ARCTIC CORRIDORS and NORTHERN VOICES

GOVERNING MARINE TRANSPORTATION IN THE CANADIAN ARCTIC

GJOA HAVEN, NUNAVUT

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Available at: www.arcticcorridors.ca and www.espg.ca

PARTICIPANT BIOGRAPHIES
(IN ALPHABETICAL ORDER)

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PAUL ELEEHETOOK is a Gjoa Haven elder who spent most of his life actively hunting and harvesting.

SARAH KAMIMMALIK was born and raised in Gjoa Haven. She is a single mother of 6 and has 2 grandchildren. She is the Manager of Transportation and Planning for the Department of ED and T, volunteers with the Fire Department, and is 100% pure Inuk.

JACOB KEANIK is a husband, and father of 6 children. He is an active hunter, president/chair of the Nattilik Heritage Society, and the Public Works Director for the Hamlet of Gjoa Haven.

BETTY KOGVIK is a mother and grandmother. She enjoys helping people who need help, and working with youth, and is involved with the Junior Canadian Rangers. Betty works at the continuing care facility in Gjoa Haven.

SAMMY KOGVIK is a father, grandfather, and uncle. He is an active hunter, Canadian Ranger, volunteer firefighter, search and rescue volunteer, small engine repair mechanic, likes working with youth, and is involved with Junior Canadian Rangers.

MARTHA POOYATAK is a mother and grandmother, who enjoys spending time on the land in the sunnier months of the year.

JAMES QITSUALIK is an active hunter and board member of the Gjoa Haven Hunters and Trappers Organization.
EXECUTIVE SUMMARY

Arctic ship traffic has increased by more than 75% since 2005. Most of that increase happened in Nunavut waters. Corridors have been mapped in the Arctic Ocean as part of the Low Impact Shipping Corridors Initiative co-led by Transport Canada, the Canadian Coast Guard, and Canadian Hydrographic Service. Low impact shipping corridors are the current framework for governing shipping in the Canadian Arctic. The intent of the low impact shipping corridors is to reduce the likelihood of marine incidents by providing predictable levels of service to mariners transiting the corridors. Identification of Inuit and northerners’ perspectives on the potential impacts of marine vessels on marine areas used for cultural and livelihood activities, and on community members, and the inclusion of Inuit and northerners’ voices in the development of potential management strategies for the low impact shipping corridors and Arctic marine transportation are key considerations in the current prioritization of the corridors.

This report reflects opinions gathered through participatory mapping, focus group discussions, and interviews with Gjoa Haven community members who were identified by local organizations as key knowledge holders. Data analysis was aimed at understanding Inuit and northerners’ perspectives on the potential impacts of marine transportation on local marine use areas and community members, and 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 potential impacts of marine vessels on identified marine use areas and community members; and
- provide recommendations 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
  - increased incidence of dangerous ice conditions for local travel
  - potential food insecurity and increased dependence on store-bought food
  - cultural artifacts illegally moved
- Disruption of sea ice formation and break-up by icebreakers and marine vessels is especially disruptive to Inuit and northerners’ ability to use local travel routes, and travel, hunt, and camp safely on ice.
- Existing search and rescue and oil/fuel spills response capacity is not sufficient.

RECOMMENDATIONS INCLUDE:

- reduced-speed zones, and no-icebreaking zones
- narrower corridors located minimum distances from shores
- key areas where new or improved charting is needed
- monitoring and enforcement of ship traffic within and outside the low impact shipping corridors
- improved communication between 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

Arctic ship traffic has increased by more than 75% since 2005. Most of that increase happened in Nunavut waters. Corridors have been mapped in the Arctic Ocean as part of the Low Impact Shipping Corridors Initiative co-led by Transport Canada, the Canadian Coast Guard, and Canadian Hydrographic Service (Figure 1). The Low Impact Shipping Corridors Initiative is the current framework for governing marine transportation in the Canadian Arctic. The goal of the initiative is to reduce the likelihood of shipping incidents. Inuit and northerners’ perspectives on the potential impacts of shipping on marine areas used for cultural and livelihood activities, and potential management strategies for the low impact shipping corridors and Arctic marine vessels are key considerations in the current prioritization of the corridors.

This report documents Gjoa Haven community members’ knowledge and extensive year-round use of important marine areas (ecological, socio-cultural, archaeological, and travel routes), the potential impacts of marine vessels on those areas and on community members, and recommendations for management of the low impact shipping corridors near their community. This report is one of several community reports which accompanies a main report.

Figure 1. Low impact shipping corridors
Figure 2. Low impact shipping corridors near Gjoa Haven, Nunavut
In the Canadian Arctic, when comparing the average number of kilometres of shipping activity from 1990-2000 to the average from 2011-2015, shipping increases have been predominantly focused in the eastern Arctic, particularly around SW Baffin Bay (e.g., Pond Inlet, Qikiqtarjuaq, Iqaluit) in the Queen Maud Gulf area (e.g., Cambridge Bay and Gjoa Haven), and NW 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, Arctic Bay, Eureka). Gjoa Haven experienced a 2,073 km increase in shipping from 2011-2015 compared to 1990-2000 - the second largest increase in the Kitikmeot region (Figure 4).

Figure 3. Change in shipping activity (km) in Canadian Arctic: 1990-2000 average to 2011-2015
There are 6 main seasons in Gjoa Haven, 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:

<table>
<thead>
<tr>
<th>SEASON</th>
<th>MONTHS IN WHICH IT HAPPENS</th>
<th>OCEAN CONDITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>START OF SPRING</td>
<td>APRIL</td>
<td>FROZEN</td>
</tr>
<tr>
<td>SPRING TO EARLY SUMMER</td>
<td>MAY AND JUNE</td>
<td>BREAK-UP (IN JUNE)</td>
</tr>
<tr>
<td>SUMMER</td>
<td>JULY TO BEGINNING OF AUGUST</td>
<td>OPEN WATER</td>
</tr>
<tr>
<td>LATE SUMMER</td>
<td>AUGUST</td>
<td>OPEN WATER</td>
</tr>
<tr>
<td>EARLY FALL TO LATE FALL</td>
<td>SEPTEMBER AND OCTOBER</td>
<td>FREEZE-UP (IN OCTOBER)</td>
</tr>
<tr>
<td>WINTER</td>
<td>NOVEMBER THROUGH MARCH</td>
<td>FROZEN</td>
</tr>
</tbody>
</table>
Figure 5. Seasonal cycle of harvesting activities in and near Gjoa Haven, Nunavut.
MAPS OF MARINE USE AREAS AND RECOMMENDATIONS FOR THE LOW IMPACT SHIPPING CORRIDORS

MAPS INCLUDE:

1. Location and behavioral activities of animals, marine mammals, fish, and birds;
2. Location of community members’ activities, camps, cabins, and local travel routes;
3. Significant marine features such as dangerous areas and summer ice; and
4. Ship no-go zones, no-icebreaking zones, restricted-use zones, reduced-speed zones, and revised low impact shipping corridors.

Maps will be available at www.arcticcorridors.ca, and in Gjoa Haven at the Hunters and Trappers Organization, Qiqirtaq Ilihakvik High School, and Junior Rangers.

Figure 6. Location of community members’ activities around time of sea-ice break-up
Figure 7. Location and behavioral activities of wildlife around time of sea-ice break-up

Figure 8. Location of significant marine features around time of sea ice-break-up
Figure 9. Location of community members’ activities during open water

Figure 10. Location and behavioral activities of wildlife during open water
Figure 11. Location of significant marine features during open water

Figure 12. Location of community members’ activities around time of sea-ice freeze-up
Figure 13. Location and behavioral activities of wildlife around time of sea-ice freeze-up

Figure 14. Location of significant marine features around time of sea-ice freeze-up
Figure 15. Location of community members’ activities when ocean is frozen

Figure 16. Location and behavioral activities of wildlife when ocean is frozen
Figure 17. Location of significant marine attributes when ocean is frozen
## 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), culture, security, and well-being (Table 4).

### TABLE 1. ECOLOGY AND ENVIRONMENT – POTENTIAL IMPACT OF MARINE VESSELS TRANSITING THE LOW IMPACT SHIPPING CORRIDORS

<table>
<thead>
<tr>
<th>POTENTIAL IMPACT OF MARINE VESSELS</th>
<th>WHEN IT MAY HAPPEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polar bear dens on sea ice will be destroyed if ships and icebreakers break up ice.</td>
<td>WINTER</td>
</tr>
<tr>
<td>Open water will disrupt caribou migration route if ships and icebreakers break up ice. Caribou will not use bridges across open water as previously proposed.</td>
<td>WINTER</td>
</tr>
<tr>
<td>Peel Sound is a calving ground, nursery, and molting area for 5000 beluga whales, is the narwhal capital of Nunavut (according to the Department of Fisheries and Oceans; DFO), and has a high concentration of seals and whales.</td>
<td>SPRING TO EARLY SUMMER, SUMMER</td>
</tr>
<tr>
<td>No winter shipping or ice-breaking especially not through Simpson Strait or Peel Sound. Winter shipping means breaking the ice which will disturb animals.</td>
<td>WINTER</td>
</tr>
<tr>
<td>There is no good place for an oil spill but Peel Sound is particularly sensitive because it is very rich in marine mammals. A lot of animals would be affected. A lot of people rely heavily on country food every day. It would have a big impact.</td>
<td>YEAR-ROUND</td>
</tr>
<tr>
<td>Sometimes whales follow ships to Gjoa Haven and Taloyoak. There were never narwhal and killer whales in Cambridge Bay before but due to so much shipping there, narwhals followed ships into the area and killer whales followed the narwhal and now there are narwhal and killer whales there.</td>
<td>SUMMER, LATE SUMMER, FALL</td>
</tr>
<tr>
<td>Marine mammals spend time near reefs, shallow areas, and the shore. They are not impacted much by ships since ships are mostly in deeper water mid-sea.</td>
<td>SUMMER, LATE SUMMER, FALL</td>
</tr>
<tr>
<td>There are still seals and fish coming around because ships do not come by every day, but it would be scary if shipping were to become an everyday thing.</td>
<td>SUMMER, LATE SUMMER, FALL</td>
</tr>
<tr>
<td>Dredging to accommodate larger ships may impact fish and marine mammal habitat.</td>
<td>YEAR-ROUND</td>
</tr>
<tr>
<td>Ship size is likely to increase in the future, and larger ships are noisier. Noise travels very far through water. Marine mammals will move and shift away from ship noise.</td>
<td>YEAR-ROUND</td>
</tr>
<tr>
<td>Caribou, polar bear, grizzly bear and wolf migratory routes, and caribou calving grounds, have changed due to mining exploration camp noise and heavy traffic. Ship noise and traffic may cause the same changes. Studies investigating this are needed.</td>
<td>UNKNOWN AS STUDIES ARE NEEDED</td>
</tr>
<tr>
<td>Noise from seismic blasting interferes with narwhal, beluga, and seals’ ability to navigate because they use sound to navigate. The blast can knock them unconscious.</td>
<td>SUMMER, LATE SUMMER, FALL</td>
</tr>
<tr>
<td>Sonar may cause marine wildlife to behave abnormally. Whales beached themselves after sonar was used during military exercises elsewhere in Nunavut.</td>
<td>SUMMER, LATE SUMMER, FALL</td>
</tr>
<tr>
<td>Charting is needed so tankers will not hit bottom and rip open and spill oil or fuel.</td>
<td>YEAR-ROUND</td>
</tr>
<tr>
<td>30 to 40 fish used to be caught in nets in one night. Over the past two years only 2 or 3 are caught in one night. Do not know if it is because of the high number of ships.</td>
<td>YEAR-ROUND</td>
</tr>
<tr>
<td>Only recently oval or round patches of yellow have been seen on the snow, similar to when one sprinkles a colour on snow. Do not know if it is caused by ships.</td>
<td>WHEN THERE IS SNOW</td>
</tr>
<tr>
<td>Deformed fish with big scars, missing fins, and lumps or white spots in the meat have been seen. Caribou on King William Island have little white spots in the meat. It is hurtful to see the spots. Gjoa Haven people do not know if meat with spots should be eaten so they eat it cooked, and not raw as preferred. There are no spots in caribou found near McGillivray Bay.</td>
<td>YEAR-ROUND</td>
</tr>
</tbody>
</table>
**TABLE 2. HUNTING – POTENTIAL IMPACT OF MARINE VESSELS TRANSITING THE LOW IMPACT SHIPPING CORRIDORS**

<table>
<thead>
<tr>
<th>POTENTIAL IMPACT OF MARINE VESSELS</th>
<th>WHEN IT MAY HAPPEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inuit hunt along the shore and not out in the middle where it is really deep where ships are, because there is nothing to hunt out there. So Gjoa Haven people are not impacted much by ships. They only interact with cruise ships in the community and with other ships during emergencies. &quot;When I first looked at those corridors I silently agreed with them right off the bat because we're not really in that area where the corridors are&quot; (Quote: Gjoa Haven resident).</td>
<td>SUMMER, LATE SUMMER, FALL</td>
</tr>
<tr>
<td>Peel Sound is a highly sensitive area of the Inuit ecosystem for people from Gjoa Haven, Taloyoak, and Resolute. There are no narwhal or whales near Gjoa Haven due to low ocean salinity. Hunters travel over 275 miles to Peel Sound. It is the only place Gjoa Haven people can harvest whales.</td>
<td>SUMMER</td>
</tr>
<tr>
<td>Simpson Strait is Gjoa Haven people's only route to the main seal and caribou hunting grounds in the islands south-west of Gjoa Haven. This is the area where ice-breaking at any time, winter shipping, a grounding, an oil spill, or a fuel leak would affect Gjoa Haven people the most. Going around King William Island is too expensive (buy more gas) and takes too long.</td>
<td>YEAR-ROUND</td>
</tr>
<tr>
<td>All-season shipping with ice-breaking would interfere with people who are out on the land or hunting or trapping. People would have to wait for days for open water to freeze solidly enough to cross safely and be able to go out or get home.</td>
<td>EARLY SPRING, SPRING, FALL, WINTER</td>
</tr>
<tr>
<td>Strongly prefer no winter shipping or ice-breaking for the safety of Gjoa Haven people (military is the only exception). Winter shipping means breaking the ice that residents travel over daily. For safety in the darkest months, people mostly do day trips (no overnights) and harvest where they can still see the community. Not just the average hunter can go anywhere. Only experienced hunters who know the area or the land can access certain areas. The further one goes, the more dangerous it gets to a certain extent.</td>
<td>EARLY SPRING, SPRING, FALL, WINTER</td>
</tr>
<tr>
<td>The fuel barge blocks the inlet that is a main entrance to town and main parking area making the break-water area inaccessible unless boaters go over the fuel line.</td>
<td>SUMMER, LATE SUMMER, FALL</td>
</tr>
<tr>
<td>Local boaters run into the partly-submerged fuel pipe between the fuel barge and land. Boaters do not know it is there. There are no lights or obvious markers on it to make it visible especially in the dark. Boaters often return home in the dark when the ocean is calmer. It would be a major catastrophe if a boat hit and broke the fuel pipe.</td>
<td>SUMMER, LATE SUMMER, FALL</td>
</tr>
<tr>
<td>On a completely flat day travelling in a small boat at high speed, crossing a ship’s wake can cause everything to fall out of the cabinets on the small boat.</td>
<td>SUMMER, LATE SUMMER, FALL</td>
</tr>
</tbody>
</table>
Gjoa Haven people do not want to increase shipping costs but have serious concerns about ships going through Peel Sound. Shipping companies have said there will be an added cost if they travel along the far side of Prince of Wales Island instead, because it will take minimum 5 to 6 hours longer. Also, ice conditions are safer in Peel Sound. Gjoa Haven people have repeatedly said “no ships through Peel Sound” but the government has not listened and ships go there anyway. Gjoa Haven people tolerate ships in Peel Sound only because they have no choice about it, due to the added cost of taking the longer route.

Search and rescue of small vessel operators costs Canadian tax-payers. Gjoa Haven people prefer ice-breakers escort ships elsewhere versus have to rescue ill-prepared visitors here.

Some community members have no issues with shipping because that is the only way Gjoa Haven people get southern food and supplies. A benefit of the low impact shipping corridors is that cargo can be shipped to communities in a timelier fashion. That is essential when stores get low on merchandise and groceries. Most importantly fuel is delivered by barge. There are lots of benefits to the low impact shipping corridors routes.

The smaller sealift that came into the bay and unloaded to trucks was better than the big ship that stays farther out and unloads to small boats that go back and forth for days. But maybe the larger ships are better because they carry more groceries for the stores.

Nunavut Fisheries and Marine Training Consortium provides training enabling Inuit in Nunavut to be licensed to work on research, Coast Guard, cargo, and cruise ships.

Employment opportunities include working as deckhands, un-loading sealift, and as Canadian Rangers to take pictures and report unauthorized boats to the military. Landing fees paid to the Hamlet Office pay for part-time employment as cultural demonstrators, performers, guides, security, and doing meal preparation. Artists earn income through art sales.

More Inuit could be employed as storytellers, guides, and observers on cruise ships. Adventure Canada wants to hire and train Inuit tour guides, bear monitors, and zodiac operators. Some Gjoa Haven people are trying to get more Inuit, especially young people, involved with cruise ships. Some people in Gjoa Haven are interested but few people are taking steps to become more involved.

Cruise ships take business away from local tour operators, hotels, restaurants etc. because cruise ships bring bulk amounts of tourists who stop briefly and do not spend money in the community. If not for cruise ships, tourists would stay longer and spend more money.

There are hunting areas further away that are rich in wildlife to harvest but usually just the closest areas are accessed since it is cheaper to get there (buy less gas). The distance one goes depends on how much gas you can afford and if you have the right equipment.
Some interactions with small craft operators are very positive, exciting experiences that include sharing stories, keeping in touch throughout their voyages, visiting each other’s camp/boat, and Gjoa Haven people gain equipment, supplies, and alcohol.

Some small craft operators invite young women from Gjoa Haven onboard, and look for or bring alcohol and drugs. Some are Hells Angels sailors or wanted by Interpol, or come in ill-equipped vessels and require rescuing. Improved security, monitoring and enforcement are needed. Public Safety Canada could co-ordinate this.

Ships coming to Gjoa Haven and causing damage is hurtful. Ships are tolerated because the community needs the supplies ships bring. Gjoa Haven people feel powerless because if asked “Is it okay if we go by here?” and answer “No”, the reply would be “Oh sorry, you aren’t going to get your stuff then”. But people want to say “no” to protect the Inuit ecosystem. (Quote: Gjoa Haven resident).

Few people have jobs and many people live on income support and/or social assistance. People run out of food because they cannot afford gas and equipment to go out to harvest country food. People can survive on store-bought food but have to pay for it. It is an added frustration that ships damage certain areas, which adds to existing concerns about food security and food safety. The thought of not having country meat anymore, is scary.

Cruise ships, the fuel barge, and supply ships do not announce their arrival dates and schedule changes. Thus, the community is often unprepared when they arrive (e.g., performers waiting at the community hall, no staff on hand to unload or pay the ship, do tasks and Gjoa Haven people are watched/photographed against their will while performing routine tasks in their yards).

To cause less disturbance, cruise ship passengers are encouraged to only visit communities because the land will not tell any stories but the people in communities will. Talking with community members provides opportunities to clarify cross-cultural misunderstandings (e.g., a seal that seems to be left to rot is actually dog food or is being fermented to improve its taste). Artifacts seen on the land are in communities too. Despite Nunavut law against moving artifacts, tourists and Gjoa Haven people take artifacts home.

It is recommended that if dredging is done to accommodate bigger ships, that no archaeological or historical sites, camping grounds, or cabins should be disturbed. Those places are where younger generations learn from older generations about preparing for the fall and understanding and respecting the land, water, and wildlife.

### TABLE 4. CULTURE, SECURITY AND WELL-BEING - POTENTIAL IMPACT OF MARINE VESSELS TRANSITING THE LOW IMPACT SHIPPING CORRIDORS

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<tr>
<th>Some interactions with small craft operators are very positive, exciting experiences that include sharing stories, keeping in touch throughout their voyages, visiting each other’s camp/boat, and Gjoa Haven people gain equipment, supplies, and alcohol.</th>
</tr>
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<td>Some small craft operators invite young women from Gjoa Haven onboard, and look for or bring alcohol and drugs. Some are Hells Angels sailors or wanted by Interpol, or come in ill-equipped vessels and require rescuing. Improved security, monitoring and enforcement are needed. Public Safety Canada could co-ordinate this.</td>
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</tr>
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<td>Few people have jobs and many people live on income support and/or social assistance. People run out of food because they cannot afford gas and equipment to go out to harvest country food. People can survive on store-bought food but have to pay for it. It is an added frustration that ships damage certain areas, which adds to existing concerns about food security and food safety. The thought of not having country meat anymore, is scary.</td>
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<td>Cruise ships, the fuel barge, and supply ships do not announce their arrival dates and schedule changes. Thus, the community is often unprepared when they arrive (e.g., performers waiting at the community hall, no staff on hand to unload or pay the ship, do tasks and Gjoa Haven people are watched/photographed against their will while performing routine tasks in their yards).</td>
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<td>It is recommended that if dredging is done to accommodate bigger ships, that no archaeological or historical sites, camping grounds, or cabins should be disturbed. Those places are where younger generations learn from older generations about preparing for the fall and understanding and respecting the land, water, and wildlife.</td>
</tr>
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</table>
RECOMMENDATIONS FOR MANAGING SHIP TRAFFIC USING THE LOW IMPACT SHIPPING CORRIDORS

MAPS OF RECOMMENDATIONS FOR LOW IMPACT SHIPPING CORRIDORS, AND EXISTING SENSITIVE AREAS

MAPS INCLUDE:

- no-go zones, no-icebreaking zones, restricted-use zones, reduced-speed zones, and revised low impact shipping corridors.

Maps will be available at www.arcticcorridors.ca, and in Gjoa Haven at the Hunters and Trappers Organization, Qiqirtaq Ilihakvik High School, and Junior Rangers.
Figure 18. Recommendations for low impact shipping corridors
Figure 19. Existing sensitive areas (reasons for recommendations made about low impact shipping corridors)
- Improved charting is needed particularly in Simpson Strait and locations identified in figure 18. Charting is needed in Queen Maud Gulf for alternate routes in heavy ice conditions.

- Strongly prefer no ships go in Peel Sound. Research is needed about ice conditions and the ecological sensitivity of waters west of Prince of Wales Island to determine if that area would be an appropriate revised low impact shipping corridors location.

- Ships are cautioned that in Bellot Strait there is a risk of icebergs surfacing from beneath ships.

- The well-travelled long-standing shipping routes are preferred routes, especially the barge route adjacent to Simpson Strait marked on chart 7083.

- Prefer that all vessels plan a route in the low impact shipping corridors, and maintain that route.

- Every vessel should have and use depth monitoring equipment to avoid grounding.

- Recommend further testing of cargo blimps so supplies can be shipped by air and not by water.

- Security is a big issue. Public Safety Canada could co-ordinate increased security. Community members do not know and wish to know:
  o if the current federal government will be as focused on security in the north as the previous (Conservative) government was; and
  o if military presence in the north should be increased for added security in Arctic waters.

- Community members do not know and wish to know:
  o if pleasure craft need permission to travel the Northwest Passage. If so, who grants permission?
  o the cause of the oval/ yellow marks on snow; and
  o if caribou meat and fish are safe to eat raw if there are little white spots in the meat.

- Improved communication is needed between marine vessel operators including fuel barge, sealift, cruise ships, pleasure craft and the community. Information to communicate includes presence of the fuel pipe, itineraries, schedule changes/cancellations, plans to anchor, and purpose of the voyage. Ideally communicate with the Hamlet Council, HTO, and Heritage Centre who would then alert the community in a timely fashion via radio, notices posted in town, and Facebook.

- Gjoa Haven lacks the capacity to respond to spills, accidents, and groundings in marine areas.

- The results of this study should be shared widely in the south and in other northern communities so Inuit and northerners’ perspectives can be understood.

- 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

The number of marine vessels in Canadian Arctic waters continues to grow. 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. Gjoa Haven has experienced one of the largest increases in marine vessel activity in Nunavut in recent decades. Moreover, the marine areas that are most significant to community members’ subsistence harvesting and livelihood activities, are located in the heart of the Northwest Passage – exactly where there has been significant increases in ship traffic. The recent discovery of the HMS Erebus and HMS Terror has drawn additional attention to Gjoa Haven and the waters surrounding it. Given community members’ concerns about this attention and growth, and its implications for the ecology, environment, and Inuit way of life, the perspectives of Gjoa Haven 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 approach 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 Gjoa Haven and throughout the Canadian Arctic.