British Columbia North Coast

Waterway Management Guidelines

October 2026

Contents

Contents 1
Introduction 2
Preamble 3
Section 1. Guidelines for All Vessels 3
1.1. Routing Guidelines 3
1.2. Speed Reduction Guidelines 5
1.3. Guidelines for Passing and Meeting 5
1.4. Wright Sound Special Operating Area (SOA) Guidelines 6
1.5. Communication guidelines 7
1.6. Guidelines in the event of mechanical or electrical breakdown 7
Section 2. Recommendations for Large Commercial Ships 8
2.1. Bulk and General Cargo Ships 8
2.2. Liquid Bulk Ships (including gas carriers) 9
2.3. Passenger Ships 9
Section 3. Recommendations for Tugs and Barges 10
Section 4. First Nation Areas of Concern 10
4.1. Gitga'at Area of Concern 11
Figure 1. Boundaries of Gitga'at Area of Concern 12
Gitga'at AOC Navigation Guidelines 13
Table 1. Gitga'at AOC Monthly Activities Summary 13
4.2. Gitxaala Area of Concern 14
Gitxaala AOC Navigation Guidelines 14
Table 3. Gitxaala AOC Monthly Activities Summary 14
Figure 2. Boundaries of Gitxaala Area of Concern 16
Appendix 1: Expected Nighttime Low-Tide Travel and Beach Harvest Dates/Times in Gitga'at AOC 2023/2024 ..... **Error! Bookmark not defined.**
Appendix 2: Mid-channel corridor 18
Appendix 3: Collision Regulations Rule 9 – Narrow Channels 25
Appendix 4: Implementation, Monitoring and Evaluation 27
Implementation 27
Monitoring & Evaluation 28
Appendix 5: Participant Endorsement 30

Introduction

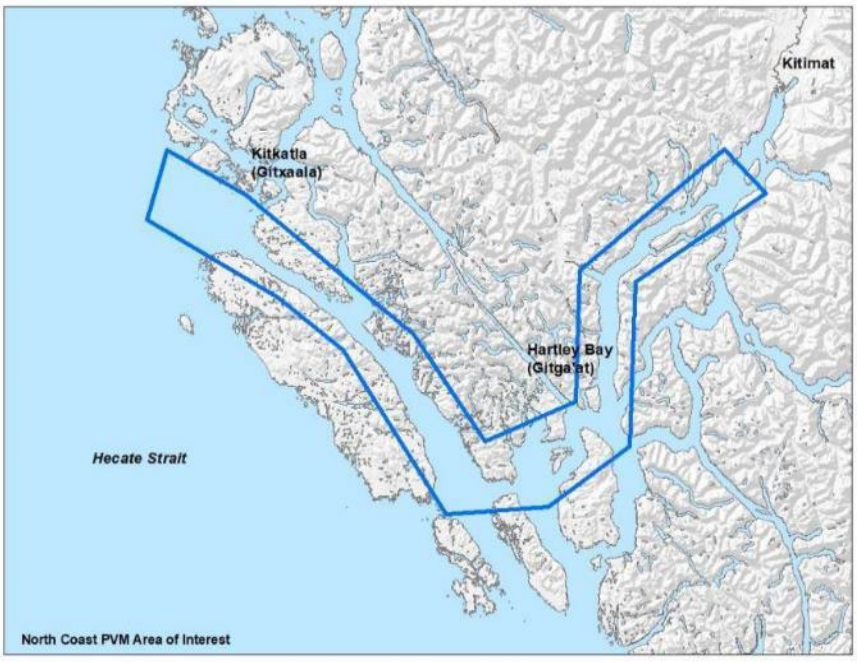
These Waterway Management Guidelines ("Guidelines") were developed through a collaborative, consensus-based process involving officials and senior representatives from the Gitga'at and Gitxaala First Nations, the Government of Canada, the British Columbia Coast Pilots and associated maritime authorities, commercial shipping industry associations, and other waterway stakeholders (the "North Coast PVM Pilot Project Committee").

The Guidelines have been endorsed by the agencies, organisations and companies participating in the process, a list of which appears in Appendix I. Their purpose is to agree on a voluntary process that improves safety by reducing conflict between First Nations marine use activities and commercial navigation in selected waterways on the North Coast.

The North Coast PVM Pilot Committee members have agreed to trial implementation of the Guidelines on a voluntary basis, with key elements of institutional support provided by Transport Canada, Canadian Coast and the Pacific Pilotage Authority, and the British Columbia Coast Pilots

The guidelines come into effect in September 1, 2022. After a period of 12 months, participants will review the guidelines and make adjustments to them as may be needed to improve their effectiveness.

The guidelines cover the area indicated on the following map:



Preamble

Nothing in these guidelines supersedes or alters the requirements of applicable Canadian and international laws and regulations, including the Collision Regulations. Furthermore, nothing in these guidelines prevents or restricts the master and pilot of a ship from taking or executing any decision which, in the master and pilot's professional judgement, is necessary to ensure the safety of life at sea and the protection of the marine environment.

These guidelines do not replace the ongoing duty of the Crown to consult and accommodate First Nations, as necessary.

Section 1. Guidelines for All Vessels

"All vessels" refers to piloted vessels and non-piloted Canadian and US domestic vessels, and Canadian and US fishing and recreational vessels.

Note: mariners navigating in the area covered by these guidelines should also be familiar with the Pacific Pilotage Authority "Pilotage Waiver Standard of Care" Implementation Guidelines (available at https://ppa.gc.ca/)

1.1. Routing Guidelines

Guideline
All channels on the route between Kitimat and Browning Entrance (Appendix 2): Recommended traffic corridors for separating deep sea traffic, domestic traffic and small craft operating in the area: a) Fishing, harvesting and recreational vessels may utilize the entire navigable channel. b) An *inshore safety zone* extending to between 3 and 6 cables (0.3-0.6 nm; 556-1,111 m) from the shoreline, depending on the width of the channel, is in place along the route. c) Deep-sea or domestic traffic will not utilize the *inshore safety zone*. d) Deep-sea vessels will mostly utilize a *mid-channel corridor* of between 3 and 15 cables (0.3-1.5 nm; 556-2780 m) wide. e) In some circumstances, deep-sea vessels may be required to navigate outside the *mid-channel corridor* (excluding the 3 to 6-cable inshore safety corridor) in order to: i) Comply with the Collision Regulations to avoid close quarters situations, such as meeting and passing other deep-sea vessels, and with other traffic including concentrations of local fishing vessels and recreational craft. In these instances, vessels may depart from the *mid-channel corridor* to ensure safe passing distances from other marine traffic.

ii) Avoid whales and other marine mammals.
iii) Respond to set, drift and swept path issues due to high winds and prevailing environmental conditions in the area.
iv) Take into account maneuverability and characteristics of the vessel when altering course onto a new heading.

f) Piloted gas carriers will utilize the *mid-channel corridor* throughout the majority of their transits due to tug escorts and recovery distances.
g) Non-piloted Canadian and US vessels will mostly utilize the *mid-channel corridor* when no deep-sea vessels are present. When deep-sea vessels are present, depending on the channel width and the prevailing circumstances and conditions, non-piloted Canadian and US vessels will navigate between the recommended *mid-channel corridor* and the 3 to 6-cable *inshore safety zone*.
h) In the *inshore safety zone* wash and wake are to be minimized. This zone is to be kept clear and safe for fishing, harvesting, or recreation.
i) NOTE: While fishing may be undertaken in the *mid-channel corridor*, Collision Regulations Rule 9 for Narrow Channels (see Appendix 2) applies such that fishing activity must not impede the passage of any other vessel navigating within a narrow channel or fairway.

Douglas Channel - Emilia Island (Appendix 2, image 13):
Single lane traffic (both directions) for piloted gas carriers. Piloted vessels should avoid meeting or overtaking gas carriers from Point Ashton to approximately Paisley Point due to narrowing of the navigable channel (3 miles).

Lewis Passage (Appendix 2, image 8):
a) Abeam Plover Point to abeam Blackrock Point - single lane traffic in both directions for piloted gas carriers. Piloted deep-sea vessels should avoid meeting or overtaking gas carriers (5 nm).
b) If required, a deep-sea vessel under 200m may utilize Cridge Passage as an alternative.

Otter Channe (Appendix 2, image 7):
Single lane traffic in both directions for piloted gas carriers. Piloted deep-sea vessels should avoid meeting or overtaking gas carriers between Fanny Point and Paige Point (2 miles).

Principe Channe (Appendix 2, images 3&4):
Wheeler to Dark Island and Whalen to Keswar Point - Single lane traffic in both directions for piloted gas carriers. Piloted deep sea vessels should avoid meeting or overtaking gas carriers (2.5 miles and 3 miles). Refer to Figure 2.

1.2. Speed Reduction Guidelines

Guideline
All channels on the route between Kitimat and Browning Entrance (see Appendix 2): Heavy fishing activity. a) Speed to be reduced if large concentrations of fishing vessels are in the area or whales are present. b) Wash and wake minimized when food harvesting is taking place in the area. **NOTE:** When possible vessels should avoid transiting through an area identified as Low Water Food Harvesting and are directed to Table 2 in Section 4 and the Pacific Pilotage Authority website (https://www.ppa.gc.ca/) for specific times.

1.3. Guidelines for Passing and Meeting

Guideline
All vessels must comply with the Canadian Modifications to Rule 9 (Narrow Channels) of the International Regulations for the Prevention of Collisions at Sea. Excerpts from the Regulations are included in Appendix 1. *Douglas Channel - Emilia Island (Appendix 2, image 13):* No passing for deep-sea vessels in the single lane traffic area in the vicinity of Emilia Island. *Lewis Passage (Appendix 2, image 8):* a) No passing for gas carriers in the single lane traffic area. b) Overtaking of piloted deep-sea vessels allowed if no opposing traffic as per Collision Regulations c) If required a deep-sea vessel under 200m could utilize Cridge Passage as an alternative *Otter Channel (Appendix 2, image 7):* a) No passing for gas carriers in the single lane traffic area in Otter Channel. b) Overtaking of piloted deep-sea vessels allowed if no opposing traffic as per the Collision Regulations. *Principe Channel (Appendix 2, images 3-6):* a) When practical and safe to do so, piloted vessels will make advanced arrangements to meet and pass in the southern, wider portion of Principe Channel and Nepean Sound. b) Portions of the channel are piloted single lane traffic (refer to section 1).

c) No passing for gas carriers in the single lane traffic areas
d) Piloted Two-Way Traffic
e) No gas carriers meeting in the piloted two-way traffic areas
f) Piloted non-gas carriers can pass gas carriers
g) Overtaking of piloted deep-sea vessels allowed if no opposing traffic as per Collision Regulations.

1.4. Wright Sound Special Operating Area (SOA) Guidelines

Guideline

A voluntary non-regulated Special Operating Area (*Appendix 2, image 9*) is in place due to:

- Confluence of traffic from five channels entering Wright Sound.
- The presence of whales, especially humpback whales.
- The presence of small craft from the local communities for fishing and harvesting.
- The likelihood of the local community harvesting on the beaches in the area.

Routing, speed, passing and meeting:

a) Wash and wake are to be minimized.
b) Speed is restricted to 8-10 knots through the SOA for tethered escorted energy vessels.
c) Deep sea vessels should plan their transit to avoid meeting piloted gas carriers transiting in the SOA.
d) *Black Fly Point* – there is an increased risk of collision at the turn due to the confluence the channels into the area. Piloted deep-sea vessels will avoid entering the SOA until a gas carrier or deep sea vessel has steadied up on its
next course after completing the required turn.
e) Overtaking should only occur when there is no opposing piloted deep sea traffic.

Development of guidance for the SOA is on-going and additional considerations may be included once the guidelines are implemented.

1.5. Communication guidelines

Guideline

a) All communications on the bridge of piloted vessels – as they relate to the navigation of the vessel – are to be conducted in English.
b) All agreements on passing or overtaking arrangements should be made on Channel 11 (the designated VTS channel). Cell phones are *not* to be utilized on the bridge of a vessel under pilotage unless prior agreement is made with the bridge team.
c) Marine Communication and Traffic Services (MCTS) will advise traffic in the area of the need for a reduced wash and wake due to community fishing and harvesting or whales in the area, as reported by communities.

Douglas Channel:

a) Inbound and outbound vessels to make a Sécurité call at Gertrude Point.
b) Vessels southbound to make a Securité Call 3 miles north of Hartley Bay.
c) MCTS Call-in Points (CIPs)
    i) Official CIP Emilia Island
    ii) Official CIP Money Point

Squally Channel:

Inbound and outbound vessels to make a Sécurité call approaching Blackrock Point.

Nepean Sound:

MCTS will request that vessels provide an ETA for Fleishman Point and call-in Fleishman Point.

Principe Channel:

Call-in points:

a. White Rocks – ETA Money Point and Otter Pass
b. Seal Rocks
c. Butterworth Rocks

1.6. Guidelines in the event of mechanical or electrical breakdown

Guideline

a) All equipment failures that affect the safe navigation of the vessel, such as a defect, deficiency, or mechanical breakdown, should be reported promptly to MCTS in accordance with regulatory reporting requirements. In the event of an emergency, the master or pilot is expected to take any action required by Canadian and international laws, and to execute decisions that are necessary, in his/her professional judgment, to ensure the safety of life at sea and the protection of the

marine environment should initially be reported to MCTS in accordance with regulatory reporting requirements, so that accurate records can be kept.

b) Further to (1) above, federal partners will make best efforts to ensure the appropriate First Nation(s) is informed of the situation as soon as is practicable.

c) Vessels under pilotage with a history of critical breakdowns may be refused pilotage services through this area.

Section 2. Recommendations for Large Commercial Ships

Recommendations contained in this section have been developed by the Pacific Pilotage Authority and the British Columbia Coast Pilots under the Pacific Pilotage Authority's mandate to provide safe pilotage services in the areas covered by these guidelines.

2.1. Bulk and General Cargo Ships

Guideline

a) The maximum sized freighter for unrestricted operation is 300m Length Over All (LOA) x 50m beam.

b) A freighter over 300m LOA or 50m beam will, as per the PPA Navigational Risk Assessment (NRA) process:
   i) Be evaluated on a case by case basis by the Pacific Pilotage Authority (PPA) and the British Columbia Coast Pilots (BCCP) and be required to notify them at least 9 months in advance.
   ii) Provide as much information on the vessels particulars and maneuvering characteristics as is available.
   iii) Is likely be required to produce a model of the vessel compatible with the PPA/BCCP Pilotage Simulator for Training and Research (PSTAR) in order to run initial simulations through the area of passage prior to the new vessels' arrival on the coast.
   iv) Require 3-D current modeling (unless already available PSTAR) and will be to the cost of the proponent.
   v) Require the simulations to be facilitated by an independent 3rd party in conjunction with the BC Coast Pilots and will be to the cost of the proponent.
   vi) Will comply with the findings of the NRA

c) The Pacific Pilotage Authority may require a freighter over 300m LOA or 50m beam to undertake additional mitigation measures which could include the use tugs or other additional safety measures as a condition for the provision of safe pilotage services – when the above guidance under paragraph 2 a) to e) have not been met.

2.2. Liquid Bulk Ships (including gas carriers)

Guideline

a) The maximum size liquid bulk carrier for unrestricted operation is 180 m. According to the *Oil Tanker Moratorium Act* the maximum allowable cargo of crude oil is 12,500 metric tonnes.

b) A liquid bulk carrier over 180 m will, as per the PPA Navigational Risk Assessment (NRA) process:
   i) be evaluated on a case-by-case basis by the Pacific Pilotage Authority (PPA) and the British Columbia Coast Pilots (BCCP) and be required to notify them at least 9 months in advance of arrival;
   ii) provide as much information on the vessels' particulars and maneuvering characteristics as is available;
   iii) likely be required to produce a model of the vessel compatible with the PPA/BCCP Pilotage Simulator for Training and Research (PSTAR) in order to run initial simulations through the area of passage prior to the new vessels' arrival on the coast;
   iv) require 3-D current modeling (unless already available in the PPA/BCCP simulator) and will be to the cost of the proponent;
   v) require the simulations to be facilitated by an independent 3rd party in conjunction with the BC Coast Pilots and will be to the cost of the proponent, and
   vi) comply with the results of the NRA.

c) Liquid Bulk vessels over 180m in product (over 6,000 tonnes of petroleum-based cargo) will require a tethered escort with two pilots on the bridge in the following areas:
   i) Emilia Island – single lane traffic area.
   ii) Between a position two miles north of Hartley Bay in Douglas Channel through Wright Sound SOA, Lewis Passage and Otter Channel.

d) For all other areas the tug will remain in the vicinity but untethered.

2.3. Passenger Ships

Guideline

a) The maximum size passenger ship for unrestricted operation is 300m LOA x 50m beam.

b) A passenger ship over 300m or 50m beam will be required to follow the PPA/NRA process. These ships will:
   i) Be evaluated on a case-by-case basis by the Pacific Pilotage Authority (PPA) and the British Columbia Coast Pilots (BCCP) and be required to notify them at least 9 months in advance.
   ii) Provide as much information on the vessels' particulars and maneuvering characteristics as is available.

iii) Likely be required to produce a model of the vessel compatible with the PPA/BCCP PSTAR simulator in order to run initial simulations through the area of passage prior to the new vessels' arrival on the coast.
iv) Require 3-D current modeling (unless already available in the PPA/BCCP simulator) and will be to the cost of the proponent.
v) Require the simulations to be facilitated by an independent 3rd party in conjunction with the BC Coast Pilots and will be at the cost of the proponent.
vi) Required to adhere to the results of the NRA.

c. The Pacific Pilotage Authority may require a passenger ship over 300m LOA or 50m beam to use tugs or other additional safety measures as a condition for the provision of safe pilotage services when the above guidance under paragraph b) i - vi has not been met.

Section 3. Recommendations for Tugs and Barges

Guideline
Towing vessels and barges, including liquid bulk towing and ATB traffic: a) Towing vessels will generally navigate in the *mid-channel corridor*. b) Passing arrangements between opposing traffic are to be confirmed well in advance.

Section 4. First Nation Areas of Concern

First Nation Areas of Concern (AOC) exist between Kitimat and Browning Entrance via Douglas Channel, Wright Sound, Lewis Passage, Otter Channel, Nepean Sound and Principe Channel. Due to local conditions and activities, a higher level of care is required in these areas to ensure safe transits by local community users. Mariners should be mindful that numerous and important community activities occur year-round throughout the route between Kitimat and Browning Entrance. However, within this route, the level of activity is especially heightened in the First Nation AOCs described below. Additional First Nation AOCs may be identified when/if guidelines for other routes are developed.

The AOCs are characterized by heightened levels of the following activities:

a) Year-round presence of small craft from the local communities for fishing, harvesting and travel.
b) High levels of small vessel traffic at nighttime.
c) Seasonal increased small vessel traffic density between communities of Lach Klan (Kitkatla) and Hartley Bay and harvesting sites.

d) Occasional large numbers of small vessels travelling between the villages of Lach Klan (Kitkatla) and Hartley Bay and ceremonial sites.
e) Seasonal high ensity of commercial and non-commercial fishing vessels and fishing gear in the channel.
f) Seasonal high desnnsity of commercial seine vessels and nets.
g) The likelihood of small vessels anchored near the shoreline.
h) The likelihood of the local community harvesting along the beaches and shores in the area.
i) Vessel-based ecotourism.
j) High seasonal abundance of whales.

4.1. Gitga'at Area of Concern

A voluntary Gitga'at Area of Concern is introduced in Lower Douglas Channel to Otter Channel to ensure heightened awareness by mariners of increased local activity. The Gitga'at AOC is outlined in Figure 1 and within the area bounded by the following:

a) Line connecting Marble Rock and Fleishman Point,
b) Line connecting Fanny Point and Blackrock Point
c) Line connecting Mollison Point and Blossom Point
d) Line connecting Yolk Point and Sainty Point
e) Line Connecting Cummings Point and Maple Point,
f) Line Connecting Money Point and the Kwa'a IR on Southwest Gribbell Island, and
g) Line Connecting Gertrude Point and the Navigation Light on Hawkesbury Island Across from Kitkiata Inlet.

Mariners should refer to Table 1 below for information on the months the levels of various activities are typically heightened in the Gitga'at AOC.

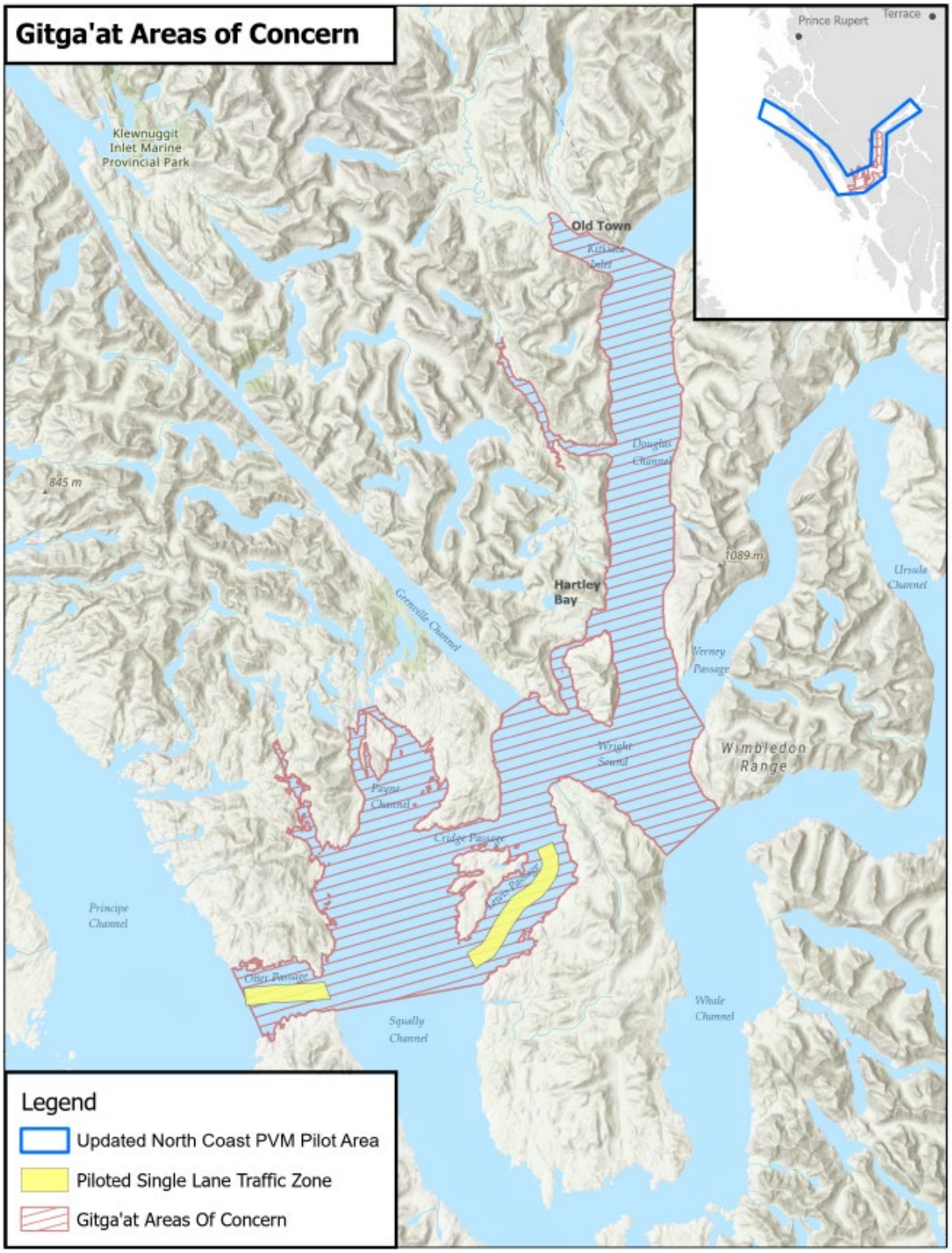


Figure 1. Boundaries of Gitga'at Area of Concern

Gitga'at AOC Navigation Guidelines

a) As per section 1.2, speed to be reduced when whales or community vessels[1] and fishing gear are in the AOC.
b) As per section 1.2, wash and wake minimized when community traffic[1], fishing and harvesting is present in the AOC.
c) Vessels should make every reasonable effort to avoid transiting through the Gitga'at AOC during the Nighttime Low-Tide Travel and Beach Harvest Dates/Times and are directed to Appendix 1 of these guidelines and the Pacific Pilotage Authority website for specific dates and times. These will be updated annually.
d) Vessels that cannot avoid transits through the Gitga'at AOC during the Nighttime Low-Tide Travel and Beach Harvest Dates/Times (see Appendix 1) or when visibility is restricted, e.g., by fog, are asked to announce their presence by sounding the appropriate signal upon entering and exiting the Gitga'at AOC and at regular intervals while transiting the AOC.

Table 1. Gitga'at AOC Monthly Activities Summary

Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Small vessel traffic: transiting, fishing, hunting, ceremonial, and monitoring	X	X	X	X	X	X	X	X	X	X	X	X
Night Traffic and Beach Harvesting	X	X	X						X	X	X	X
Intertidal/shoreline harvesting – People onshore, vessels anchored nearshore	X	X	X		X	X			X	X	X	X
Community and Commercial Fishing Vessels and Gear				X	X	X	X	X	X	X		
High Whale Use					X	X	X	X	X	X	X	
Nearshore Hunting	X	X	X	X	X	X	X	X				X
Increased traffic between Hartley Bay and Seasonal Harvest Camps					X	X		X	X	X		
Vessel-Based Ecotourism								X	X	X		
Fin Island Research Station and Associated Vessel Surveys Active				X	X	X	X	X	X	X	X	

[1] *Community vessels and traffic* includes all vessels owned and operated by First Nations that are transiting the AOC or engaged in fishing and/or harvesting activities in the AOC.

4.2. Gitxaala Area of Concern

Introduction of a voluntary Gitxaala Area of Concern in Principe Channel to ensure there is a heightened awareness of increased activity by the mariners. The Gitxaala AOC is outlined in Figure 2 and within the area bounded by:

a) Keecha Point to Oar Point
b) White Rocks to Sentinel Islet
c) Sentinel Islets to Hankin Rock

Mariners should refer to Table 3 of for further information on the months the levels of various activities are typically heightened in the Gitxaala AOC.

Gitxaala AOC Navigation Guidelines

a) As per section 1.2, speed to be reduced when whales or community vessels[2] or fishing gear are in the AOC.
b) As per section 1.2, wash and wake minimized when community traffic[2], fishing and harvesting is present in the AOC.
c) Upon entering the Gitxaala AOC (North entrance between White Rocks and Sentinel Islets; south entrance between Keecha Point and Oar Point) vessels shall announce their presence by:
d) Communicating their location on Channel 11 (the designated VTS channel)
e) Sounding one prolonged blast of the vessel's whistle and shall sound the prolonged blast as they pass the Banks Island North and Ralston Island South Sector Aids to Navigation.

Table 3. Gitxaala AOC Monthly Activities Summary

Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Small vessel traffic: transiting, fishing, hunting, ceremonial, and monitoring	X	X	X	X	X	X	X	X	X	X	X	X
Intertidal/shoreline harvesting and hunting – People onshore, vessels anchored near shore			X	X	X	X	X	X	X	X	X	X

[2] Community vessels and traffic includes all vessels owned and operated by First Nations that are transiting the AOC or engaged in fishing and/or harvesting activities in the AOC.

Commercial and non-commercial fishing vessels and fishing gear					X	X	X	X	X	X		
High Whale Use			X	X	X	X	X	X	X	X	X	

Legend

X	Activity is heightened
X	Activity is present (moderate levels)
	Activity may be present

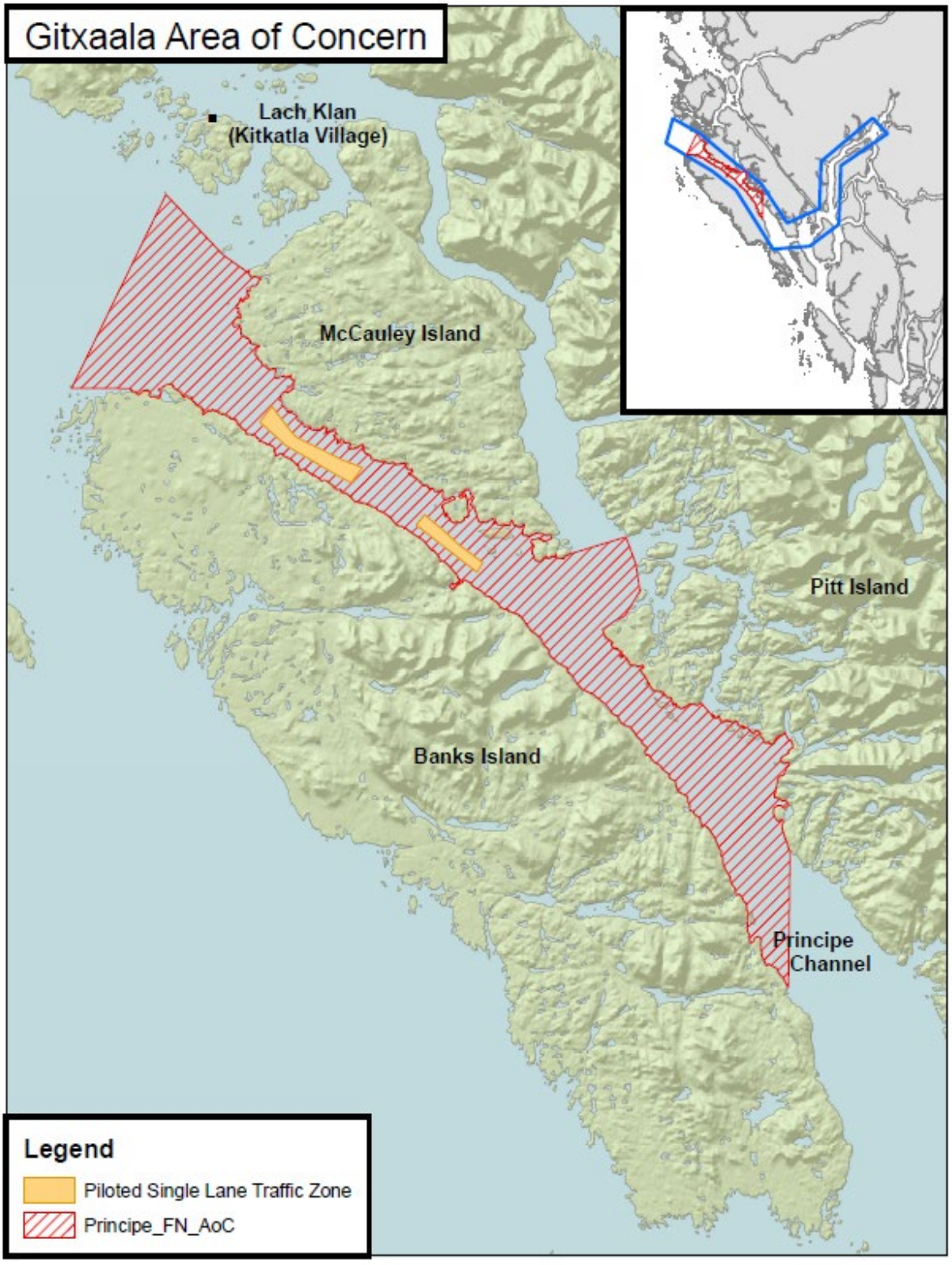


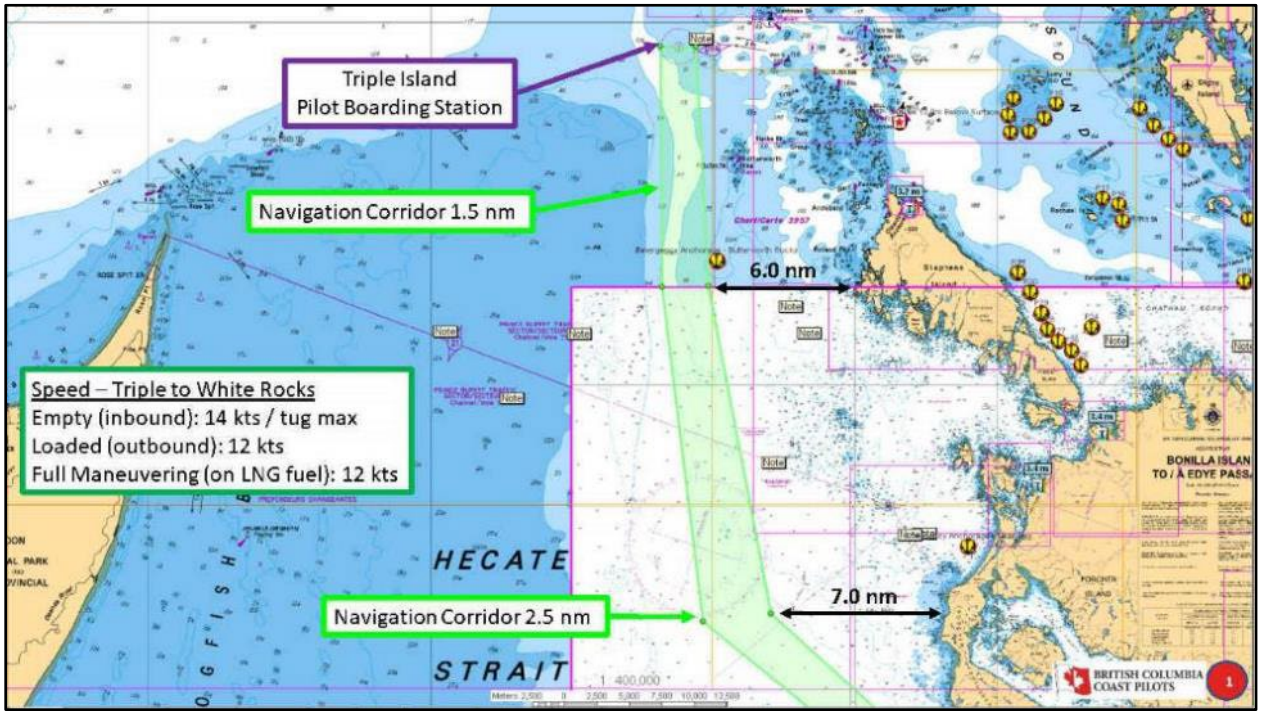
Figure 2. Boundaries of Gitxaala Area of Concern

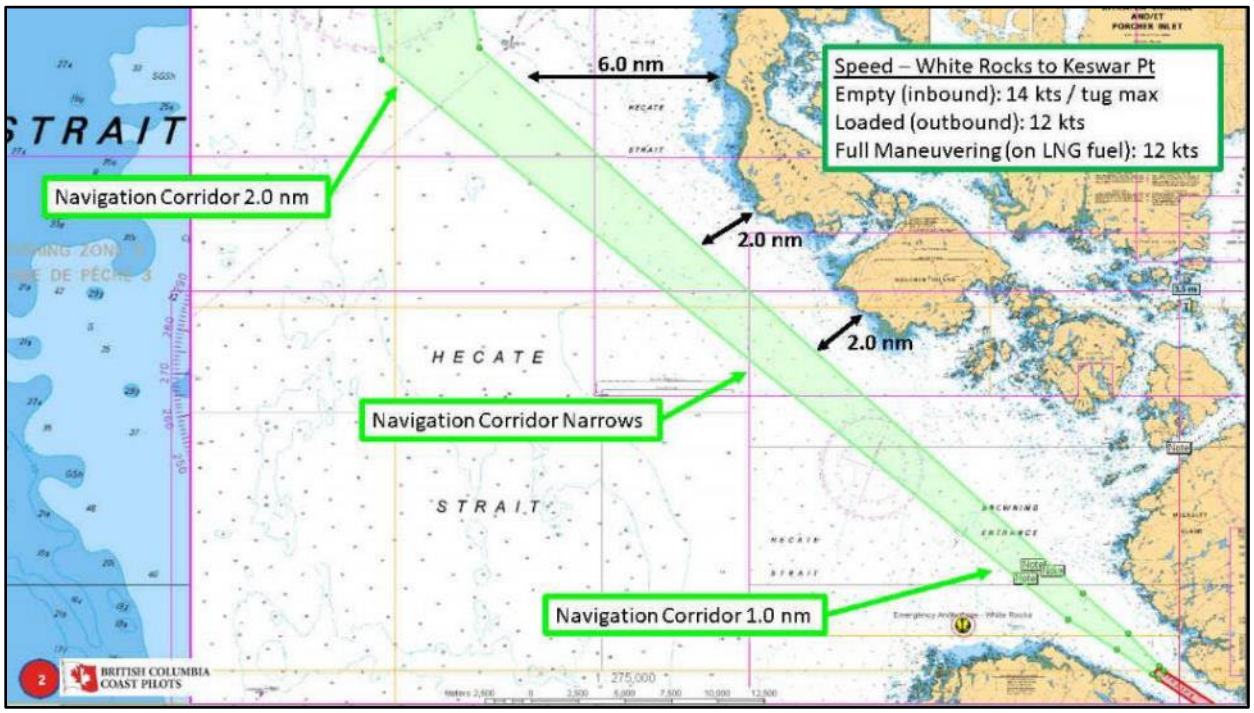
Appendix 1: Expected Nighttime Low-Tide Travel and Beach Harvest Dates/Times in Gitga'at AOC 2026/2027. These times are determined:

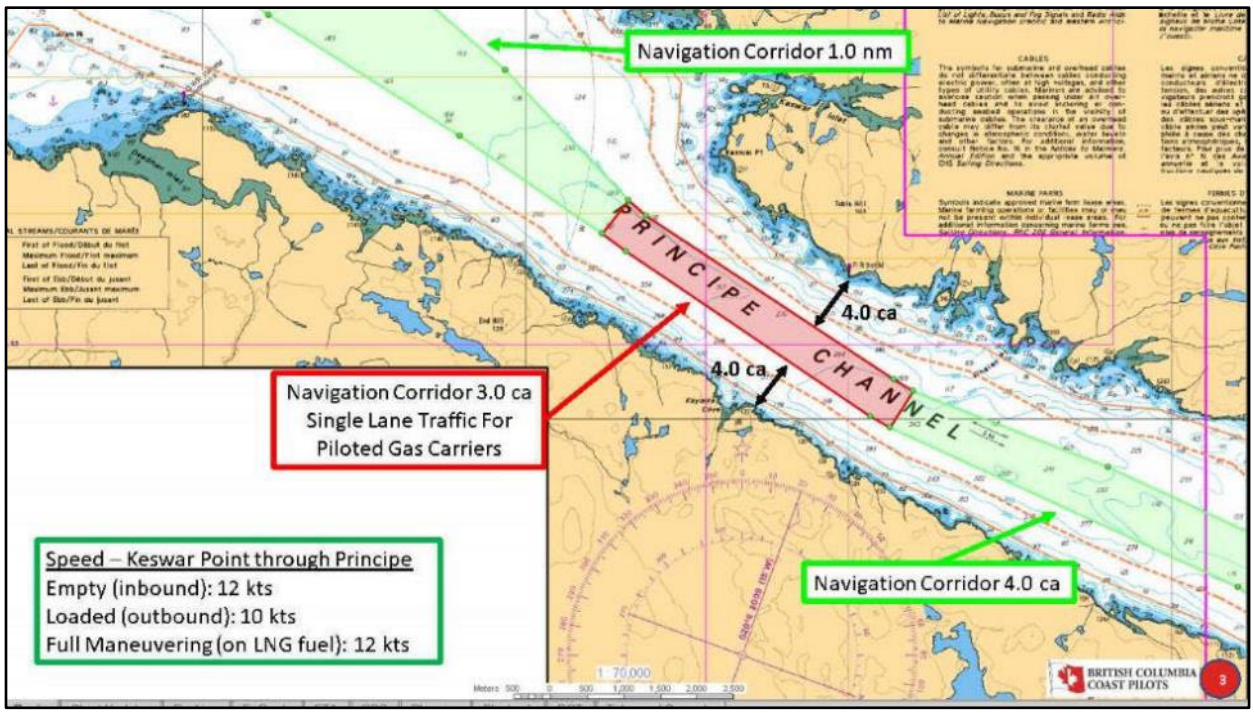
- Using the Canadian Hydrographic Website for the Hartley Bay Tide Station
- When the low tides are 2foot or less
- 3 hours before and after the low tide to allow for travel time.

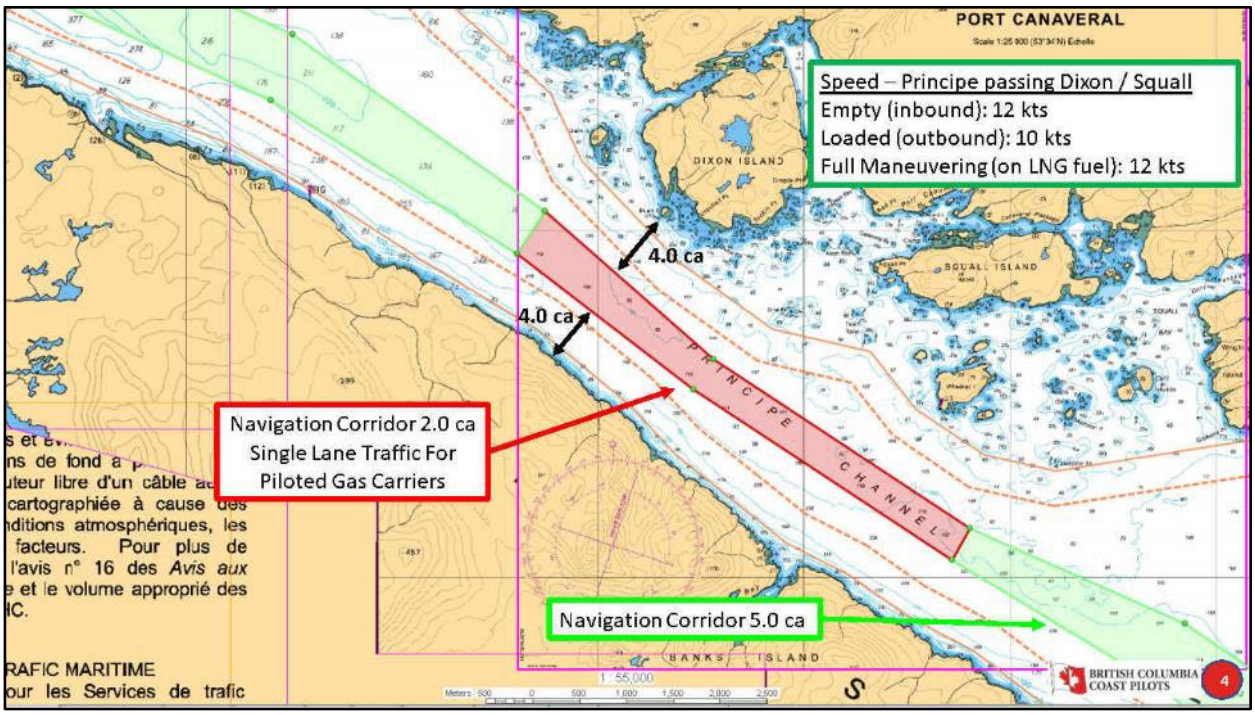
Date	Low Tide Time (Local Time)	Likely Travel/ Harvest Time
28 Sep 26	21:16	18:15 to 00:15
29 Sep 26	21:59	19:00 to 01:00
25 Oct 26	19:33	16:30 to 22:30
26 Oct 26	20:14	17:15 to 23:15
27 Oct 26	20:58	18:00 to 00:00
28 Oct 26	21:44	18:45 to 00:45
29 Oct 26	22:34	19:30 to 01:30
23 Nov 26	19:12	16:15 to 22:15
24 Nov 26	19:58	17:00 to 23:00
25 Nov 26	20:46	17:45 to 23:45
26 Nov 26	21:34	18:30 to 00:30
27 Nov 26	22:25	19:30 to 01:30
28 Nov 26	23:17	20:15 to 02:15
22 Dec 26	18:58	16:00 to 22:00
23 Dec 26	19:48	16:45 to 22:45
24 Dec 26	20:37	17:30 to 23:30
25 Dec 26	21:24	18:30 to 00:30
26 Dec 26	22:10	19:00 to 01:00
27 Dec 26	22:55	19:55 to 01:55
20 Jan 27	18:48	15:45 to 21:45
21 Jan 27	19:38	16:30 to 22:30
22 Jan 27	20:24	17:30 to 23:30
23 Jan 27	21:07	18:00 to 00:00
24 Jan 27	21:47	18:45 to 00:45
25 Jan 27	22:26	19:30 to 01:30
18 Feb 27	18:35	15:30 to 21:30
19 Feb 27	19:21	16:15 to 22:15
20 Feb 27	20:03	17:00 to 23:00
21 Feb 27	20:41	17:45 to 23:45
22 Feb 27	21:18	18:15 to 00:15

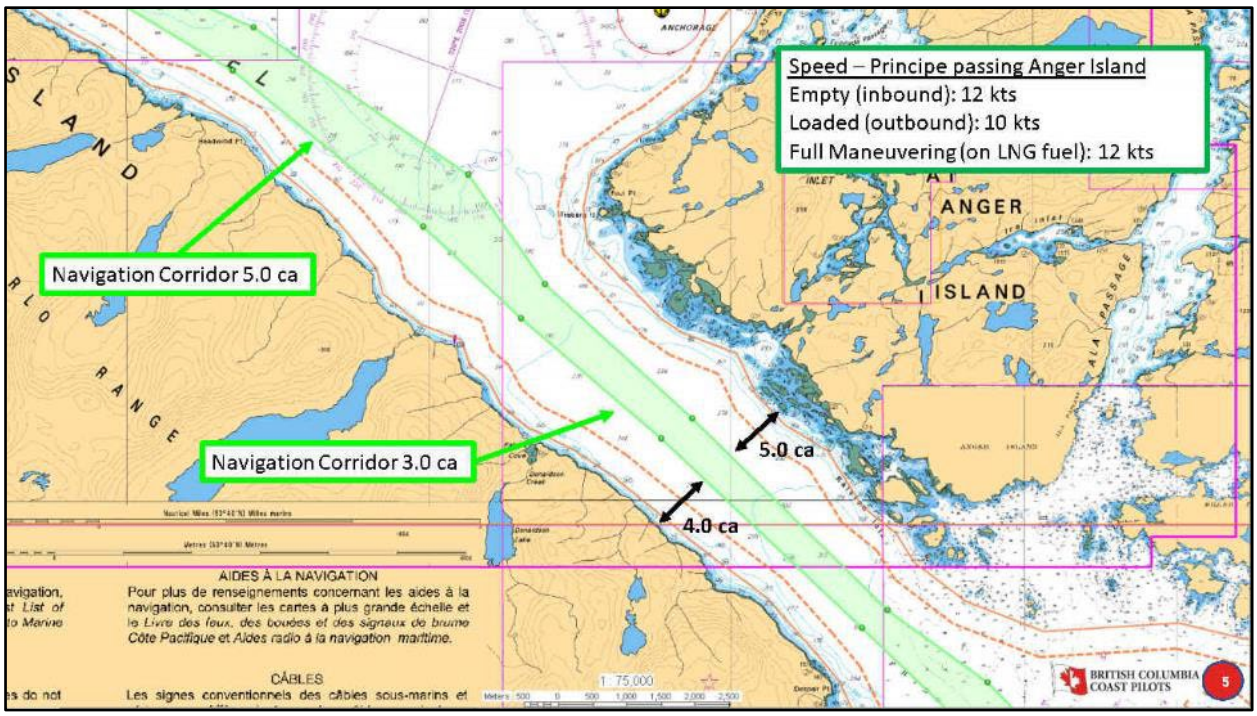
Appendix 2: Mid-channel corridor

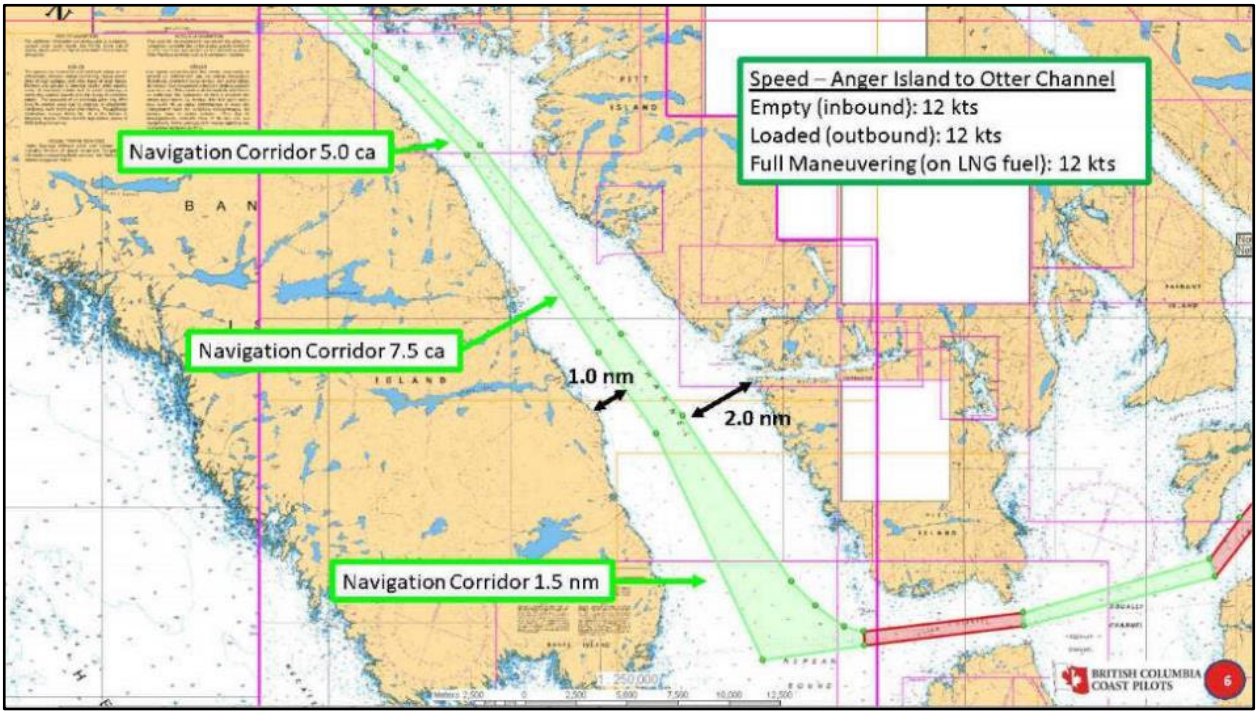


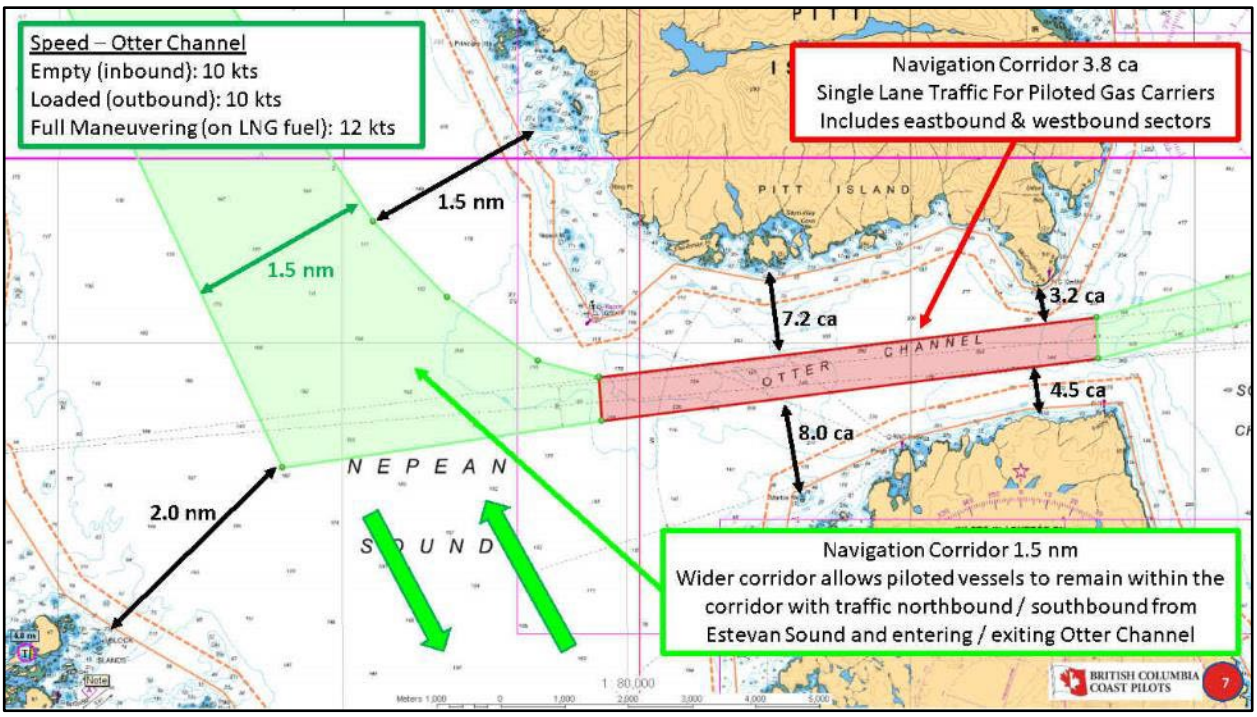


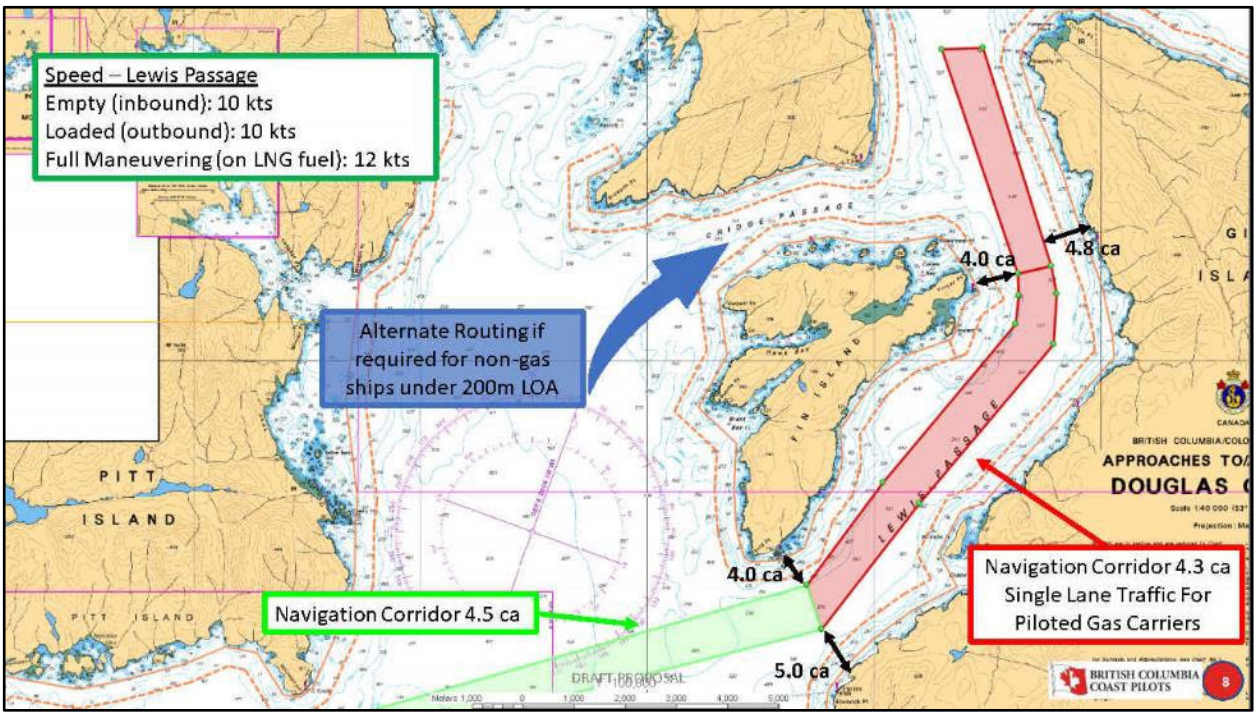

Navigation Corridor 1.0 nm
PRINCIPE CHANNEL
4.0 ca
4.0 ca
Navigation Corridor 3.0 ca
Single Lane Traffic For
Piloted Gas Carriers
Speed – Keswar Point through Principe
Empty (inbound): 12 kts
Loaded (outbound): 10 kts
Full Maneuvering (on LNG fuel): 12 kts
Navigation Corridor 4.0 ca
BRITISH COLUMBIA COAST PILOTS

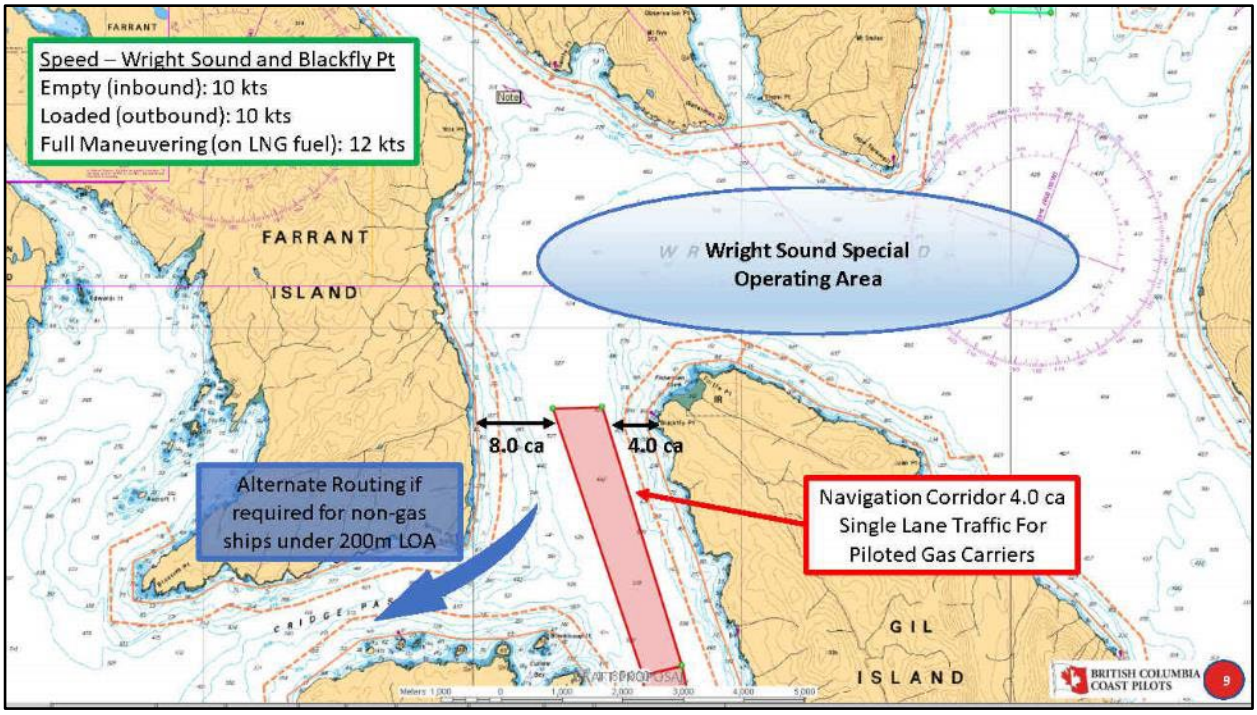

PORT CANAVERAL
Speed – Principe passing Dixon / Squall
Empty (inbound): 12 kts
Loaded (outbound): 10 kts
Full Maneuvering (on LNG fuel): 12 kts
DIXON ISLAND
SQUALL ISLAND
4.0 ca
4.0 ca
PRINCIPE CHANNEL
Navigation Corridor 2.0 ca
Single Lane Traffic For
Piloted Gas Carriers
Navigation Corridor 5.0 ca
BANKS ISLAND
BRITISH COLUMBIA COAST PILOTS

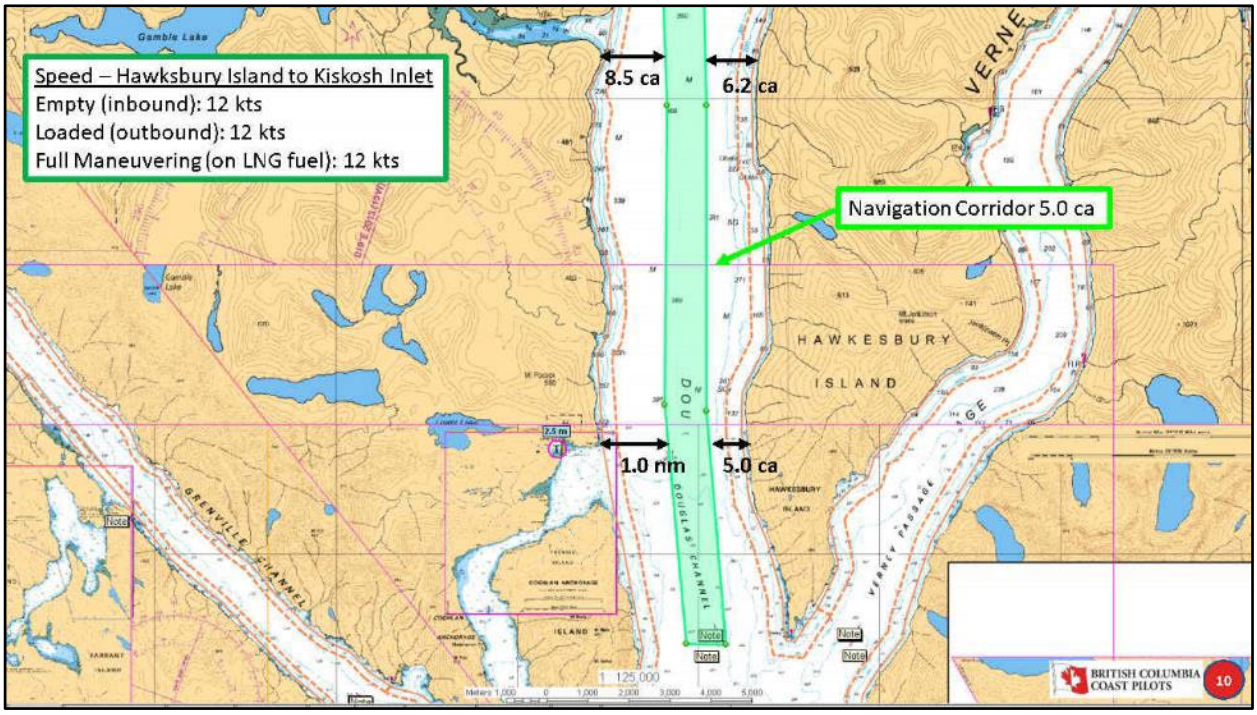

Speed – Principe passing Anger Island
Empty (inbound): 12 kts
Loaded (outbound): 10 kts
Full Maneuvering (on LNG fuel): 12 kts
Navigation Corridor 5.0 ca
Navigation Corridor 3.0 ca
5.0 ca
4.0 ca
ANGER
ISLAND
AIDES À LA NAVIGATION
Pour plus de renseignements concernant les aides à la navigation, consulter les cartes à plus grande échelle et le Livre des feux, des bouées et des signaux de brume Côte Pacifique et Aides radio à la navigation maritime.
CÂBLES
Les signes conventionnels des câbles sous-marins et
1:75,000
BRITISH COLUMBIA COAST PILOTS
5

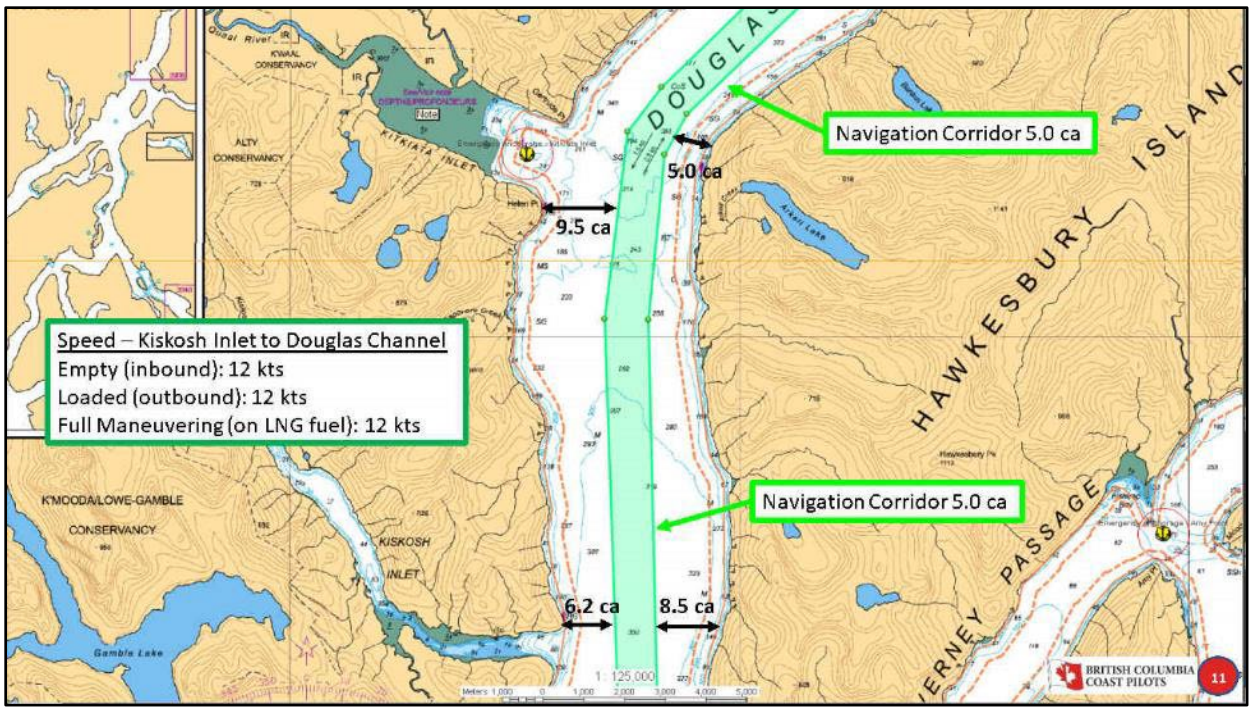

Speed – Anger Island to Otter Channel
Empty (inbound): 12 kts
Loaded (outbound): 12 kts
Full Maneuvering (on LNG fuel): 12 kts
Navigation Corridor 5.0 ca
Navigation Corridor 7.5 ca
Navigation Corridor 1.5 nm
1.0 nm
2.0 nm
BRITISH COLUMBIA COAST PILOTS
6

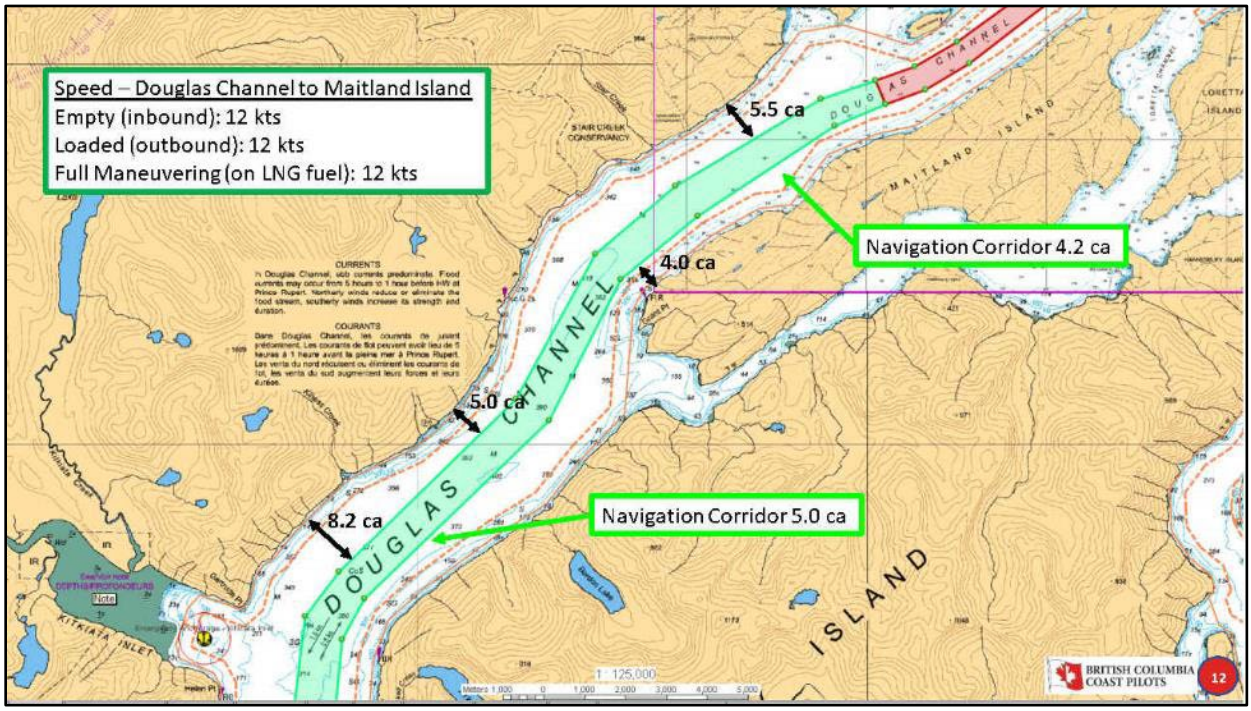

Speed – Otter Channel
Empty (inbound): 10 kts
Loaded (outbound): 10 kts
Full Maneuvering (on LNG fuel): 12 kts
Navigation Corridor 3.8 ca
Single Lane Traffic For Piloted Gas Carriers
Includes eastbound & westbound sectors
1.5 nm
1.5 nm
2.0 nm
7.2 ca
3.2 ca
4.5 ca
8.0 ca
PITT ISLAND
OTTER CHANNEL
NEPEAN SOUND
Navigation Corridor 1.5 nm
Wider corridor allows piloted vessels to remain within the corridor with traffic northbound / southbound from Estevan Sound and entering / exiting Otter Channel
BRITISH COLUMBIA COAST PILOTS

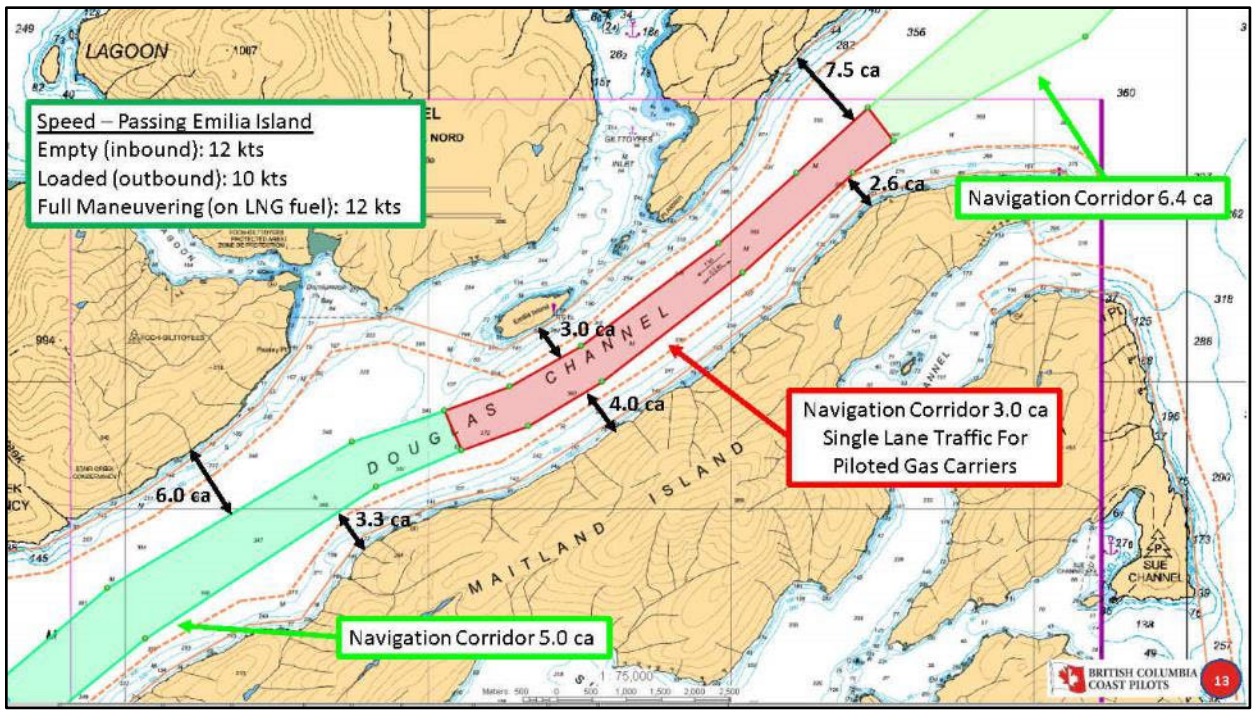

Speed – Lewis Passage
Empty (inbound): 10 kts
Loaded (outbound): 10 kts
Full Maneuvering (on LNG fuel): 12 kts
Alternate Routing if required for non-gas ships under 200m LOA
4.0 ca
4.8 ca
4.0 ca
5.0 ca
PITT ISLAND
FIN ISLAND
LEWIS PASSAGE
Navigation Corridor 4.5 ca
Navigation Corridor 4.3 ca
Single Lane Traffic For Piloted Gas Carriers
APPROACHES TO
DOUGLAS
BRITISH COLUMBIA COAST PILOTS

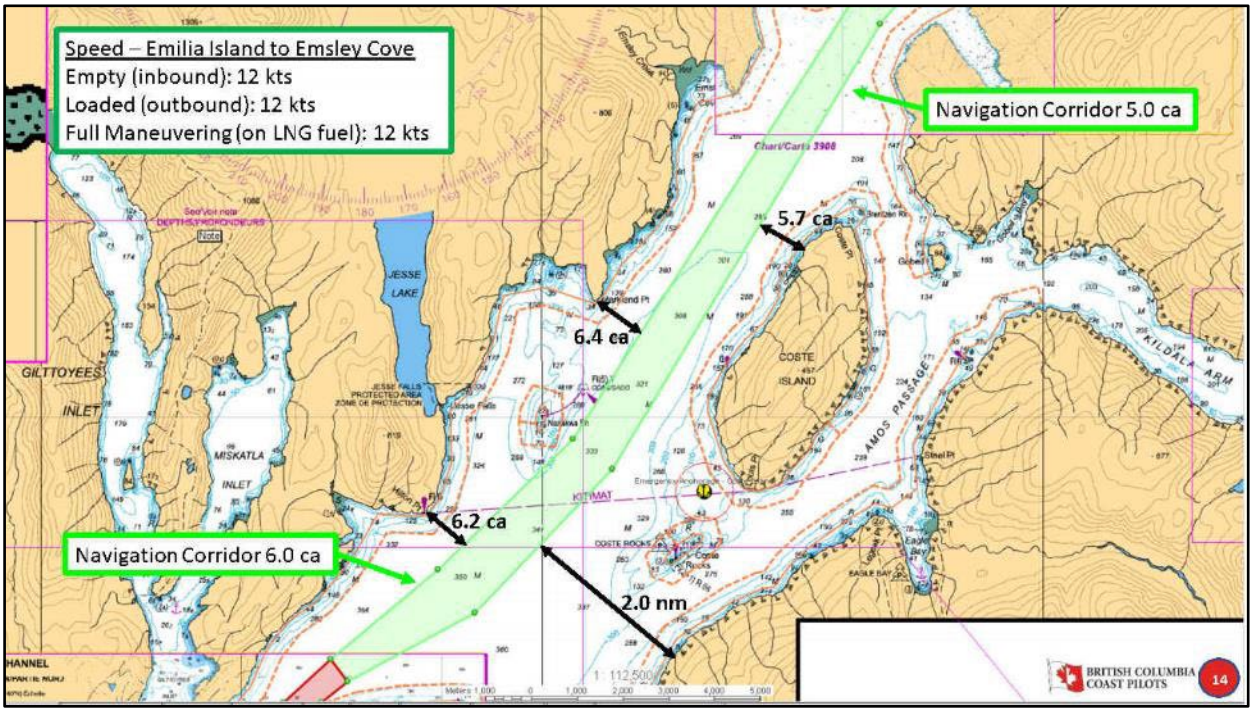

Speed – Wright Sound and Blackfly Pt
Empty (inbound): 10 kts
Loaded (outbound): 10 kts
Full Maneuvering (on LNG fuel): 12 kts
FARRANT
ISLAND
Wright Sound Special Operating Area
8.0 ca
4.0 ca
Alternate Routing if required for non-gas ships under 200m LOA
Navigation Corridor 4.0 ca
Single Lane Traffic For Piloted Gas Carriers
GIL
ISLAND
BRITISH COLUMBIA COAST PILOTS
9


Speed – Hawksbury Island to Kiskosh Inlet
Empty (inbound): 12 kts
Loaded (outbound): 12 kts
Full Maneuvering (on LNG fuel): 12 kts
8.5 ca
6.2 ca
Navigation Corridor 5.0 ca
HAWKESBURY
ISLAND
1.0 nm
5.0 ca
DOUGLAS CHANNEL
GRENVILLE CHANNEL
VERNEY PASSAGE
BRITISH COLUMBIA COAST PILOTS
10


Navigation Corridor 5.0 ca
5.0 ca
9.5 ca
Speed – Kiskosh Inlet to Douglas Channel
Empty (inbound): 12 kts
Loaded (outbound): 12 kts
Full Maneuvering (on LNG fuel): 12 kts
Navigation Corridor 5.0 ca
6.2 ca
8.5 ca
HAWKESBURY ISLAND
KITKIATA INLET
KISKOSH INLET
K'MOODA/LOWE-GAMBLE CONSERVANCY
KWAAL CONSERVANCY
ALTY CONSERVANCY
Gamble Lake
1 : 125,000
BRITISH COLUMBIA COAST PILOTS
11


Speed – Douglas Channel to Maitland Island
Empty (inbound): 12 kts
Loaded (outbound): 12 kts
Full Maneuvering (on LNG fuel): 12 kts
5.5 ca
Navigation Corridor 4.2 ca
4.0 ca
5.0 ca
8.2 ca
Navigation Corridor 5.0 ca
DOUGLAS CHANNEL
MAITLAND ISLAND
STAIRCASE CONSERVANCY
KITKIATA INLET
1 : 125,000
BRITISH COLUMBIA COAST PILOTS
12


Speed – Passing Emilia Island
Empty (inbound): 12 kts
Loaded (outbound): 10 kts
Full Maneuvering (on LNG fuel): 12 kts
LAGOON
7.5 ca
2.6 ca
Navigation Corridor 6.4 ca
3.0 ca
4.0 ca
DOUGLAS CHANNEL
Navigation Corridor 3.0 ca
Single Lane Traffic For
Piloted Gas Carriers
6.0 ca
3.3 ca
MAITLAND ISLAND
Navigation Corridor 5.0 ca
SUE CHANNEL
BRITISH COLUMBIA COAST PILOTS
13


Speed – Emilia Island to Emsley Cove
Empty (inbound): 12 kts
Loaded (outbound): 12 kts
Full Maneuvering (on LNG fuel): 12 kts
Navigation Corridor 5.0 ca
5.7 ca
6.4 ca
JESSE LAKE
GILTTOYEES INLET
MISKATLA INLET
COSTE ISLAND
KITIMAT
6.2 ca
Navigation Corridor 6.0 ca
2.0 nm
BRITISH COLUMBIA COAST PILOTS
14

Appendix 3: Collision Regulations Rule 9 – Narrow Channels

Narrow Channels — International

(a) A vessel proceeding along the course of a narrow channel or fairway shall keep as near to the outer limit of the channel or fairway which lies on her starboard side as is safe practicable.

(b) A vessel of less than 20 meters in length or a sailing vessel shall not impede the passage of a vessel which can safely navigate only within a narrow channel or fairway.

(c) A vessel engaged in fishing shall not impede the passage of any other vessel navigating within a narrow channel or fairway.

(d) A vessel shall not cross a narrow channel or fairway if such crossing impedes the passage of a vessel which can safely navigate only within such channel or fairway. The latter vessel may use the sound signal prescribed in Rule 34(d) if in doubt as to the intention of the crossing vessel.

(e) (i) In a narrow channel or fairway when overtaking can take place only if the vessel to be overtaken has to take action to permit safe passing, the vessel intending to overtake shall indicate her intention by sounding the appropriate signal prescribed in Rule 34(c)(i). The vessel to be overtaken shall, if in agreement, sound the appropriate signal prescribed in Rule 34(c)(ii)take steps to permit safe passing. If in doubt she may sound the signals prescribed in Rule 34(d).**(ii)** This Rule does not relieve the overtaking vessel of her obligation under Rule 13.

(f) A vessel nearing a bend or an area of a narrow channel or fairway where other vessels may be obscured by an intervening obstruction shall navigate with particular alertness and caution and shall sound the appropriate signal prescribed in Rule 34(e).

(g) Any vessel shall, if the circumstances of the case admit, avoid anchoring in a narrow channel.

Narrow Channels — Canadian Modifications

(h) Notwithstanding paragraph (d), in the waters of the Great Lakes Basin, a vessel that can safely navigate only within a narrow channel or fairway shall, if a crossing vessel impedes her passage, use the sound signal prescribed in Rule 34(d) if in doubt as to the intention of the crossing vessel.

(i) Notwithstanding paragraph (e), in a narrow channel or fairway in the waters of the Great Lakes Basin, a vessel shall indicate its intention to overtake, or its agreement to being overtaken, as the case may be, by sounding the whistle signals prescribed in Rule 34(j).

(j) In the Canadian waters of a narrow channel or fairway a barge or an inconspicuous, partly submerged vessel or object shall not be navigated, moored or anchored so as to impede the safe passage of any other vessel or object using those waters.

(k) Notwithstanding paragraph (a) and Rule 14(a), in the Canadian waters of a narrow channel or fairway where there is a current or tidal stream and two power-driven vessels are meeting each other from opposite directions so as to involve risk of collision,

(i) the vessel proceeding with the current or tidal stream shall be the stand-on vessel and shall propose the place of passage and shall indicate the side on which she intends to pass by sounding the appropriate signal prescribed in Rule 34(a) or (g),

(ii) the vessel proceeding against the current or tidal stream shall keep out of the way of the vessel proceeding with the current or tidal stream and shall hold as necessary to permit safe passing,

(iii) the vessel proceeding against the current or tidal stream shall promptly reply to the signal referred to in subparagraph (i) with the same signal, if she is in agreement, and with the sound signal prescribed in Rule 34(d), if she is in doubt.

Appendix 4: Implementation, Monitoring and Evaluation

Implementation

Members of the North Coast PVM Pilot Project Committee have agreed to take the following actions to support implementation and communication of the Guidelines:

Gitga'at and Gitxaala: Senior staff of the Gitga'at Oceans and Lands Department (GOLD) and the Gitxaala Stewardship Office (GSO) will communicate information about the Guidelines to community waterway users and marine harvesters via newsletters, online communications, direct discussions and community meetings.

Transport Canada: TC will work with relevant federal departments/agencies to include information about the Guidelines in official nautical publications, which may include: Ship Safety Bulletins, Notices to Mariners, Navigational Warnings, electronic and paper navigation charts, and the Sailing Directions for the Pacific coast.

Canadian Coast Guard: CCG will explore a range of publications, e.g., Notices to Mariners, and communications channels including real-time communication with piloted and non-piloted vessels through MCTS.

Pacific Pilotage Authority: The PPA will publish information on the guidelines and fishery openings0 on its website and issue a Notice to Industry if appropriate.

The BC Coast Pilots: The BC Coast Pilots will communicate information about the voluntary guidelines through the Weekly Newsletter to Pilots, discussion at informal meetings and Company Meetings as well as issuing a BCCP Safety Notice to Pilots

Shipping Industry: Industry associations will post information on their websites and promote the guidelines internally within their networks and committees.

> *Western Marine Community Coalition (WMCC):* WMCC is a coordinated forum that promotes the growth and development of the marine community with regard to economic, safety and other pertinent issues. WMCC will publish the guidelines on its website for others to link to, and seek opportunities for information to be presented at monthly meetings of the Pacific Coast Marine Advisory Review Panel (PACMAR) and Navigation Aids & Navigation Services (NANS).

Natural resource development industry: Terminal operators will include information in their terminal information guides and circulate the information to agents.

Non-governmental Organisations: NGOs will share information on their websites and through their communication channels and networks, as appropriate, to increase awareness of the guidelines amongst a range of waterway users. E.g., the Ships, Whales and Acoustics in Gitga'at Territory (SWAG) program, recreational boater information sources.

Monitoring & Evaluation

Members of the North Coast PVM Pilot Project Committee have agreed to establish a Monitoring & Evaluation Sub-committee consisting of members whose operations are implicated by the guidelines and associated monitoring activities and who have sufficient capacity to participate.

The Monitoring & Evaluation Sub-committee will seek to:

1. Observe and reach common understanding of changes in traffic patterns resulting from the implementation of the guidelines.
2. Identify positive and negative outcomes, including unintended consequences, to First Nations marine activities, whales and commercial vessel operations; and
3. Develop recommendations to modify the guidelines as may be necessary to address issues and opportunities identified from the above monitoring activities

It is suggested that the monitoring sub-committee meet at regular intervals (to be agreed on by the sub-committee members) to discuss and analyse information gathered. The sub-committee will report out on key findings and recommendations to the North Coast PVM Pilot Project Committee.

Information gathering methods may include:

1. *Marine Vessel Traffic:* TC, GOLD and GSO will use various tools and information sources to observe changes in traffic patterns including: the Enhanced Monitoring Situation Awareness System (EMSA), observations by Guardian Watchmen, AIS data analytics (as available), and MCTS observations and records (as available).
2. *Indigenous Waterway Use:* GOLD and GSO will gather local knowledge and Information through discussions with the Guardian Watchmen and discussions/surveys with local community users. Information gathered may include:
    - Awareness of the guidelines by community members
    - Changes to behaviour on the water as a result of vessels following the guidelines.
    - Changes to behaviour on the water as a result of expectations of waterway users.
    - Modifications to routes travelled.
    - Feelings of enhanced safety on the water.
    - Observations made during deep-sea vessel transits.
3. *Whales:* GOLD and GSO will undertake relevant monitoring activities to enhance data collection already in progress through complementary initiatives such as the Ships and Whales in Gitga'at Territory (SWAG) initiative. Results from this method are intended to support anticipated future discussions with the shipping industry.
4. *Observations from Pilots:*
    - Is there a departure from current practices in the waterway, and is there a demonstrated improvement to safety?
    - Assistance with mammal reporting and identification.

5. *Commercial Vessel Operations:* Monitoring & Evaluation Sub-Committee members will collaborate to gather and share information about changes in vessel operations. Information gathered may include:
    - Changes to transit/arrival/departure times
    - Changes to fuel consumption/costs
    - Additional pilot time
    - Interactions with local community vessels

Information will be brought forward for review and discussion by the Monitoring & Evaluation Sub-Committee with the goal of developing shared understanding of the information.

Proposed modifications will be discussed and agreed to by the monitoring committee and presented to the North Coast PVM Pilot Project Committee for discussion and approval, prior to updating the Guidelines. Issues will be recorded and changes will be tracked.

The guidelines and associated monitoring and evaluation activities will be considered in the context of other regional initiatives, such as the Cumulative Effects of Marine Shipping and Marine Protected Area Network planning for the Northern Shelf Bioregion, and integrated or linked as appropriate.

Nothing in these guidelines supersedes or alters the requirements of applicable Canadian and international laws and regulations, including the Collision Regulations. Furthermore, nothing in these guidelines prevents or restricts the master and pilot of the ship from taking or executing any decision which, in the master and pilot's professional judgement, is necessary to ensure the safety of life at sea and protection of the marine environment.

Appendix 5: Participant Endorsement

The participating organisations listed below have endorsed the North Coast Waterway Management Guidelines.

Gitga'at Nation	Chamber of Shipping
Gitxaala Nation	LNG Canada
Transport Canada	Shipping Federation of Canada
Canadian Coast Guard	Council of Marine Carriers
Pacific Pilotage Authority	Douglas Channel Watch
British Columbia Coast Pilots	World Wildlife Fund Canada