut), and changes in the High Arctic have been negative (e.g., Resolute Bay, Arctic Bay, Eureka).¹ Pond Inlet experienced a 4,120 km increase in shipping activity when comparing the average annual number of kilometres of shipping activity from 1990–2000 to the annual average from 2011–2015; making it the community with the highest annual average vessel traffic in Nunavut (Figure 4).¹

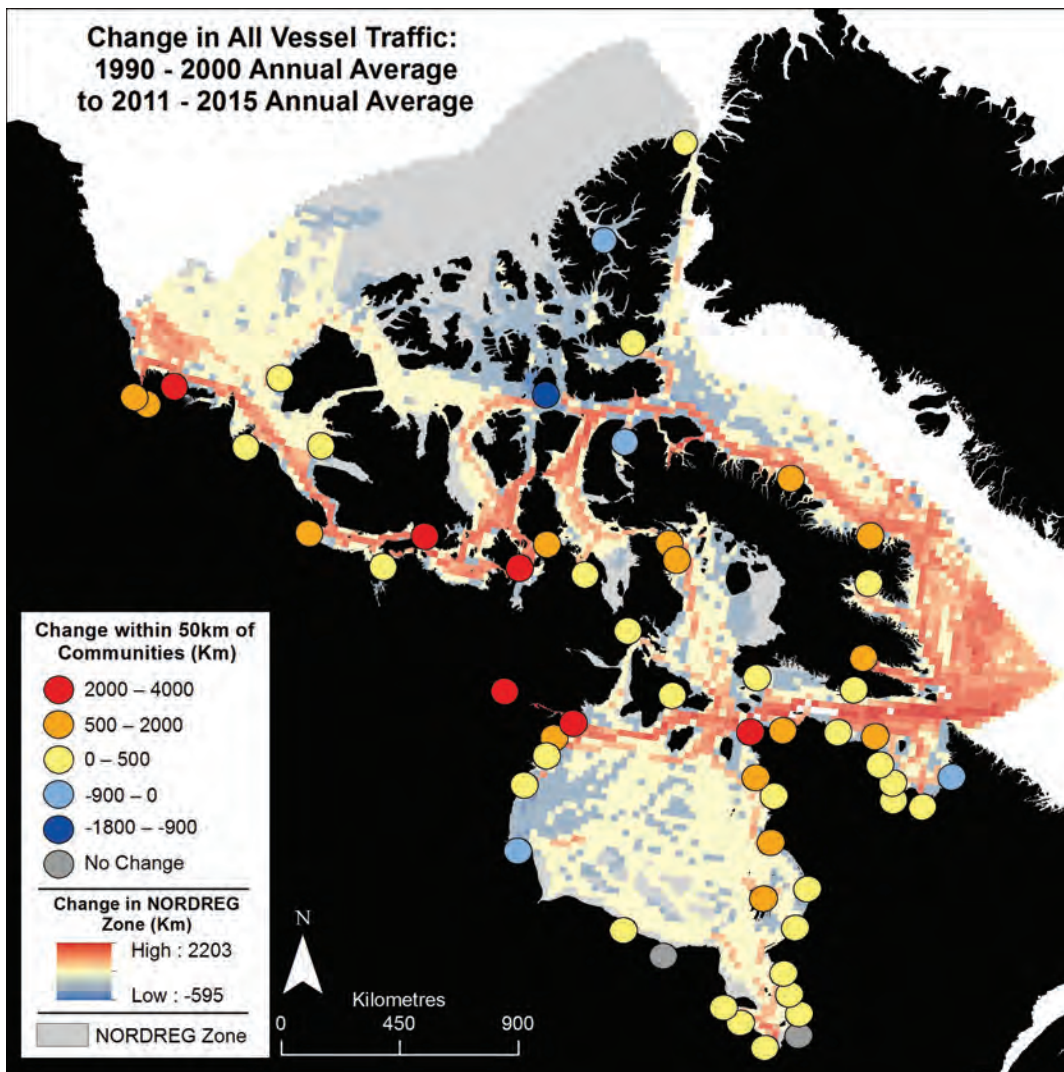


Figure 3. Change in shipping activity (km) in the Canadian Arctic: 1990–2000 annual average compared to 2011–2015 annual average¹

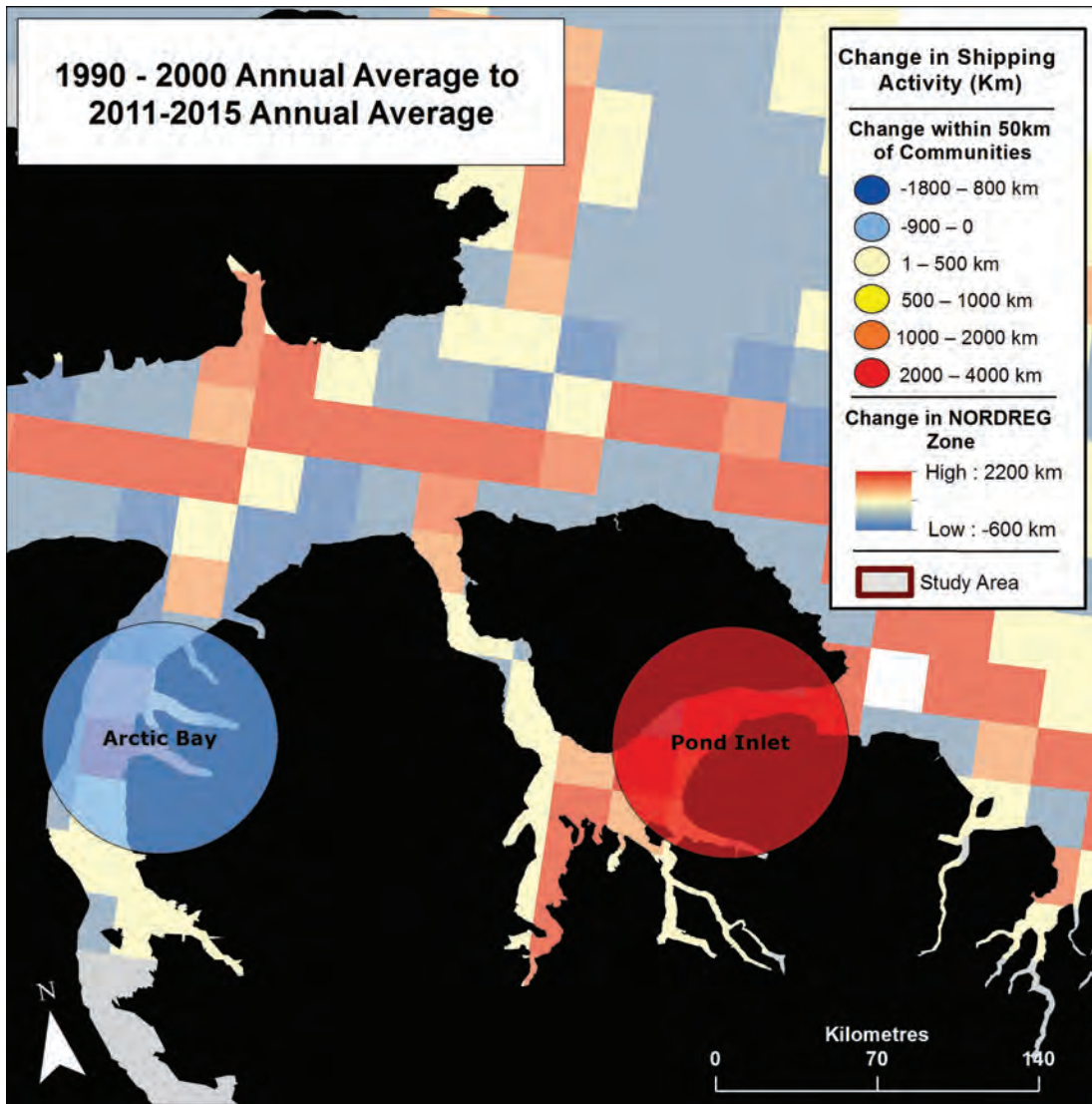


Figure 4. Change in shipping activity (km) near Pond Inlet, Nunavut: 1990–2000 annual average compared to 2011–2015 annual average¹





SIX SEASONS

There are 6 main seasons in Pond Inlet, Nunavut. The seasons are weather and ice dependent, therefore, the months each season happens in can be different each year. However, in general the seasons are:

SEASON	MONTHS IN WHICH IT HAPPENS	OCEAN CONDITION
Early Spring (from the month of seal pups to when sea ice begins forming puddles)	March through early May	Frozen
Spring (from when sea ice begins forming puddles to when sea ice begins to break-up)	May through mid-June	Frozen and break-up
Summer (open water, no sea ice, everything is melted/thawed)	Mid-July and August	Open water
Fall (sea ice begins forming)	September and October	Open water and freeze-up
Early Winter	November and early December	Freeze-up, and frozen
Winter	Mid-December through February	Frozen





SEASONAL HARVESTING CYCLE

Harvesting happens according to seasons and follows an annual cycle.

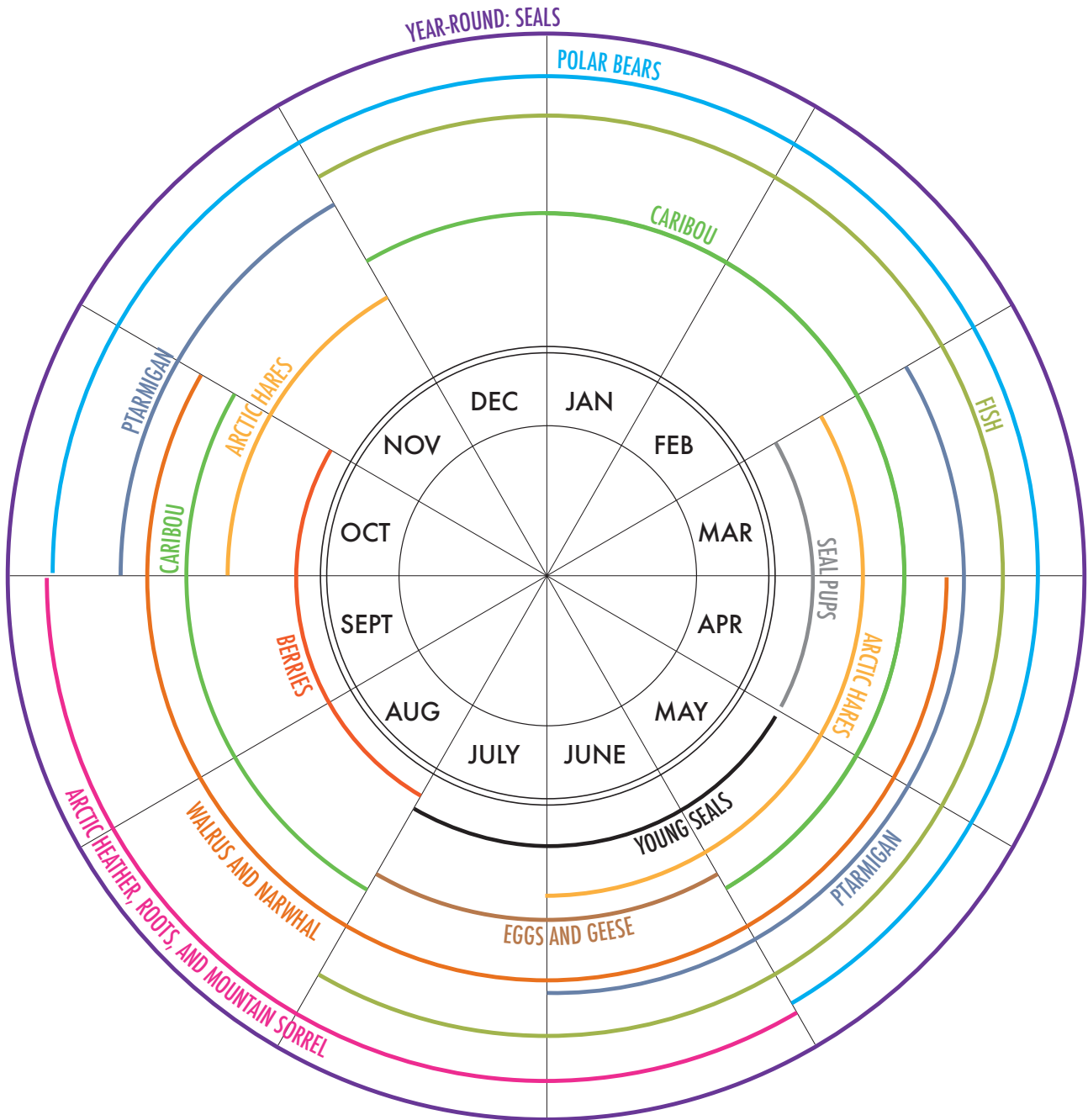


Figure 5. Seasonal cycle of harvesting activities near Pond Inlet, Nunavut



MAPS OF CULTURALLY SIGNIFICANT MARINE AREAS (CSMAS)

Maps include:

1. Location and behavioural activities of animals, marine mammals, fish, and birds;
2. Location of community members' activities as well as camps and cabins, and local travel routes; and
3. Significant marine features such as dangerous areas and summer ice.

Maps will be available at www.arcticcorridors.ca and in Pond Inlet at the Pond Inlet Archives, and Mittimatalik Hunters and Trappers Organization.

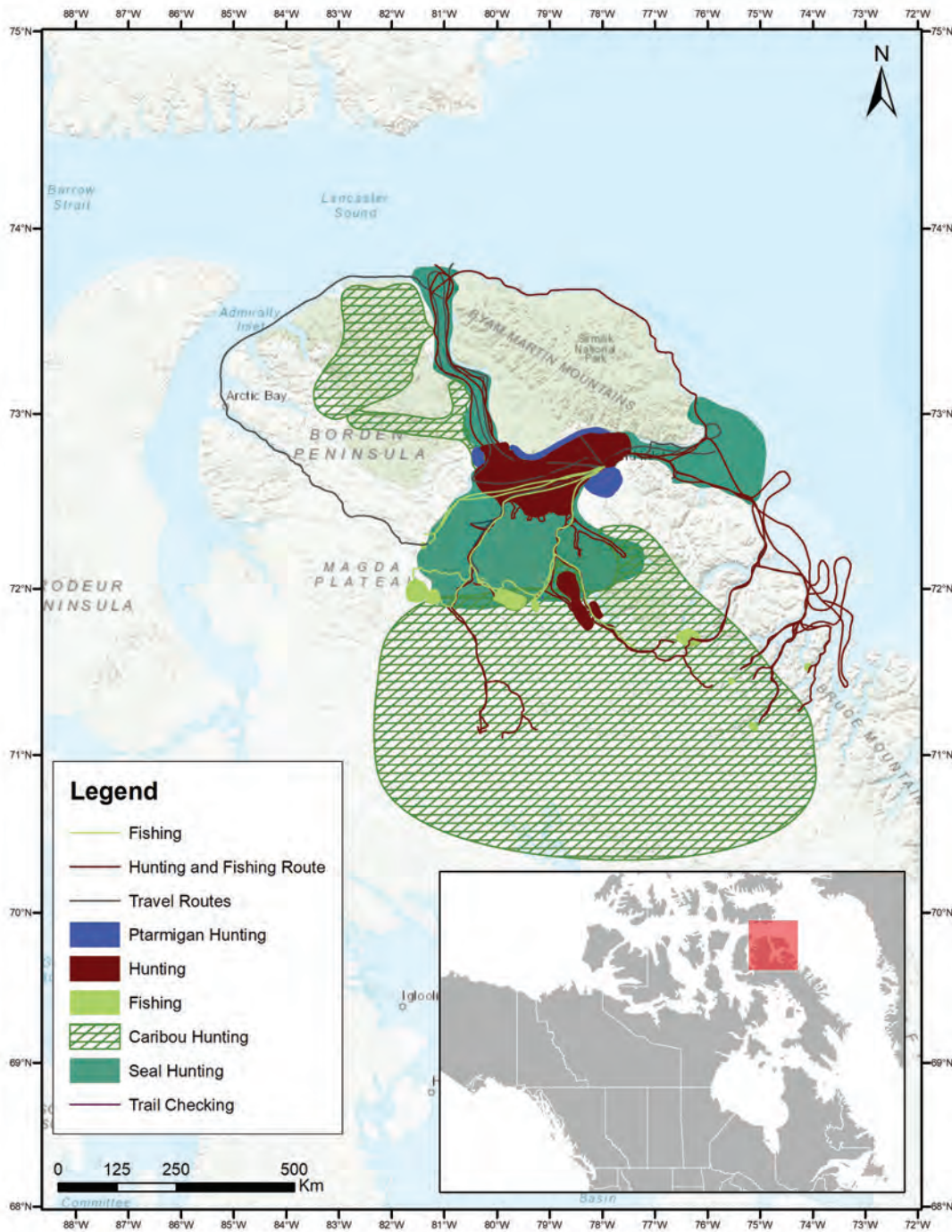


Figure 6. Location of community members' activities when the ocean is frozen

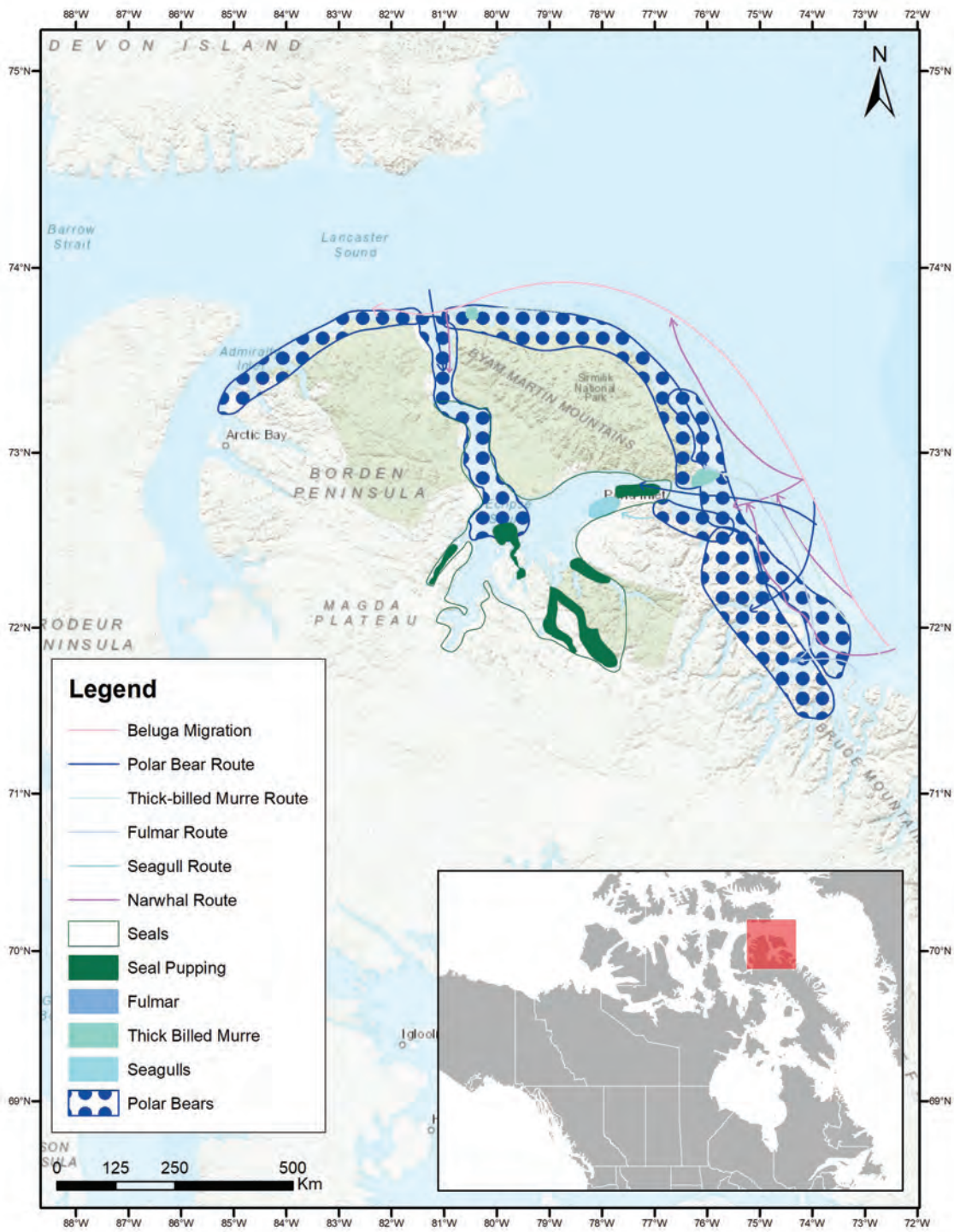


Figure 7. Location and behavioural activities of wildlife when the ocean is frozen

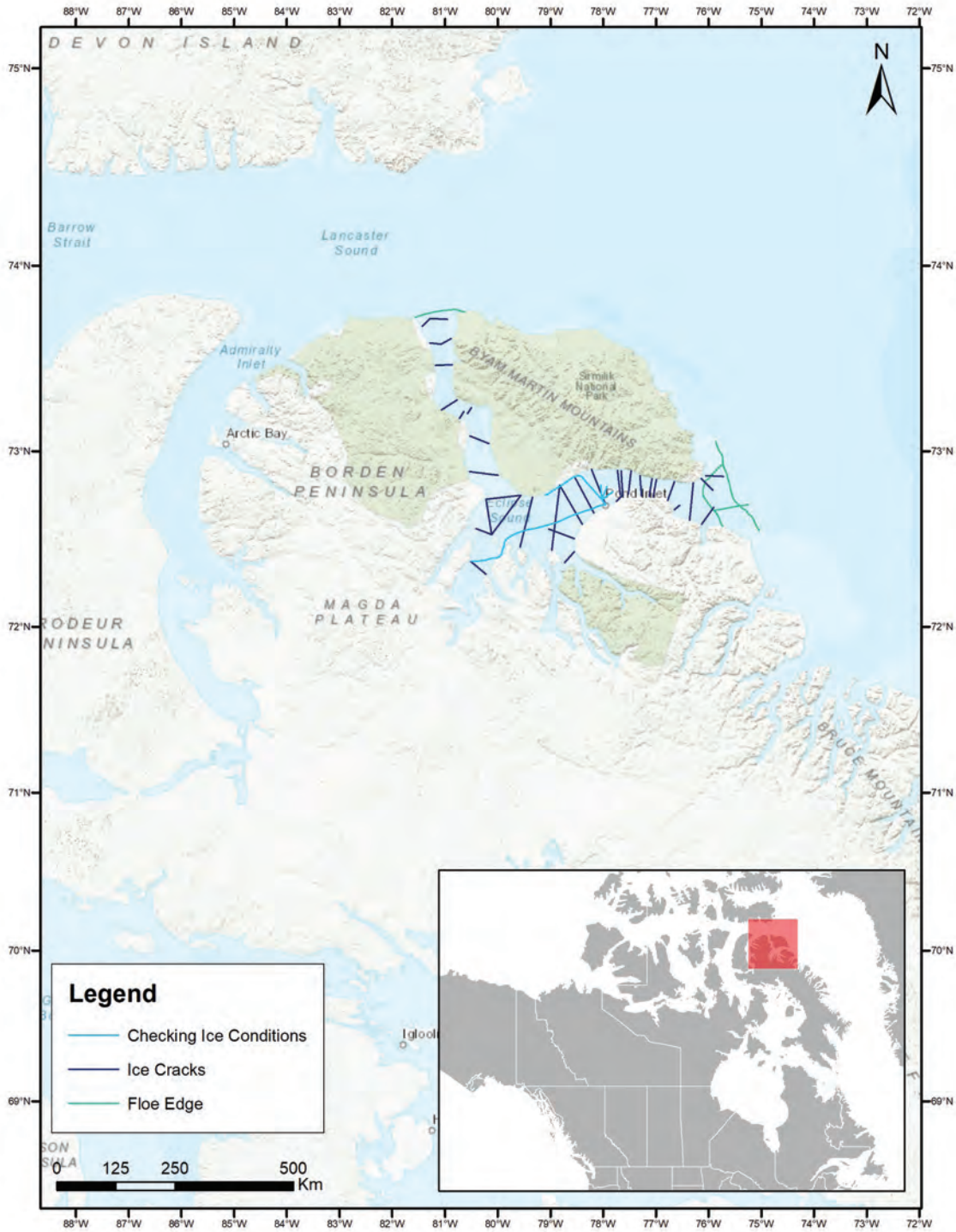


Figure 8. Location of significant marine features when the ocean is frozen

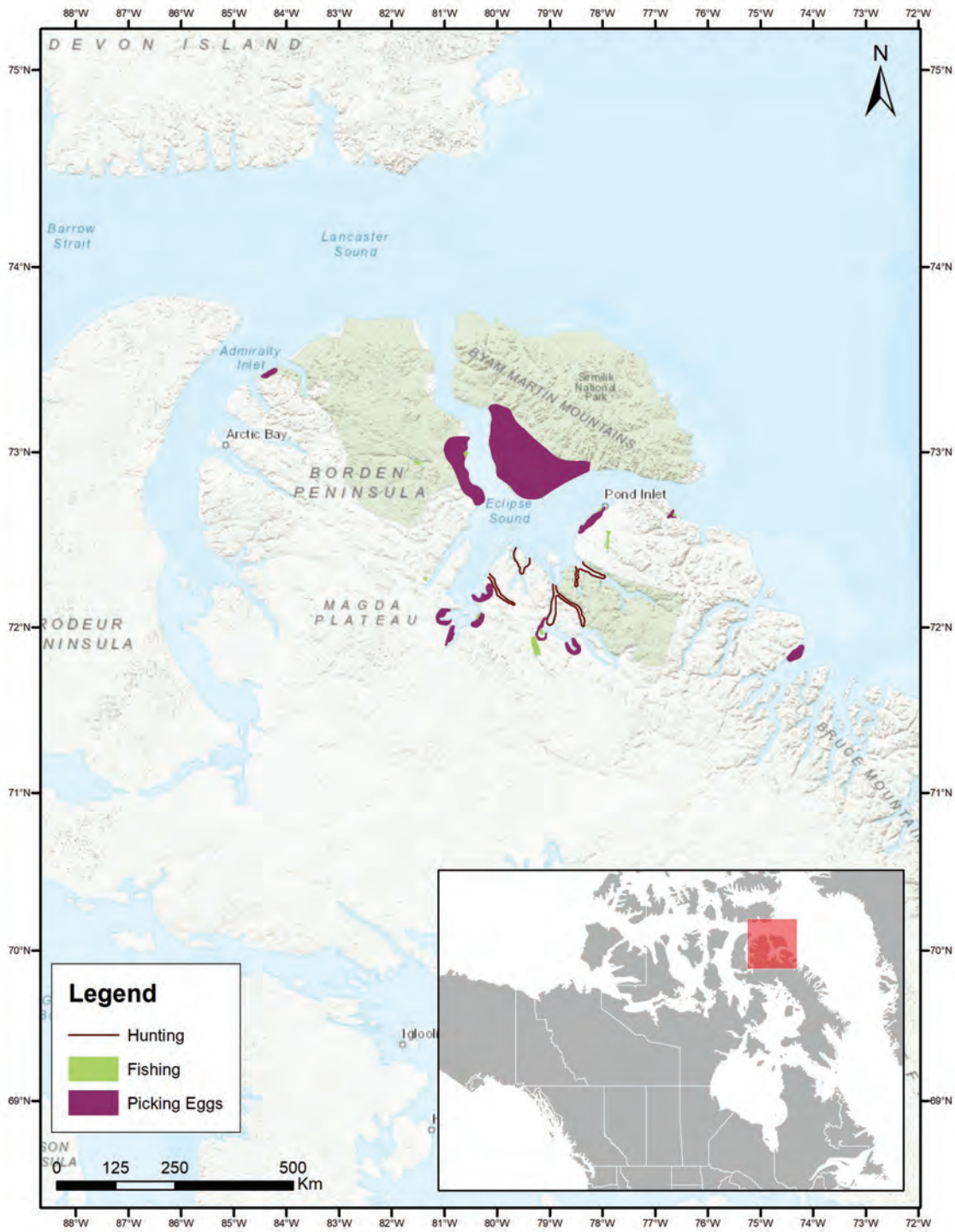


Figure 9. Location of community members' activities around the time of sea ice break-up

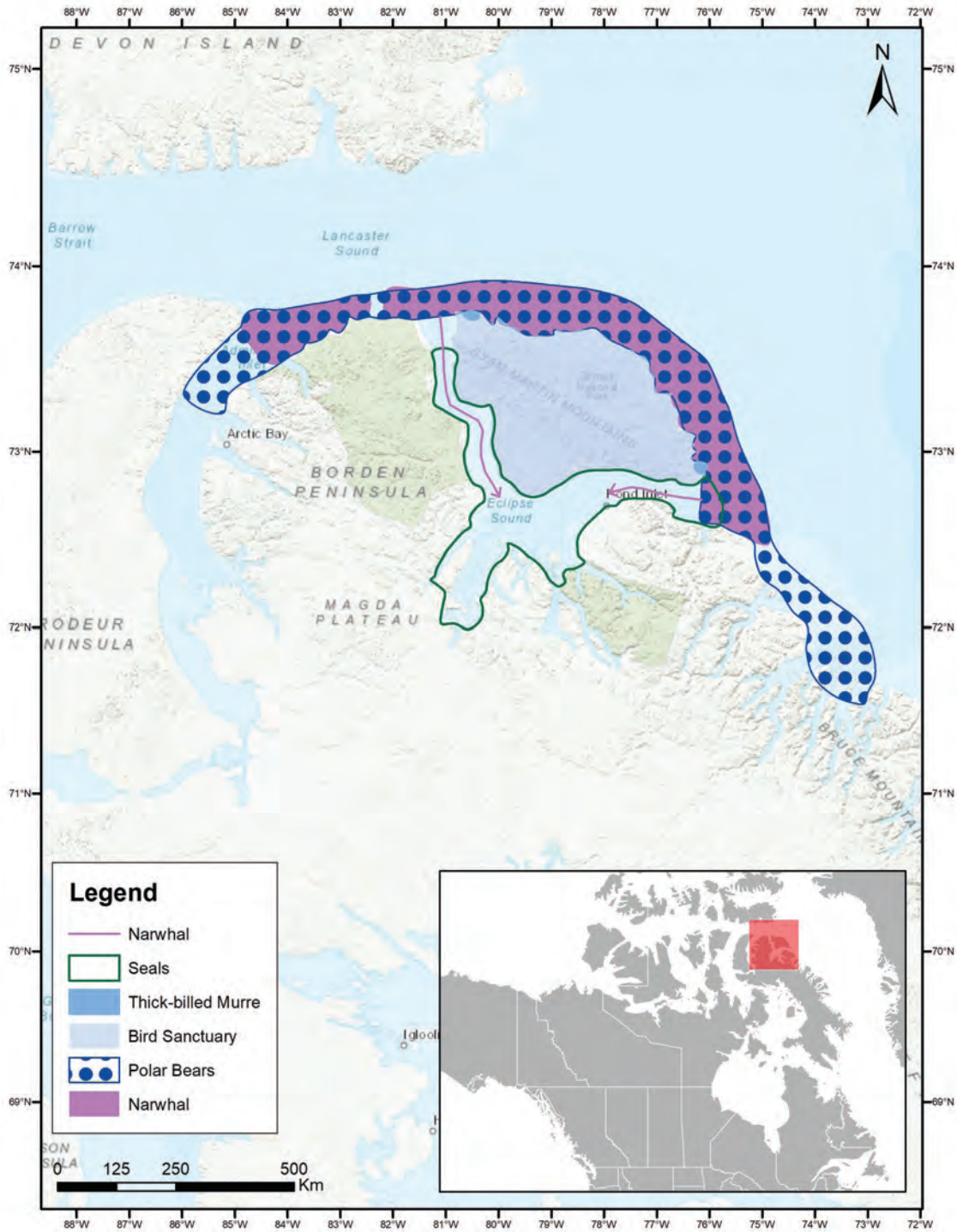


Figure 10. Location and behavioural activities of wildlife around the time of sea ice break-up

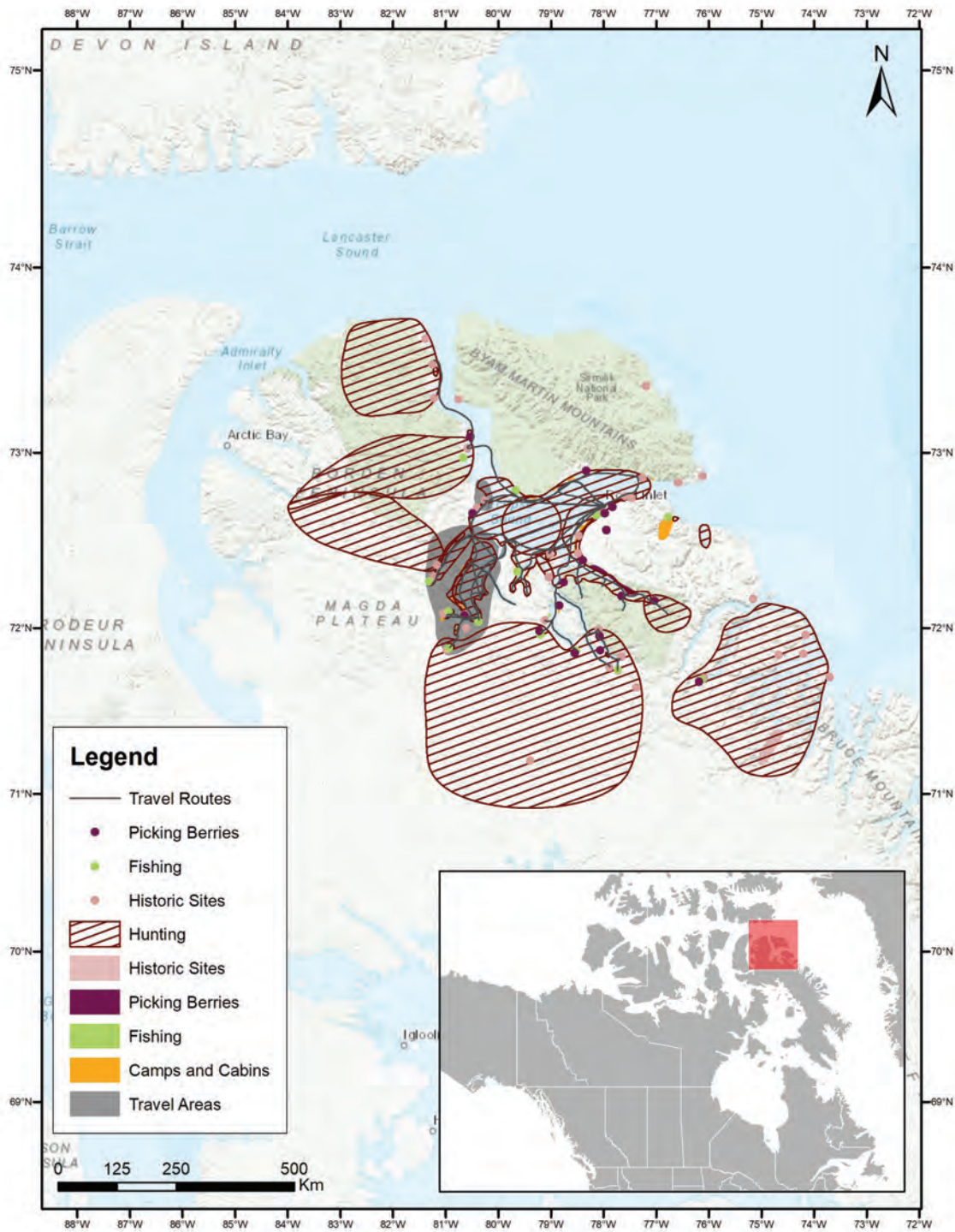


Figure 11. Location of community members' activities during open water

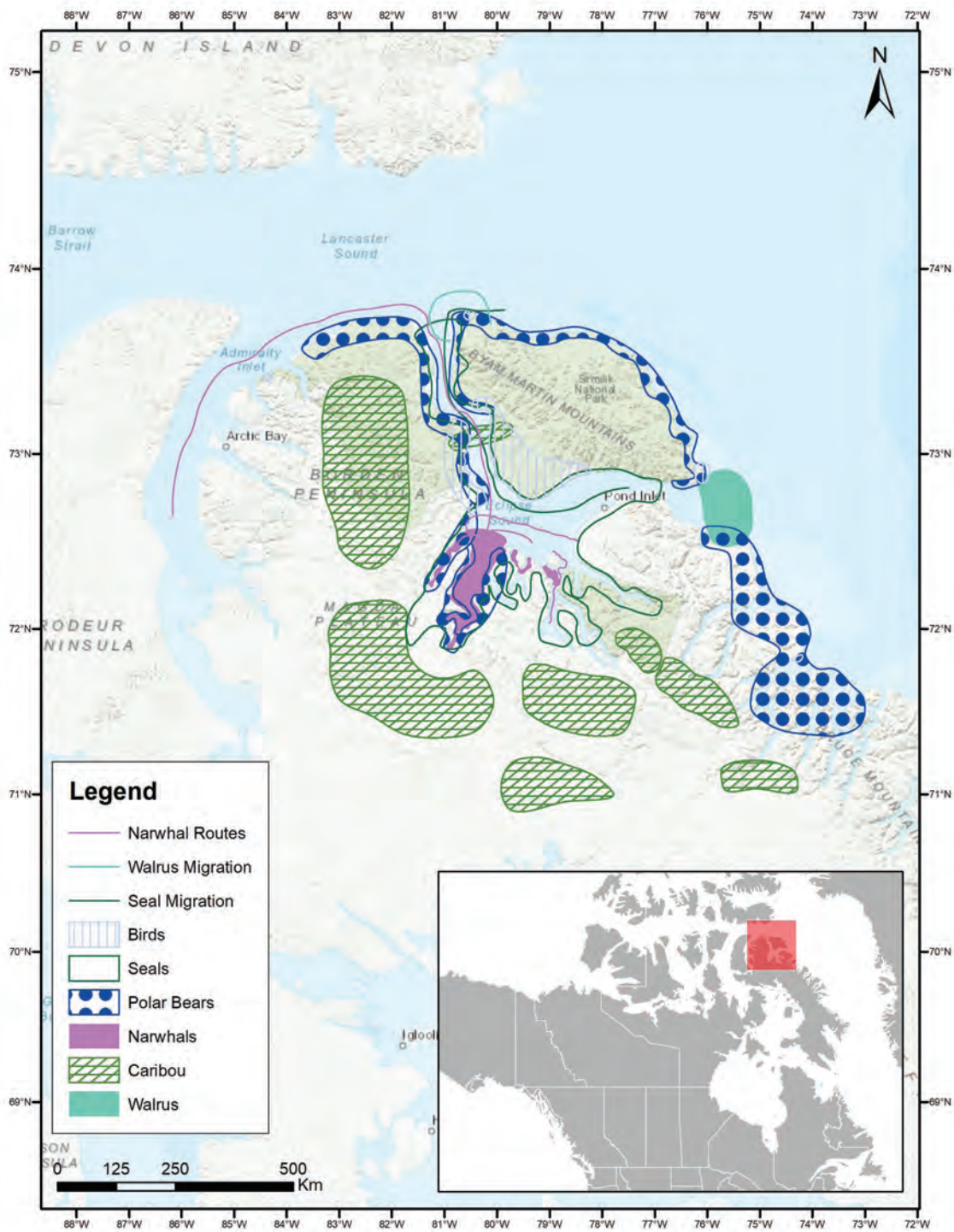


Figure 12. Location and behavioural activities of wildlife during open water

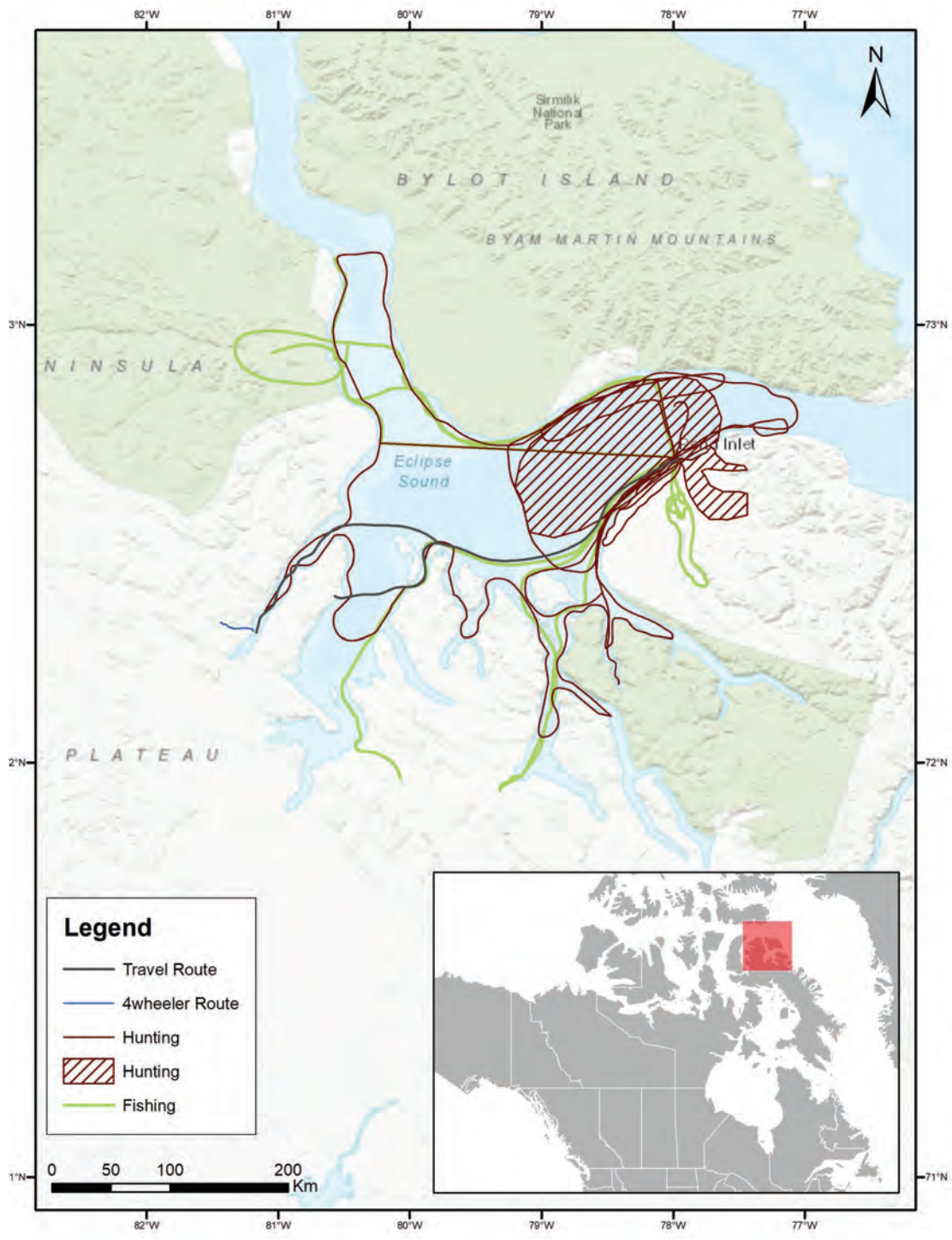


Figure 13. Location of community members' activities around the time of sea ice freeze-up

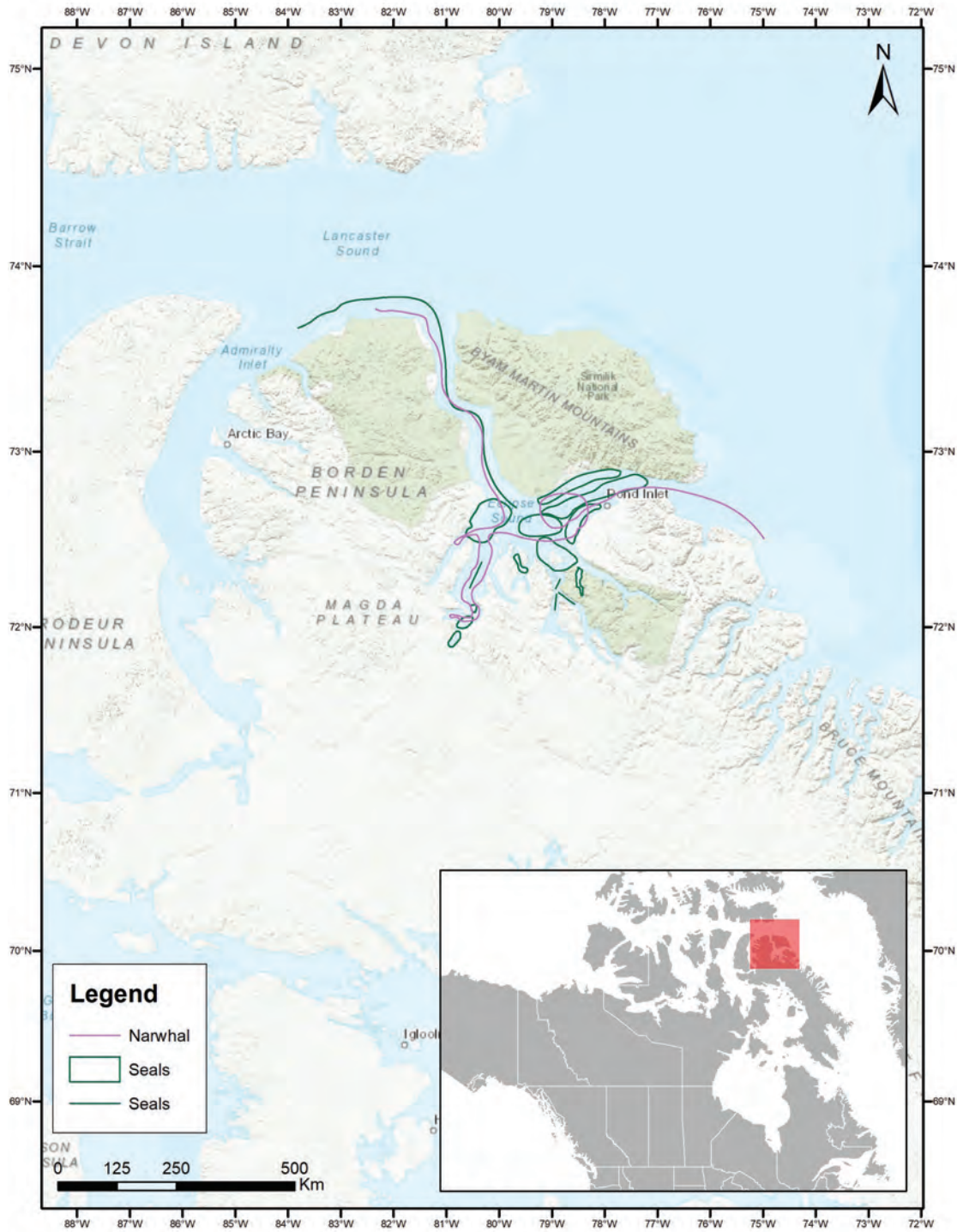


Figure 14. Location and behavioural activities of wildlife around the time of sea ice freeze-up

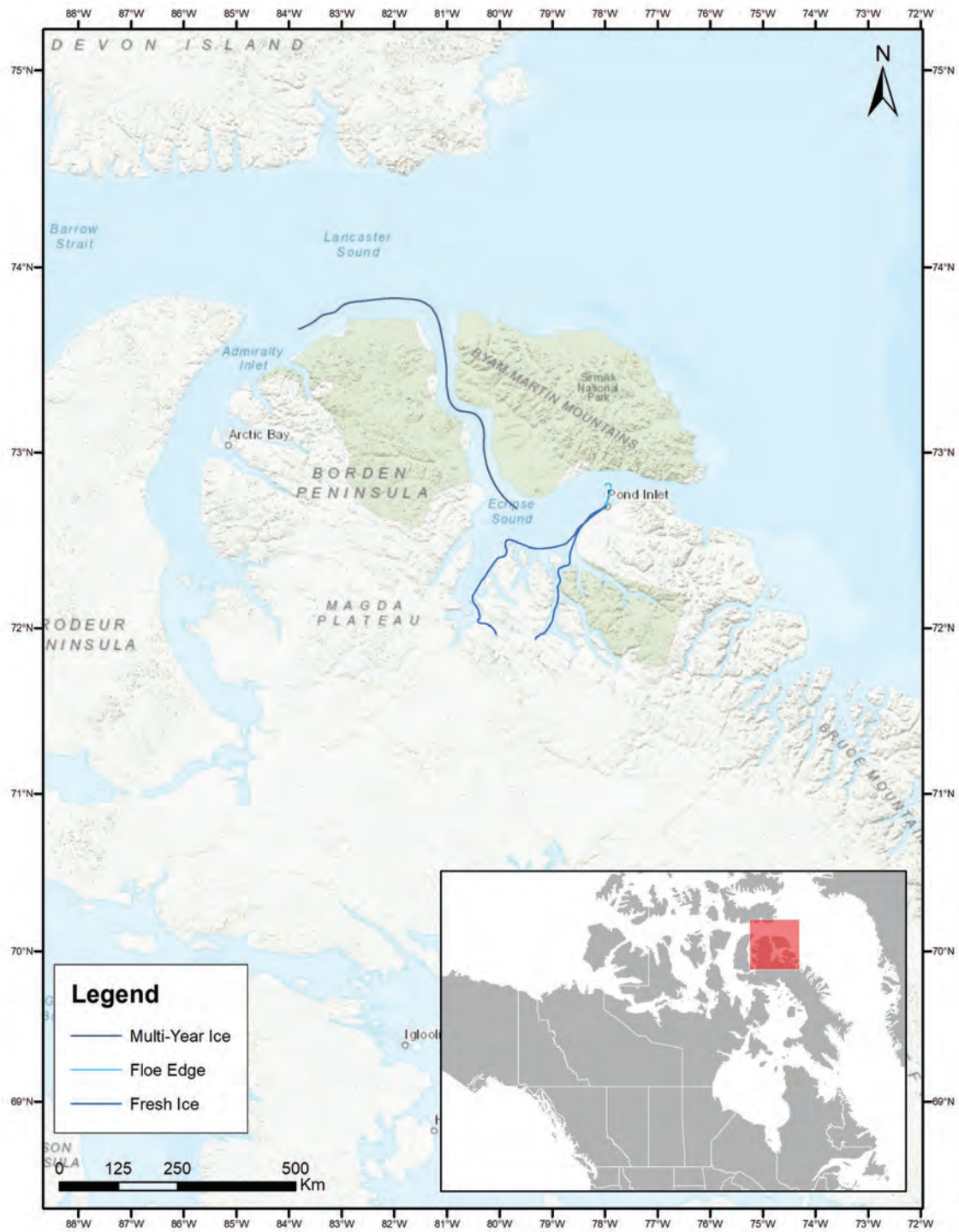


Figure 15. Location of significant marine features around the time of sea ice freeze-up



POTENTIAL IMPACT OF MARINE VESSELS

Vessels travelling through the Low Impact Shipping Corridors may impact the ecology and environment (Table 1), hunting (Table 2), economics (Table 3), community members' health (Table 4), and Inuit culture and self-sufficiency (Table 5).

Table 1. Potential impact of marine vessels using the Low Impact Shipping Corridors on ecology and the environment

POTENTIAL IMPACT OF MARINE VESSELS	WHEN IT MAY HAPPEN
Seal denning areas on sea ice may be destroyed as ships and icebreakers break up sea ice during voyages.	Winter and early Spring
Polar bears' food source will be compromised if seal denning areas on the sea ice are destroyed as ships and icebreakers break up ice during voyages.	Early Spring
Fish, animals, and marine mammals abandon their usual habitat and change their migratory routes when they are disturbed by passing and anchored vessels, scuba divers, remotely operated underwater vehicles, submarines, or helicopters.	Winter, early Spring, and Summer
Narwhals delay migrating until ship traffic has stopped for the season, leave too late, become trapped in sea ice at freeze-up, and die.	Fall
Ship waves disturb the shoreline more than natural waves do. Archaeological artifacts may need to be moved so that waves do not destroy them.	Summer and Fall
Fuel tankers transit the Northwest Passage. The community and Department of Fisheries and Oceans (DFO) are not prepared or equipped for oil spills or ship fuel leaks.	Summer, late Summer, Fall, Year-round. Special risk if spill is under sea ice in Winter, early Spring, and Spring





Table 2. Potential impact of marine vessels using the Low Impact Shipping Corridors on hunting

POTENTIAL IMPACT OF MARINE VESSELS	WHEN IT MAY HAPPEN
<p>Fish, animals, and marine mammals are abandoning their usual habitat due to disturbance by ship traffic thus are no longer found as often or at the usual time of year in traditional hunting grounds. Areas around Pond Inlet have already been negatively impacted by ships. There are fewer seals and narwhals than there used to be.</p> <p>Therefore:</p> <ul style="list-style-type: none"> • hunters have fewer successful hunts and must travel further and longer and in unfamiliar areas. Travelling farther increases the cost to hunters and families (e.g., fuel, buying groceries in place of country food); and • hunters are away from their families and paid employment longer. <p>Travelling further puts Inuit at risk travelling in areas they are not familiar with. Hunters are increasingly uncomfortable with their knowledge of sea ice conditions and travel routes.</p>	<p>Winter, Spring, Summer, and Fall until freeze-up</p>
<p>Ice conditions will be changed (more open water, more first year ice) by ships and icebreakers during freeze-up and break-up, and daily in the winter along the ship track. Ship traffic keeps the ocean from re-freezing or the water re-freezes into impassable rough ice.</p>	<p>Early Winter (at freeze-up) Spring (at break-up) Anytime there is frozen sea ice</p>
<p>Icebreakers or winter shipping will create open water that is wider than the length of qamutiit (sleds pulled behind snowmobiles). Qamutiit are too short to span the width of the open water so there is no way to drive snowmobiles across the open water. Snowmobile routes to hunting camps will become inaccessible.</p>	<p>Early Winter (at freeze-up) Spring (at break-up) Anytime there is frozen sea ice</p>
<p>When disturbed or broken off by ships or icebreakers, ice moves faster than normal, and ice behaviour becomes more unpredictable. This makes local ice knowledge less precise, and people may drown or be stranded on drifting ice as a result.</p>	<p>Spring (at break-up) and during floe edge visits</p>
<p>People may be stranded without equipment and/or stranded on the “wrong” side of open water. Equipment may fall into open water or drift away on ice floes. This is particularly a concern at the floe edge.</p>	<p>Year-round, but especially early Spring and Spring</p>
<p>Hunters may see animals they wish to harvest but will not be able to shoot because a ship is within 1.6 km (1 mile). They will have wait for the ship to be an adequate distance away, during which time the animal may move or leave the area. This may result in fewer successful harvests/hunts, making it difficult for Inuit to access country food.</p>	<p>Year-round (any time there are ships within 1.6 km)</p>
<p>Ship waves are bigger than natural waves and waves made by small boats. Hunters in typical (small) hunting boats cannot cross ship wake safely, thus must wait for waves to die down. Hunting boats can be washed away by ship waves and may be damaged when ship waves cause them to scrape along rocks or the shore.</p>	<p>Spring, Summer, and Fall until freeze-up</p>



Table 3. Potential financial impact of marine vessels using the Low Impact Shipping Corridors

POTENTIAL IMPACT OF MARINE VESSELS	WHEN IT MAY HAPPEN
Ice-breaking and ship traffic during sea ice break-up may cause snowmobiles, camping equipment, and other equipment parked on beaches and on sea ice to be lost. Losses will occur because the ice will move faster than it normally does during break-up.	Anytime there is frozen sea ice
Less or no revenue will be earned from skins, meat, and tusk sales if hunters cannot get to the floe edge to hunt seals and narwhal. The floe edge may become inaccessible or too dangerous to access because ice would move faster and be even more unpredictable if disturbed or broken by ship traffic versus when it breaks up naturally. Local ice knowledge would no longer apply, making trips to the floe edge too risky.	Spring and Summer
Less revenue will be earned from selling fish, meat, skins and traditional clothing made from wild skins if less fish and meat and fewer skins are available (due to fish and marine mammals abandoning their usual habitat resulting in fewer successful harvests/hunts). Less fish and meat, and fewer skins in the community may affect Inuit's ability to share, compromising this important Inuit societal value.	Year-round
Fuel costs to re-supply camps in summer by boat versus in winter by snowmobile pulling qamutik will increase if icebreakers and/or ship traffic keep the ocean from re-freezing or cause it to re-freeze into rough ice. Open water and/or rough ice would make snowmobile routes inaccessible which would make it necessary to re-supply in summer by boat. It takes 75 litres (20 gallons) of fuel to re-supply by boat versus 19 litres (5 gallons) by snowmobile pulling a qamutik.	Winter and early Spring
There are limited income opportunities created through employment on ships.	Mid-July to mid-October
Increased tourism (pleasure craft, cruise ships) may lead to additional income opportunities created through employment as local guides and outfitters, and as Parks Canada Agency patrollers in Sirmilik National Park.	Spring and Summer





Table 4. Potential impact of marine vessels using the Low Impact Shipping Corridors on community members' physical and mental health

POTENTIAL IMPACT OF MARINE VESSELS

Inuit need to eat many types of country food on a regular basis in order to stay physically healthy. Inuit need to eat country food to stay warm and compensate for the extreme cold of winter. Store-bought food does not provide the nutrients Inuit require and is very expensive. No fresh meat is available in stores.

Elders need country food and the nutrients it provides. If Elders go without country food for even a few days, their overall health may decline. The nutrition that country food provides is also beneficial if Elders have any health conditions.

Children prefer country food and refuse to eat store-bought food if they go too long without country food.

Inuit are genetically "wired" to eat country food in order to consume sufficient quantities of required nutrients, because there is little vegetation available naturally year-round in the Arctic.

Eating country food is not a preference, rather it is a need that is even stronger than a craving. Country food is soul food. It nourishes body and soul. Even if Inuit can afford store-bought food it does not satisfy Inuit the way that only country food can.

Hunters feel aching, irritable, short-tempered, miserable, edgy, and moody, and their train of thought and thought processes are negatively affected when they cannot hunt, share meat, and feed others. Families bear the brunt of hunters' frustration.





Table 5. Potential impact of marine vessels using the Low Impact Shipping Corridors on community members’ culture

POTENTIAL IMPACT OF MARINE VESSELS	WHEN IT MAY HAPPEN
<p>The corridors are located right in front of Pond Inlet and exactly in the community’s hunting grounds.</p> <ul style="list-style-type: none"> • Animals may experience hearing loss and changes in diet, habitat, and migration; • The traditional knowledge that Inuit base things on, may not be effective anymore; and • Hunters will have to relearn everything which may not be impossible but will be a challenge. <p>There is a need to keep Inuit tradition alive, but the environment is changing so much that traditional knowledge no longer applies as much as it used to.</p>	Year-round
<p>Money cannot replace the loss of Inuit’s ability to travel and hunt. Inuit are marine people 365 days per year. If shipping affects marine mammals Inuit cannot just walk 500 feet inland and have a different type of living. The lifestyle of Inuit would be heavily affected.</p>	Year-round
<p>Seals and seal hunting, sharing and eating meat, preparing and wearing skins is the core of Inuit culture. If shipping causes seals to move away from their usual habitat around Pond Inlet, a whole part of each person will go missing.</p>	Year-round
<p>Dependence on store-bought items is higher now that Inuit live in communities versus pre-1962 when most Inuit still lived out on the land. If animals and marine mammals move away from ships and fewer are harvested, then less meat, skin, and fur will be available, and Inuit will become even more dependent on store-bought items.</p>	Year-round
<p>If shipping disturbs family members’ ability to get to camps and hunt in traditional hunting grounds together, then family bonds will no longer be strengthened in camps, as families Inuit will stray away from one another.</p>	Spring and Summer
<p>If Inuit can continue to hunt, fish, and gather then people will have food and skins even if sealift and planes do not come.</p> <ul style="list-style-type: none"> • People can survive without southern comforts; • Handmade clothes made from wild skins and furs are less expensive to make but have great value because a lot of traditional knowledge, skill, labour, and pride are involved in making them; and • Handmade clothes are warmer than store-bought hand furs, material and clothing. <p>Purchased clothing is much more expensive than handmade and is unaffordable for some people.</p>	Year- round



MAPS OF RECOMMENDATIONS FOR THE LOW IMPACT SHIPPING CORRIDORS

Maps include:

- A preferred corridor
- Revised corridors
- Seasonal speed limits
- No-go zones
- No-anchoring zones
- No-icebreaking zones
- Restricted-use zones
- Areas to avoid



Figure 16. Recommendations for Low Impact Shipping Corridors

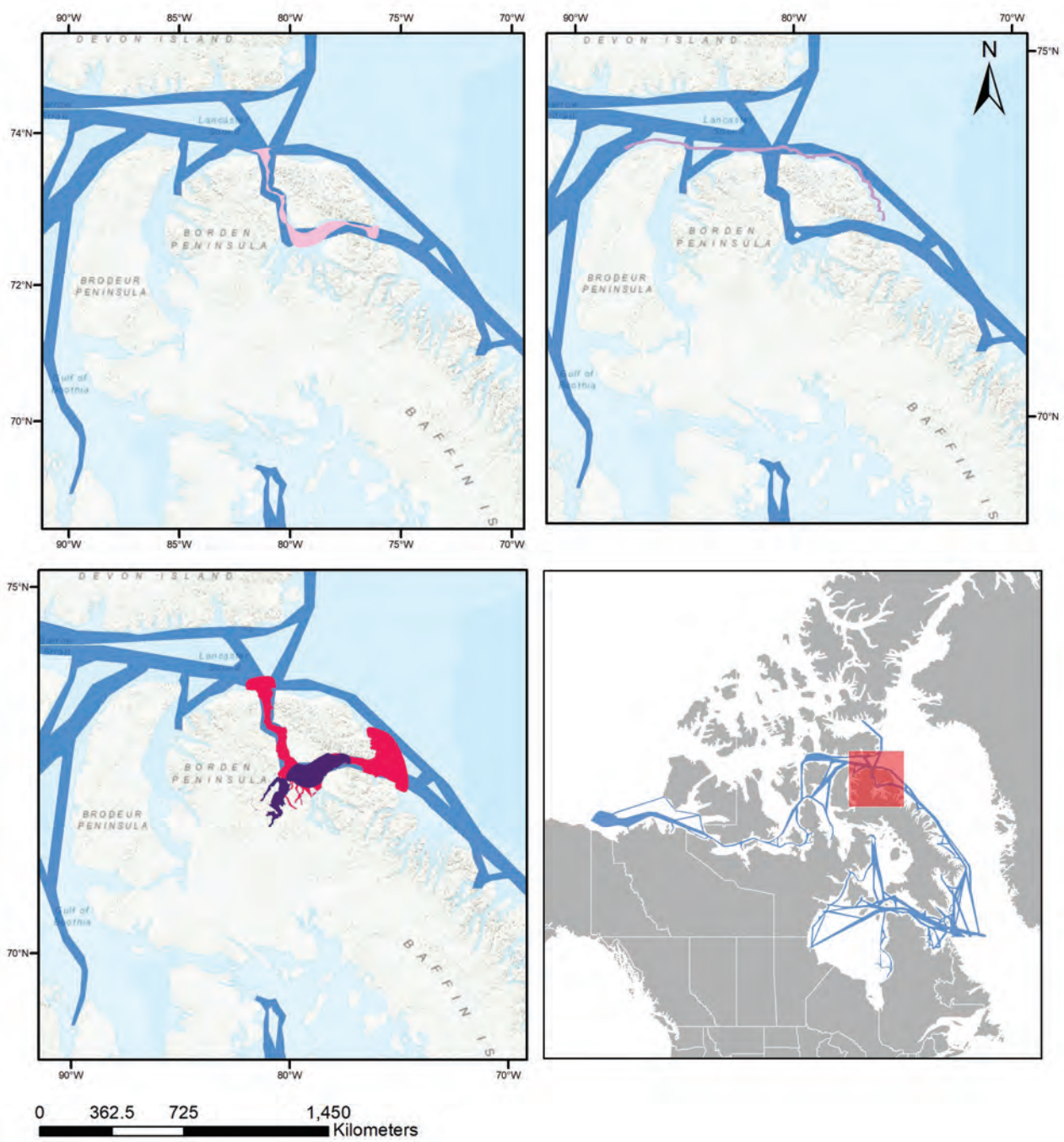
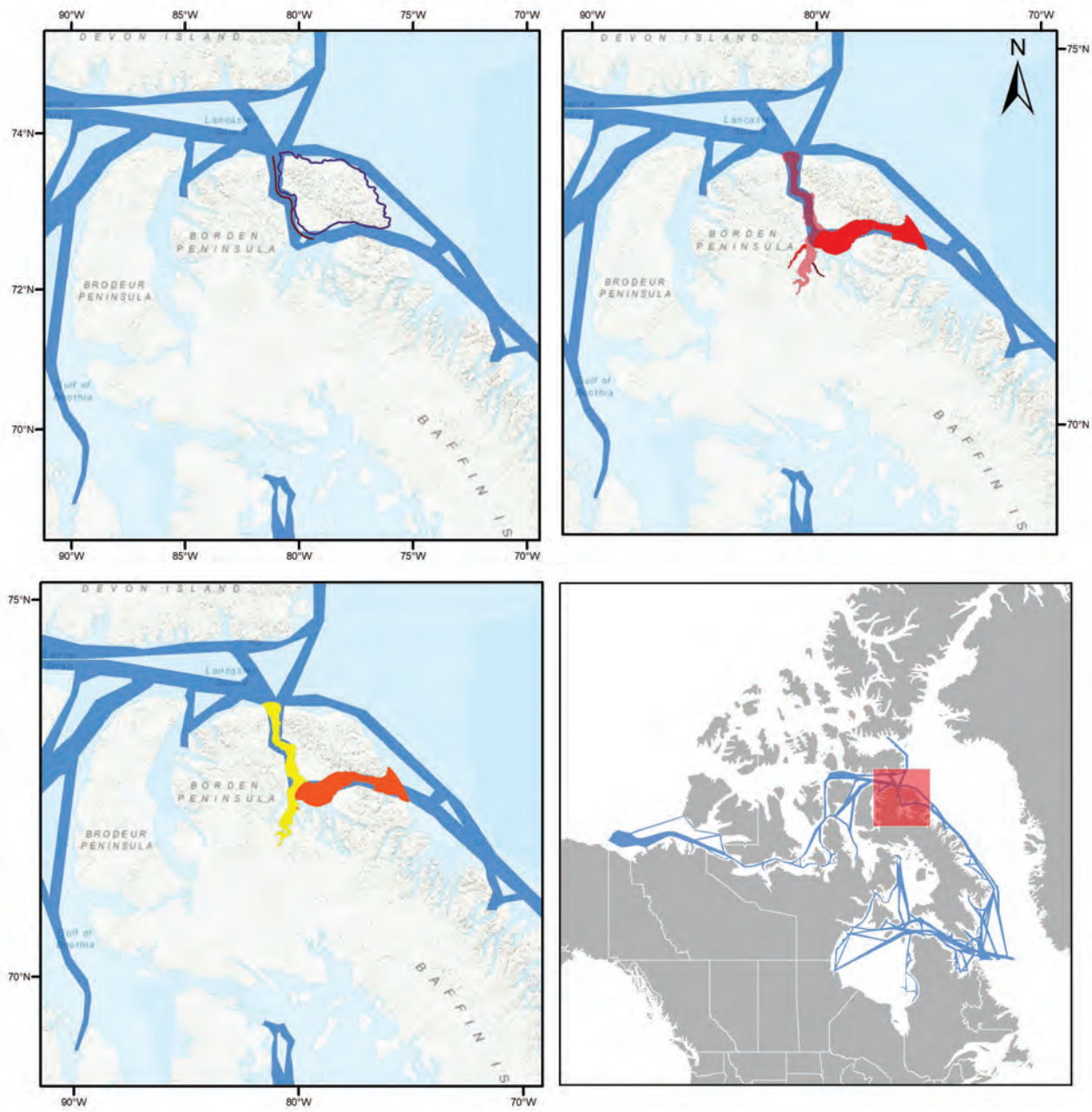


Figure 17. Recommendations for Low Impact Shipping Corridors



0 362.5 725 1,450 Kilometers

Legend

- Essential Services Only From Start of Freeze-up to End of Break-up
- Minimum 3.2 km From Migratory Bird Sanctuary
- No Anchoring Year Round
- Ice Breaking Only if Mine Ships Year Round
- No Icebreaking Year Round
- No Ships in Winter
- Potential Winter Shipping Route
- Low Impact Shipping Corridors

Figure 18. Recommendations for Low Impact Shipping Corridors

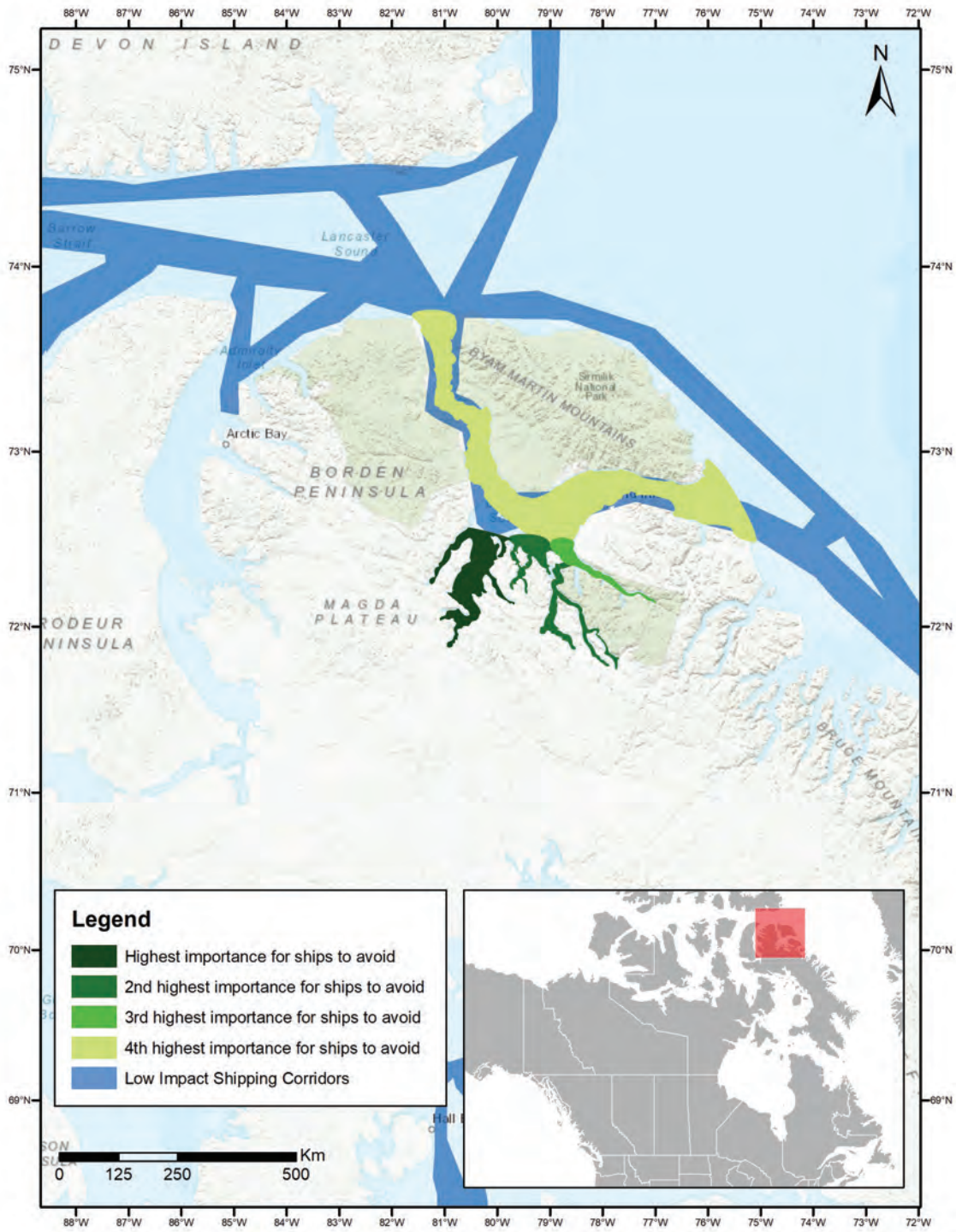


Figure 19. Recommendations for Low Impact Shipping Corridors

RECOMMENDATIONS FOR MANAGING SHIP TRAFFIC AND THE LOW IMPACT SHIPPING CORRIDORS

Need for enhanced governance, regulations, monitoring, communication, and capacity related to marine use areas

- “We cannot go inside a farm without approval of a farmer! This is our farm and our highway! And we cannot walk in the middle of the airstrip in Ottawa!” said one research participant in describing the need for regulations about use of and access to Nunavut land and marine areas and enforcement of them.
- Governance, regulations, monitoring, and enforcement of marine areas and ship traffic within and outside the Low Impact Shipping Corridors is needed. A patrolling system, similar to the system implemented in Greenland and Labrador, is needed in Nunavut and could be coordinated by Public Safety Canada. There is a need for beneficiaries to be onboard vessels to confirm compliance.
- Every non-local marine vessel should have an Automatic Identification System so that vessel itineraries can be monitored and enforced.
- Locally-based representatives are needed to whom community members can express concerns and complaints about land, water, ice, ships, and tourism.
- Community members do not know and wish to know which local organizations or levels of government have authority over the land and water and are able to enforce rules.
- Improved communication is needed between marine vessel operators including cruise ships, pleasure craft, Canadian Coast Guard, Royal Canadian Navy, and United States Navy Ships and the community. Communication should include itineraries, plans to anchor, and purpose of the voyage. Information should be shared via the Hamlet Council, Hunters and Trappers Organization, and the Visitors Centre who should then share it broadly in the community.
- The north as a whole and Pond Inlet in particular, lacks the human and physical capacity needed to respond appropriately to spills or accidents in marine areas.
- Inuit and Northerners should be and wish to be included on an on-going basis in the development and management of the Low Impact Shipping Corridors.





CONCLUSION

Pond Inlet has experienced the largest increase in marine vessel activity in Nunavut in recent decades.¹ At the same time, the Northwest Passage is receiving unprecedented international attention related to sovereignty, interest from tourism operators, and the immense cost savings that a commercially navigable Arctic route would present. The marine areas that are most significant to Pond Inlet community members' subsistence harvesting and livelihood activities, particularly Milne Inlet and Eclipse Sound, form the eastern entrance of the Northwest Passage – exactly where there have been significant increases in ship traffic. Moreover, ships travelling to and from the nearby Baffinland Mary River Project mine site and Europe, pass through Milne Inlet and directly past the hamlet of Pond Inlet, began in July 2015. Given community members' concerns about this attention and increase in marine vessel activity, and its implications for the ecology, environment,

and Inuit way of life, the perspectives of Pond Inlet community members and all communities, should be a fundamental consideration during the implementation and management of Low Impact Shipping Corridors. The consequences of a marine incident would have deep, lasting, and potentially irreversible ecological, environmental, and cultural impacts. Combining scientific and Inuit knowledge will provide the most effective course for pro-active vessel management through a corridors approach. Infusing Inuit and Northerners' voices in the continued development of Low Impact Shipping Corridors is critical to ensuring safe marine transportation near Pond Inlet and throughout the Canadian Arctic.

¹ Dawson J., Pizzolato, L., Howell, S.E.L., Copland, L., & Johnston, M.E. 2018. Temporal and Spatial Patterns of Ship Traffic in the Canadian Arctic from 1990 to 2015. *Arctic 71*(1). 15-26. <https://doi.org/10.14430/arctic4698>.

