

WSC Whale Chart: A global voyage planning aid to protect whales



Second Edition (October 2024)

Contact World Shipping Council Wei-Jun Mun Email: <u>wjmun@worldshipping.org</u>

About World Shipping Council

The World Shipping Council is the united voice of liner shipping, working with policymakers and industry groups to shape the future growth of a socially responsible, environmentally sustainable, safe, and secure shipping industry. We are a non-profit trade association with offices in Brussels, London, Singapore and Washington, D.C. Read more at www.worldshipping.org



Introduction

The WSC Whale Chart provides a global survey of whale conservation measures that apply to the merchant shipping fleet. In most cases, these measures are designed to address accidental collisions with whales ("vessel strikes") and human-generated underwater sounds ("underwater radiated noise") that impact marine life.

The chart focuses on government measures issued or endorsed by environmental, maritime transport, as well as port authorities. Measures that do not apply to merchant shipping (e.g. fishing or the tourism industry) are not included.

Our intended audience is for anyone with an interest in this topic, but with a particular focus on crew and voyage planners in the shipping industry. This is why we have found it best to arrange measures by geography and jurisdiction. Maps and coordinates are provided, where available.

We have made it a point to differentiate the mandatory and voluntary measures, as well as whether the measures are year-long, seasonal, or ad hoc. A summary of the type of measure is provided, ranging from dynamic and static slow down zones, areas to be avoided, and routing measures. Links to sources are included, especially for measures with information that change frequently during the season and can't be fully captured in this chart. This is primarily the dynamic slow down measures on the U.S. and Canadian East Coast that are aimed at protecting the endangered North Atlantic right whale.

In the second edition of the WSC Whale Chart, we have updated existing measures and included new measures from port authorities and regulators in Brazil, Costa Rica, the Arctic region, as well as the "whale desks" in Canada and the U.S.

We try to update this resource at least once a year to include new measures and update existing measures. Readers are encouraged to report any errors, changes, or updates to us. This document should not be used as a substitute or source of precise navigational coordinates and other information. Appropriate governmental information and charts should be consulted. Readers are also encouraged to refer to the International Maritime Organization's guidelines on noise (MEPC.1/Circ.906/Rev.1 and Circ.907) and vessel strikes (MEPC.1/Circ.674).

The ocean is a shared space. We hope that by compiling this resource and making it available to everyone, we can help reduce shipping's impact on whales.

DISCLAIMER: The information provided by the World Shipping Council in this document is intended for informational purposes only and must be relied upon solely at your own risk. Every effort has been made to accurately reflect the most current available information at the time of their review. The World Shipping Council cannot guarantee the accuracy of the information or provide warranties of any kind.

Scan the QR code or visit us at https://www.worldshipping.org/whales for the latest edition of the WSC Whale Chart





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1. North America

1.1 North America: Canada (Gulf of St. Lawrence)

1.1.1 Gulf of St. Lawrence



1.1.1.1 Mandatory Static Zones slowdown (seasonal)

• ≤10 knots speed over ground in Static Zones

Northern Static Zone	Southern Static Zone
(a) starting at 50°20'N, 65°00'W	(a) starting at 48°40'N, 65°00'W
(b) from there to 49°13'N, 65°00'W	(b) from there to 48°40'N, 62°40'W
(c) from there to 48°40'N, 64°13'W	(c) from there to 48°03'N, 61°07.5'W
(d) from there to 48°40'N, 62°40'W	(d) from there to 47°58.1'N, 61°03.5'W
(e) from there to 48°03'N, 61°07.5'W	(e) from there to 47°10'N, 62°30'W
(f) from there to 47°58.1'N, 61°03.5'W	(f) from there to 47°10'N, 65°00'W and
(g) from there to 48°00'N, 61°00'W	(g) from there to 48°40'N, 65°00'W.
(h) from there to 49°04'N, 61°00'W	
(i) from there to 49°04'N, 62°00'W	
(j) from there to 49°43'N, 63°00'W	
(k) from there to 50°20'N, 63°00'W and	
(l) from there to 50°20'N, 65°00'W.	

1.1.1.2 Mandatory dynamic slowdowns in shipping lanes (seasonal)

• ≤10 knots speed over ground in Dynamic Shipping Zones A, B, C, D, E when at least one North Atlantic right whale is detected in or near the relevant zone (activated through a NAVWARN for min 15 days)



Dynamic Shipping Zone A	Dynamic Shipping Zone B
(a) starting at 49°41 'N, 65°00'W;	(a) starting at 49°22'N, 64°00'W;
(b) from there to 49°20'N, 65°00'W;	(b) from there to 49°11'N, 64°00'W;
(c) from there to 49°11'N, 64°00'W;	(c) from there to 48°48'N, 63°00'W;
(d) from there to 49°22'N, 64°00'W; and	(d) from there to 49°00'N, 63°00'W; and
(e) from there to 49°41'N, 65°00'W.	(e) from there to 49°22'N, 64°00'W.
Dynamic Shipping Zone C	Dynamic Shipping Zone D
(a) starting at 49°00'N, 63°00'W;	(a) starting at 50°16'N, 64°00'W;
(b) from there to 48°48'N, 63°00'W;	(b) from there to 50°00'N, 64°00'W;
(c) from there to 48°24'N, 62°00'W;	(c) from there to 49°56'N, 63°00'W;
(d) from there to 48°35'N, 62°00'W; and	(d) from there to 50°16'N, 63°00'W; and
(e) from there to 49°00'N, 63°00'W.	(e) from there along the coastline back to
	50°16'N, 64°00'W.
Dynamic Shipping Zone E	
(a) starting at 48°35′N, 62°00′W;	
(b) from there to 48°24'N, 62°00'W;	
(c) from there to 48°03'N, 61°07.5'W;	
(d) from there to 47°58.1'N, 61°03.5'W;	
(e) from there to 48°00'N, 61°00'W;	
(f) from there to 48°10.5'N, 61°00'W; and	
(g) from there to 48°35'N, 62°00'W.	

1.1.1.3 Mandatory slowdowns in Seasonal Management Areas (seasonal)

- <10 knots speed over ground in Seasonal Management Areas 1 & 2 (early season)
- <10 knots speed over ground in Seasonal Management Areas 1 & 2 when at least one North Atlantic right whale is detected in the area (late season; activated by a NAVWARN for min 15 days)

1.1.1.4 Voluntary slowdown in Seasonal Management Areas (post-season)

• ≤10 knots speed over ground in the area if North Atlantic right whales are detected in the area; and/or maritime conditions permit vessels to safely operate at this speed

Seasonal Management Area 1	Seasonal Management Area 2
(a) starting at 49°04'N, 62°00'W	(a) starting at 48°24'N, 62°00'W
(b) from there to 49°04'N, 61°00'W	(b) from there to 48°03'N, 61°07.5'W
(c) from there to 48°10.5'N, 61°00'W	(c) from there to 47°58.1'N, 61°03.5'W
(d) from there to 48°35'N, 62°00'W and	(d) from there to 47°26.69'N, 62°00'W and
(e) from there to 49°04'N, 62°00'W.	(e) from there to 48°24'N, 62°00'W.

1.1.1.5 Voluntary seasonal slowdown in the Cabot Strait

• ≤10 knots speed over ground in Cabot Strait (seasonal)

<u>Voluntary Seasonal Slowdown in the Cabot Strait</u> 48° 10.5' N, 061° 00' W 47° 37.2' N, 059° 18.5' W 47° 02' N, 060° 23.7' W 47° 58.1' N, 061° 03.5' W 48° 00' N, 061° 00' W



1.1.2 Shediac Valley (Gulf of St. Lawrence)

1.1.2.1 Mandatory Area to be Avoided (seasonal)

- Area to be Avoided will come into force once 80% of the restricted area is closed to fishing for the season as per the Department of Fisheries and Oceans's right whale closure protocol; is lifted once the North Atlantic right whale detections decrease in the restricted area; vessels above 13m in length (LOA) must:
 - i. avoid the area unless they are exempt as per the Interim Order for the Protection of North Atlantic Right Whales (Eubalaena Glacialis) in the Gulf of St. Lawrence;
 - ii. transit the area at a speed not exceeding 8.0 knots over the ground if they are part of the exemptions

Shediac Valley	Restricted Area
48° 31.8'N	63° 39.6′W
48° 24.72'N	63° 17.88'W
47° 18.84'N	64° 10.8'W
47° 27.18'N	64° 30.72'W

1.1.3 Roseway Basin (Gulf of St. Lawrence)



Source: Transport Canada

1.1.3.1 Voluntary Area to be Avoided in the Roseway Basin

• Area to be Avoided (seasonal – 1 June to 31 December)

Roseway Basi	in Area to be Avoided
(1) 43° 16' N	064° 55' W
(2) 42° 47' N	064° 59' W
(3) 42° 39' N	065° 31' W
(4) 42° 52' N	066° 05' W



References / Resources:

- <u>Canadian Coast Guard Notice to Mariners</u>
- <u>Transport Canada North Atlantic right whale webpage</u>
- Transport Canada Ship Safety Bulletins
- Interim Order for the Protection of North Atlantic Right Whales (Eubalaena glacialis) in the Gulf of St. Lawrence
- To subscribe and receive navigational warnings that are currently in force, visit the <u>Canadian Coast Guard website</u>
- Contact Transport Canada at: marinesafety-securitemaritime@tc.gc.ca or 1-855-859-3123 (Toll Free)

Report a North Atlantic right whale sighting



- If you see live, free-swimming whales:
 - Email: DFO.GLFWhales-BaleinesGLF.MPO@dfo-mpo.gc.ca
- When reporting sightings of North Atlantic right whales, you must include: GPS location (latitude and longitude), date and time of sighting, number of marine mammals, photograph(s)/video(s) collected and if

possible, behavior of marine mammals observed (ex., feeding, travelling, diving).

If you see a North Atlantic right whale (and all other marine mammals) entangled, injured or dead, please document and report it immediately to the regional Response Network.

• When documenting you should collect: GPS location (latitude and longitude), date and time of sighting, number of marine mammals, photograph(s)/video(s), and description of the incident to provide to the Response Network.

Southern part of the Gulf of St. Lawrence (New Brunswick, Nova Scotia & Prince Edward Island)

Marine Animal Response Society Telephone: 1-866-567-6277

Newfoundland and Labrador

Whale Release and Strandings Newfoundland and Labrador (Tangly Whales Inc.) Telephone: 1-888-895-3003 or 1-709-895-3003

Quebec

Baleines en direct (GREMM) Telephone: 1-877-722-5346



1.2 North America: Canada (Saguenay-St. Lawrence)1.2.1 Saguenay-St. Lawrence Marine Park and surrounding waters



Source: DFO and Parks Canada

1.2.1.1 Voluntary protection measures (seasonal – 1 May to 31 October)

- **Caution area (yellow area):** Posting a lookout is recommended. If bypassing the whales is not possible, slow down and wait for the animals to move away to a distance greater than 400 metres (0.215 nautical miles). At night, increased caution is recommended.
- Slow down to 10 knots or less area (red area): To reduce the risk of collisions with whales feeding in the area, it is recommended that vessels slow down to a maximum speed through the water of 10 knots and post a lookout. It is further recommended to remain in the Laurentian Channel to the north of Île Rouge to minimize the impact of noise in a sensitive area south of this island, which is highly frequented by herds of beluga whales composed of females and young.
- Area to be avoided (hatched red area): Vessels should avoid transiting through this area. If the area cannot be avoided, slow down to a speed through the water of 10.0 knots or less.

These measures apply to merchant vessels and cruise ships between Pointe à Boisvert and Cap de la Tête au Chien to prevent collisions with whales. These measures should only be taken when they will not jeopardize navigational safety.

References / Resources:
Canadian Coast Guard Notice to Mariners





Saguenay-St. Lawrence Marine Park and surrounding waters

Any collision with a marine mammal within the Marine Park must immediately be reported to a park warden at 1-866-508-9888. For collisions that occur outside the Marine Park or for any situation involving a marine mammal that is dead or in trouble, contact the emergency network at 1-877-722-5346.



1.3 North America: Canada (Southern British Columbia) 1.3.1 Southern British Columbia



Source: Transport Canada

1.3.1.1 Mandatory approach distance from whales

- Vessel must not approach within 400 metre of a killer whale in the waters indicated below (does not apply to vessels in transit)
- Prohibition against positioning vessel in path of a killer whale in the waters indicated below (does not apply to vessels at anchor)

valers of southern british Columbia

beginning at 50°03.807'N	124°50.610'W [Sarah Point];
then to 49°52.486'N	124°33.903'W [north Powell River];
then to 49°52.426'N	124°33.912'W [south Powell River];
then to 49°46.436'N	124°16.815'W [north Jervis Inlet/Thunder Bay];
then to 49°44.262'N	124°13.260'W [south Jervis Inlet];
then to 49°43.838'N	124°12.572'W [north Blind Bay];
then to 49°43.018'N	124°11.228'W [south Ballet Bay];
then to 49°39.450'N	124°05.148'W [west Agamemnon Channel];
then to 49°39.313'N	124°04.355'W [east Agamemnon Channel];
then to 49°19.301'N	123°08.888'W [north Burrard Inlet];
then to 49°18.775'N	123°08.882'W [south Burrard Inlet];
then to 49°15.608'N	123°15.755'W [Cowards Cove];
then to 49°15.173'N	123°16.247'W [east Sea Island];
then to 49°15.455'N	123°16.795'W [north Sea Island];
then to 49°12.853'N	123°13.338'W [south Sea Island];
then to 49°11.205'N	123°12.225'W [north Swishwash Island];
then to 49°10.425'N	123°12.023'W [south Swishwash Island];
then to 49°07.853'N	123°12.037'W [Steveston];
then to 49°06.128'N	123°19.335'W [north Strait of Georgia];
then to 49°05.368'N	123°19.342'W [south Strait of Georgia];
then to 49°07.058'N	123°11.647'W [Fraser River];



then to 49°06.532'N	123°11.232'W [Westham Island];
then to 49°04.062'N	123°09.410'W [south Canoe Passage];
then to 49°03.487'N	123°08.493'W [Roberts Bank];
then to 49°00.132'N	123°05.460'W [Boundary Bluff];
then adjacent to the United St	ates border until
48°14.200'N	125°44.500'W [southern boundary of the critical habitat of
the Southern Resident killer w	hale];
then to 48°41.700'N	126°17.783'W [northwest boundary of the critical habitat of
the Southern Resident killer w	hale];
then to 48°59.685'N	125°40.152'W [Quisitis Point];
then to 48°55.253'N	125°32.517'W [Amphitrite Point];
then to 48°56.076'N	125°31.372'W [Stuart Bay];
then to 49°01.238'N	125°02.383'W [Hi'tatis];
then to 48°46.985'N	125°12.587'W [Cape Beale];
then to 48°39.645'N	124°49.205'W [west Clo-oose Bay];
then to 48°39.485'N	124°48.648'W [east Clo-oose Bay];
then to 48°33.703'N	124°27.812'W [west Port San Juan];
then to 48°33.110'N	124°25.742'W [east Port San Juan];
then to 49°59.092'N	125°13.390'W [Campbell River];
then to 50°03.807'N	124°50.610'W [Sarah Point].

1.3.2 Southern Gulf Islands

(see Southern Gulf Islands inset map above)

1.3.2.1 Mandatory Area to be Avoided (seasonal):

• All vessels prohibited from entering the two interim sanctuary zones (off the eastern tip of Saturna Island and off the southwest coast of North Pender Island)

1.3.2.2 Voluntary Speed Reduction Zone (seasonal):

• Reduce speed to 10 knots or less in Tumbo Channel when safe to do so

Pender Island ISZ beginning at 48°45.817'N 123°19.300'W [northwest boundary]; then to 48°46.217'N 123°18.867'W [northeast boundary]; then to 48°44.167'N 123°13.917'W [southeast boundary]; then to 48°44.153'N 123°15.517'W [southwest boundary]; then to 48°45.817'N 123°19.300'W [northwest boundary].	Saturna Island ISZ beginning at 48°47.150'N 123°02.733'W [northern boundary of East Point (shoreline)]; then to 48°47.367'N 123°02.915'W [Tumbo Channel]; then to 48°47.617'N 123°02.483'W [northwest boundary (east of Tumbo Point)]; then to 48°47.473'N 123°01.975'W [northeast boundary (Boiling Reef)]; then to 48°46.558'N 123°03.147'W [Boundary Pass]; then to 48°46.333'N 123°03.805'W [southeast boundary]; then to 48°46.350'N 123°05.150'W [southwest boundary (Narvaez Bay)]; then to 48°46.683'N 123°05.150'W [Fiddlers Cove];
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then to 48°47.150'N 123°02.733'W [northern boundary of East Point (shoreline)].

1.3.3 Near Swiftsure Bank



2024 Swiftsure Bank management measures

Canada Source: <u>Transport Canada</u>

1.3.3.1 Mandatory seasonal slowdown areas (seasonal):

• <10 knots speed over ground in the two Seasonal Slowdown Areas

Mouth of the Nitinat River	Swiftsure Bank
beginning at 48°42.377'N 125°00.000'W	beginning at 48°34.000'N 125°06.000'W
[northwest boundary];	[northwest boundary];
then to 48°36.683'N 125°00.000'W	then to 48°32.100'N 125°01.760'W
[northwest boundary (Swiftsure Bank)];	[southwest boundary];
then to 48°36.683'N 124°45.083'W	then to 48°32.100'N 124°49.545'W
[southeast boundary (Carmanah Point)];	[southern boundary (traffic separation
then along the coastline to 48°42.377'N	scheme lane)];
125°00.000'W [northeast boundary].	then to 48°32.017′N 124°46.593′W
	[southern boundary (traffic separation
	scheme lane)];
	then to 48°31.150'N 124°43.483'W
	[southeast boundary];
	then to 48°35.717′N 124°43.067′W
	[northeast boundary];
	then to 48°34.000'N 124°54.190'W
	[northern boundary];
	then to 48°34.000'N 125°06.000'W
	[northwest boundary].



1.3.4 Haro Strait and Boundary Pass



1.3.4.1 Voluntary Vancouver Fraser Port Authority ECHO Program slowdown (seasonal):

• ≤14.5 knots speed through water (for vehicle carriers, cruise ships and container vessels)

• ≤11 knots speed through water (for bulkers, tankers, and government vessels)

The voluntary slowdown takes place between the TSS at the south end of Haro Strait, and the TSS at the north end of Boundary Pass.

Speed transition zones are in place within the established traffic system at both approaches to the slowdown area.

The north transition zone are those waters between north of Boat Pass, Saturna Island and Rosenfeld Rock and the south transition zone are those waters between buoy VH at the Victoria pilot station, and Sea

Bird Point at the southeast corner of Discovery Island.

There are also two optional slowdown areas, one rounding turn point and the other between Turn point, Saturna Island and Alden Point, Patos Island.

Source: Vancouver Fraser Port Authority

North transition zone		South transition zone	
48°51'35.13"N	123°2'13.68"W	48°22'17.29"N	123°23'33.95"W
48°48'42.98"N	122°55'43.33"W	48°24'22.78"N	123°12'15.26"W
48°47'23.78"N	123°0'42.63"W		



1.3.5 Strait of Juan de Fuca



Source: Vancouver Fraser Port Authority

1.3.5.1 Voluntary Vancouver Fraser Port Authority ECHO Program lateral displacement (seasonal):

• Vessel routing – if it is safe and operationally feasible to do so, tugs are requested to move south of the known killer whale feeding area and navigate either through the outbound shipping lane or the inshore lateral displacement zone, while maintaining a buffer distance of 1,000 metres from the traffic separation scheme

<u>Strait of Juan de Fuca voluntary inshore lateral displacement</u> The inshore lateral displacement zone is 1,500 m wide and occurs in the area between longitudes 123° 52.3532' W 48° 18.6222' N and 124° 31.5563' W 48° 28.8886' N, covering a distance of approximately 28 nm.



1.3.6 Swiftsure Bank



Source: Vancouver Fraser Port Authority

1.3.6.1 Voluntary Vancouver Fraser Port Authority ECHO Program slowdown (seasonal):

- ≤14.5 knots speed through the water (for vehicle carriers, cruise ships and container vessels)
- <11 knots speed through the water (for bulkers, tankers, and government vessels)

The voluntary vessel slowdown takes place in the inbound and outbound lanes of the vessel traffic separation scheme between the start or end of the traffic separation scheme on the western or southern side, and the 124° 40' W longitudinal line (radio call in point 1) on the eastern side. Speed transition zones are in place about 5 nautical miles prior to entering the slowdown area.



References / Resources:

- Interim Order for the Protection of the Killer Whale (Orcinus orca) in the Waters of Southern British Columbia
- To subscribe and receive navigational warnings that are currently in force, visit the <u>Canadian Coast Guard website</u>
- Stay up-to-date on the Government of Canada's actions to protect Southern Resident killer whales by <u>signing up to receive Parks Canada's e-bulletin</u>
- Contact Transport Canada at: marinesafety-securitemaritime@tc.gc.ca or 1-855-859-3123 (Toll Free)
- <u>Vancouver Fraser Port Authority Enhancing Cetacean Habitat and Observation</u>
 <u>(ECHO) Program</u>
- Subscribe to the ECHO Program newsletter to receive general news and updates about the program <u>here</u>
- Contact the ECHO Program team at echo@portvancouver.com or the Vancouver Fraser Port Authority Operations Centre which is available 24/7 at 604.665.9086



Report a killer whale in distress

If you see an injured, stranded, entangled or dead killer whale, contact this toll-free number or VHF channel:

- BC Marine Mammal Response Network: 1-800-465-4336
- VHF Channel 16



1.4 North America: Canadian Arctic 1.4.1 The Tarium Niryutait and Anguniaqvia niqiqyuam Marine Protected Areas Image: A state of the target of target of the target of targ



Tarium Nirvutait

Anguniaqvia niqiqyuam Marine Protected Areas

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1.4.1.1 Voluntary Guidelines for Ships Operating in the Areas (seasonal – 1 June to 31 October):

- Avoid (red area): If passage through this area is required, vessels should slow down to a maximum speed through the water of 10 knots and post a lookout such as a marine mammal observer in order to increase the chances of seeing the whales and thus taking necessary measures to avoid them. If bypassing the whales is not possible, slow down and wait for the animals to move away to a distance greater than 400 metres (0.215 nautical miles). It is more difficult to see the animals in rain, fog, or in rough sea states, therefore increased caution is recommended.
- Slow down to 10 knots or less (yellow area): Vessels should slow down to a maximum speed through the water of 10 knots, remain in the marked community supply channels and post a lookout.

These measures apply to merchant vessels, cruise ships, small vessels and adventure craft within the boundaries of the MPAs and the additional identified areas to prevent collisions with whales and to mitigate the underwater noise generated by the vessels. These measures should only be taken when they will not jeopardize navigational safety.

The Tarium Niryutait Marine Protected Areas consist of three areas of the Mackenzie Bay: Okeevik, Kittigaryuit and Niaqunnaq. The ocean bottom is soft and sediment laden and the waters are fairly shallow. The three areas are bounded by rhumb lines connecting the

Source: Transport Canada



following geographical coordinates [North America Datum 1983 (NAD 83)/World Geodetic System (WGS 84)].

<u>Okeevik Sub Area</u>		Kittigaruit Sub Area	
(1) 69 <i>°</i> 38′19"	135 <i>°25′</i> 09″	(1) 69° 35′ 10"	133° 48′ 26"
(2) 69 <i>°</i> 38′03″	135 <i>°25′11</i> ″	(2) 69° 34′ 00"	133° 28′ 00"
(3) 69 <i>°</i> 37′46″	135 <i>°24′52</i> ″	(3) 69° 23′ 37"	133° 26′ 40"
(4) 69 <i>°29′4</i> 9″	135 <i>°</i> 12′49″	(4) 69° 20′ 34"	133° 40′ 37"
(5) 69 <i>°</i> 30′45″	135 <i>°</i> 16′56″	(5) 69° 19′ 05"	133° 42′ 21"
(6) 69 <i>°29′2</i> 6″	135 <i>°</i> 18′53″	(6) 69° 19′ 01"	133° 42′ 31"
(7) 69 <i>°2</i> 9′23″	135 <i>°</i> 19′06″	(7) 69° 20′ 39"	133° 43′ 20"
(8) 69 <i>°28′</i> 07″	135 <i>°20′2</i> 5″	(8) 69° 16′ 42"	133° 54′ 54"
(9) 69 <i>°27′</i> 36″	135 <i>°24′2</i> 5″	(9) 69° 15′ 20"	134° 06′ 53"
(10) 69 <i>°25′51</i> ″	135 <i>°</i> 32′27″	(10) 69° 16′ 33"	134° 05′ 56"
(11) 69 <i>°26′32</i> ″	135 <i>°</i> 34′ 54″	(11) 69° 20′ 42"	134° 02′ 44"
(12) 69 <i>°</i> 28′21″	135 <i>°</i> 35′24″	(12) 69° 24′ 00"	133° 59′ 10"
(13) 69 <i>°28′</i> 35″	135 <i>°</i> 36′40″	(13) 69° 24′ 34"	133° 53′ 49"
(14) 69 <i>°28′</i> 39″	135 <i>°</i> 37′58″	(14) 69° 28′ 21"	133° 48′ 15"
(15) 69 <i>°</i> 30′34″	135 <i>°</i> 45′54″	(15) 69° 28′ 02"	133° 50′ 59"
(16) 69 <i>°</i> 35′18"	135 <i>°</i> 35′42″	(16) 69° 33′ 20"	133° 47′ 29"
(17) 69 <i>°</i> 36′00″	135 <i>°22′</i> 10"	(17) 69° 34′ 33"	133° 47′ 42"
(18) 69 <i>°</i> 34′40″	135 <i>°20′0</i> 9"	(18) 69° 32′ 55"	133° 51′ 09"
(19) 69 <i>°</i> 34′00"	135 <i>°20′0</i> 9"	(19) 69° 32′ 56"	133° 51′ 54"
(20) 69 <i>°</i> 34′00″	135 <i>°27′</i> 39″	(20) 69° 33′ 46"	133° 55′ 48"
(21) 69 <i>°</i> 36′00″	135 <i>°27′</i> 39″	(21) 69° 33′ 46"	133° 55′ 31"
(22) 69 <i>°27′</i> 00″	135 <i>°</i> 31′11"		
(23) 69 <i>°27′</i> 00″	135 <i>°34′4</i> 5″		
Niaqunnaq Sub Area			
(1) 69° 08′ 00"	136° 16′ 44"		
(2) 69° 04′ 25"	136° 07′ 45"		
(3) 69° 03′ 43"	136° 07′ 08"		
(4) 69° 01′ 19"	136° 04′ 45"		
(5) 69° 01′ 14"	136° 04′ 45"		
(6) 69° 00′ 57"	136° 05′ 42"		
(7) 69° 00′ 12"	136° 07′ 08"		
(8) 68° 57′ 00"	136° 10′ 00"		
(9) 68° 55′ 00"	136° 15′ 00"		
(10) 68° 54′ 22"	136° 31′ 50"		
(11) 68° 55′ 00"	136° 38′ 33"		
(12) 68° 56′ 15"	137° 00′ 41"		
(13) 68° 56′ 29"	137° 03′ 03"		
(14) 68° 55′ 48"	137° 11′ 00"		
(15) 68° 57′ 50"	137° 16′ 40"		
(16) 68° 59′ 20"	137° 21′ 30"		
(17) 69° 03′ 09"	137° 44′ 54"		



The Anguniaqvia niqiqyuam Marine Protected Areas consist of two areas in Darnley Bay and Amundsen Gulf in the Beaufort Sea: Zone 1 and Zone 2. The areas consist of the seabed, the subsoil to a depth of five metres and the water column, including the sea ice. The two areas are bounded by straight lines connecting the following geographical coordinates [North America Datum 1983 (NAD 83)].

Zone 1		Zone 2	
(A) 69°21'07.8"	124° 21' 32" approx	(K) 70° 04' 15.8"	124° 41' 51" approx
(B) 70° 12' 00" approx.	124° 31' 55.2"	(L) 70° 04' 48.6"	124° 41' 54" approx
(C) 70° 08' 22.0"	124° 41' 45" approx	(M) 70° 02' 12.9"	124° 35' 23" approx
(D) 70° 09' 09.9"	124° 57' 42" approx	(N) 70° 02' 12.9"	124° 35' 29" approx
(E) 70° 09' 13" approx.	125°05'28.6"		
(F) 70°09'13.2"	125° 17' 53.0"		
(G) 70°20'00.0"	125° 17' 53.0"		
(H) 70° 20' 00.0"	123° 54' 17.5"		
(I) 69° 37' 20.6"	123° 54' 17.5"		
(J) 69° 30' 00.0"	124° 15' 34.7"		



References / Resources:

• Canadian Coast Guard Notice to Mariners



1.5 North America: United States (East Coast)

An overview of Seasonal Management Areas (SMA) along the U.S. East Coast. Most vessels 65 feet or longer must travel at 10 knots or less in these zones when active.



Source: National Oceanic and Atmosphere Administration Fisheries



1.5.1 Northeast U.S.



1.5.1.1 Mandatory:

- ≤10 knots speed restriction in Cape Cod Bay Seasonal Management Area (seasonal 1 January to 15 May)
- ≤10 knots speed restriction in Off Race Point Seasonal Management Area (seasonal 1 March to 30 April)
- ≤10 knots speed restriction in Great South Channel Seasonal Management Area (seasonal 1 April to 31 July)
- Traffic Separation Scheme in Boston, Massachusetts (year-long)
- USCG WHALESNORTH ship reporting (year-long)

<u>Cape Cod Bay Seasonal Management Area</u> 42°04'56.5"N, 070°12'W 42°12'N, 070°12'W then due west back to shore.	Off Race Point Seasonal Management Area 42°04'56.5"N, 070°12'W 42°12'N, 070°12'W 42°12'N, 070°30'W 42°30'N, 070°30'W 42°30'N, 069°45'W 41°40'N, 069°45'W then due west back to shore.
<u>Great South Channel Seasonal</u> <u>Management Area</u> 42°30'N, 069°45'W 42°30'N, 067°27'W 42°09'N, 067°08'24''W 41°00'N, 069°05'W 41°40'N, 069°45'W then back to starting point.	



In the approach to Boston, MA: Traffic separation scheme. (a) A separation zone 1 mile wide is established and is centered upon the following geographic positions:

42°20.73' N 70°39.06' W. 42°18.28' N 70°01.14' W. 40°49.25' N 69°00.81' W.

(b) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

40°50.47' N 68°58.67' W. 42°20.17' N 69°59.40' W. 42°22.71' N 70°38.62' W.

(c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

42°18.82' N 70°40.49' W. 42°16.39' N 70°02.88' W. 40°48.03' N 69°02.95' W.

Source: <u>https://www.ecfr.gov/current/title-33/chapter-I/subchapter-P/part-167/subpart-</u> B/section-167.77

In the approach to Boston, MA: Precautionary areas.

(a) A precautionary area is established with a radius of 6.17 nautical miles centered upon geographical position 42°22.71' N, 70°46.97' W.

(b)

(1) A precautionary area is established and is bounded to the east by a circle of radius 15.5 miles, centered upon geographical position 40°35.01' N, 68°59.96' W, intersected by the traffic separation schemes in the approach to Boston, MA, and Eastern approach, off Nantucket (part II of the TSS off New York) at the following geographical positions:

40°50.47' N 68°58.67' W. 40°23.75' N 69°13.95' W.

(2) The precautionary area is bounded to the west by a line connecting the two TSSs between the following geographical positions:

40°48.03' N 69°02.95' W. 40°36.76' N 69°15.13' W.

Source: <u>https://www.ecfr.gov/current/title-33/chapter-l/subchapter-P/part-167/subpart-</u> *B/section-167.76*





Source: National Oceanic and Atmosphere Administration Fisheries

The area coordinates (NAD 83) are as follows: from a point on Cape Ann, Massachusetts at 42°39'N, 70°37'W;

then northeast to 42°45'N, 70°13'W; then southeast to 42°10'N, 68°31'W; then south to 41°00'N, 68°31'W; then west to 41°00'N, 69°17'W; then northwest to 42°05'N, 70°02'W; then west to 42°04'N, 70°10'W; and then along the Massachusetts shoreline of Cape Cod Bay and Massachusetts Bay back to the point on Cape Ann at 42°39'N, 70°37'W.

1.5.1.2 Voluntary:

- ATBA in Great South Channel (seasonal 1 April to 31 July)
- Vessel routing off Boston, Massachusetts (seasonal January to May)

Great South Channel ATBA

(1) 41° 44´.14 N 069° 34´.83 W (2) 42° 10´.00 N 068° 31´.00 W (3) 41° 24´.89 N 068° 31´.00 W (4) 40° 50´.47 N 068° 58´.67 W



See also charts of approaches to Boston Traffic Separation Scheme and Area to be Avoided:

- <u>13200: Georges Bank and Nantucket</u> <u>Shoals</u>
- 13203: Georges Bank Western Part
- <u>13006: West Quoddy Head to New York</u>



Vessel routing off Boston, Massachusetts



Source: National Oceanic and Atmosphere Administration Fisheries

For navigation, refer to the current version of NOAA Chart 13246. The area shaded in blue is designed critical habitat for North Atlantic right whales 50 CFR 226.203(b)). This area is a critical feeding area for whales between January and May each year.



Source: National Oceanic and Atmosphere Administration Fisheries



1.5.2.1 Mandatory:

- ≤10 knots speed restriction in Seasonal Management Areas with calving and nursery grounds (seasonal 15 November to 15 April)
- U.S. Coast Guard ship reporting (seasonal 15 November to 16 April)



The area (NAD 83) extends from the shoreline eastward to longitude 80°51.6'W with the southern and northern boundaries at latitude 30°00'N and 31°27'N., respectively.

Source: National Oceanic and Atmosphere Administration Fisheries

SE Seasonal Management Area

Vessel speed is restricted in the area bounded to the north by latitude 31°27'N; to the south by latitude 29°45'N; to the east by longitude 080°51'36"W.

1.5.2.2 Voluntary:

• Vessel routing off Georgia and Florida (seasonal – November to April)



Vessel routing off Georgia and Florida For navigation, refer to the current version of Brunswick, GA NOAA Chart 11480. The area shaded in blue is a calving area of North Atlantic right whales November 15 through April 15. This area encompasses the northern portion of the designated critical habitat for the whales (see 50 CFR 226.203(c)). The red dashed line 270°T extending East from Florida coastline, then North parallel to shore is the Mandatory Ship Reporting boundary line. Source: National Oceanic and Atmosphere Administration Fisheries Jacksonville, FL SOUTHEAST REGION Refer to NOAA Chart

1.5.3 Mid-Atlantic U.S.



Source: National Oceanic and Atmosphere Administration Fisheries



1.5.3.1 Mandatory:

• ≤10 knots speed restriction in Seasonal Management Areas with migratory routes and calving grounds (seasonal – 1 November to 30 April)

Block Island Sound waters bounded by: 40°51'53.7" N 070°36'44.9" W 41°20'14.1" N 070°49'44.1" W 41°04'16.7" N 071°51'21.0" W 40°35'56.5" N 071°38'25.1" W then back to starting point.	Within a 20-nm (37 km) radius of the following (as measured seaward from the COLREGS lines): -Ports of New York/New Jersey: 40°29'42.2"N 073°55'57.6"W-Entrance to the Delaware Bay (Ports of Philadelphia and Wilmington): 38°52'27.4"N 075°01'32.1"W-Entrance to the Chesapeake Bay (Ports of Hampton Roads and Baltimore): 37°00'36.9"N 075°57'50.5"W-Ports of Morehead City and Beaufort, NC: 34°41'32.0"N 076°40'08.3"W
Within a continuous area 20-nm from shore between Wilmington, North Carolina, to Brunswick, Georgia, bounded by the following: A- 34°10'30"N, 077°49'12"W B- 33°56'42"N, 077°49'12"W C- 33°36'30"N, 077°47'06"W D- 33°28'24"N, 078°32'30"W E- 32°59'06"N, 078°50'18"W F- 31°50'00"N, 080°33'12"W G- 31°27'00"N, 080°51'36"W and west back to the shore.	

1.5.3.2 Voluntary Port Authority of New York & New Jersey Clean Vessel Incentive (CVI) Program:

• Vessels enrolled in the CVI program to slow-steam at 10 knots or less from 20 nautical miles outside of the Territorial Sea Line (year-long)





Source: Port Authority of New York & New Jersey

Through the VSR component of the CVI Program, the Port Authority encourages ships to expand and extend their seasonal compliance obligations under National Oceanic and Atmospheric Administration's (NOAA) Right Whale Ship Strike Reduction Rule (50 CFR 224.105). The VSR component rewards ships that slow down throughout the year and extends the area for speed reduction into the harbor, thereby reducing criteria air pollutants, as well as CO2 emissions and the risk of fatal strikes on whales.

1.5.4 Right Whale Slow Zones & Dynamic Management Areas

1.5.4.1 Voluntary:

 Area to be avoided or ≤10 knots speed recommendation (activated by NOAA on an ad hoc basis – based on visual sightings of three or more right whales within a discrete area or based on acoustic triggers)

See the "Current Right Whale Slow Zones/DMAs" section at NOAA's webpage.

References / Resources:

- NOAA webpage Reducing Vessel Strikes to North Atlantic Right Whales
- Sign up for <u>emailers / text notifications</u> about the latest Right Whale Slow Zones
- Follow NOAA on Facebook (@NOAAFisheriesNEMA) and Twitter (@NOAAFish_GARFO) for announcements
- Check for Right Whale Slow Zones/DMAs on NOAA's <u>online right whale sightings</u>
 <u>map</u>
- Port Authority of New York & New Jersey Clean Vessel Incentive (CVI) Program



Report a vessel strike to NOAA

Report vessel strikes to the National Marine Mammal Stranding Network.



1.6 North America: United States (West Coast) 1.6.1 Southern California Region



Source: NOAA Channel Islands National Marine Sanctuary

1.6.1.1 Mandatory:

- Channel Islands National Marine Sanctuary ATBA (year-long)
- Traffic Separation Scheme (year-long)

In order to avoid risk of pollution in the area designated as the Channel Islands National Marine Sanctuary, all ships, except those bound to and from ports on one of the islands within the area, engaged in the trade of carrying cargo, including but not limited to tankers and other bulk carriers and barges, should avoid the following areas:

<u>Channel Islands National Marine Sanctuary ATBA</u> (a) In the region of San Miguel, Santa Rosa, Santa Cruz and Anacapa Islands off the coast of southern California

33°58'.7 N, 119°12'.8 W 33°54'.0 N, 119°17'.0 W 33°46'.3 N, 120°07'.8 W 33°59'.0 N, 120°39'.5 W 34°10'.4 N, 120°39'.5 W 34°10'.0 N, 120°31'.3 W 34°10'.0 N, 119°56'.4 W 34°01'.4 N, 119°18'.6 W



(b) In the region of the Santa Barbara Island off the coast of southern California The area contained within a circle of radius 7.5 nautical miles, centred on the following geographical position, is designated as an area to be avoided:

33°28′.6 N, 119°02′.2 W

1.6.1.2 Voluntary:

- ≤10 knots speed recommendation in the Southern California Vessel Speed Reduction zone (seasonal 1 May to 15 December)
- Channel Islands National Marine Sanctuary extended ATBA (year-long)

<u>Southern California Region Vessel Speed</u> <u>Reduction zone</u> 34° 34.43' N, 121° 01.796' W 33° 18.066' N, 121° 01.796' W 33° 18.066' N, 117° 29.988' W <u>Channel Islands National Marine Sanctuary</u> <u>voluntary expanded ATBA</u> 34° 26.01' N, 121° 01.796' W 33° 49.11' N, 121° 01.796' W

1.6.2 San Francisco and Monterey Bay Regions



Source: <u>NOAA Cordell Bank, Greater Farallones, and Monterey Bay National Marine</u> <u>Sanctuaries</u>

1.6.2.1 Mandatory:

Traffic Separation Scheme (year-long)



1.6.2.2 Voluntary:

- ≤10 knots speed recommendation in the San Francisco Bay Region Vessel Speed Reduction zone (seasonal – 1 May to 15 December; see also Protecting Blue Whales and Blue Skies incentive-based VSR program)
- Monterey Bay National Marine Sanctuary recommended tracks for (i) vessels 300 gross tons and above (except those carrying hazardous cargo in bulk or crude oil) and for (ii) vessels carrying hazardous cargo in bulk (year-long)



Monterey Bay National Marine Sanctuary vessel routing



Source: Monterey Bay National Marine Sanctuary

(i) Recommended tracks for vessels 300 gross tons and above (except those carrying hazardous cargo in bulk or crude oil):

Northbound 15nm off Point Sur 12.7nm off Pigeon Point Southbound 16nm off Pigeon Point 20nm off Point Sur

(ii) vessels carrying hazardous cargo in bulk: Use Western TSS when entering or leaving San Francisco

Northbound

25nm off Point Sur 25nm off Pigeon Point <u>Southbound</u> 30nm off Pigeon Point 30nm off Point Sur



1.6.3 Puget Sound, Washington State



The Vessel Traffic Service Puget Sound area consists of the U.S. navigable waters of the Salish Sea from a line drawn from the Washington State coastline at 48°23.133' N., 124°43.616' W. on Cape Flattery to the Cape Flattery Light at 48°23.5' N., 124°44.2' W. on Tatoosh Island, due west to the U.S. Territorial Sea Boundary; thence northward along the U.S. Territorial Sea Boundary to its intersection with the U.S./Canada International Boundary; thence east along the U.S./Canada International Boundary to 49°00.1' N., 122°45.3' W. (International Boundary Range C Rear Light).

Source: <u>VTS Puget Sound Users Manual</u>

1.6.3.1 Voluntary for all VTS Puget Sound users:

- Report whale sightings
- Apply for Whale Report Alert System (WRAS) access for enhanced situational awareness while transiting
- Reduce your speed to 10 knots or less
- Give whales their space
- Always be on the lookout
- Turn off ultrasonic anti-fouling systems in areas with reported killer whales
- Review the International Maritime Organization's guidelines for vessel noise reduction to find out how activities like vessel maintenance, propeller design and selection, and selection and mounting of engines and machinery can produce a quieter vessel



References / Resources:

- <u>Channel Islands Marine Sanctuary webpage</u>
- Greater Farallones National Marine Sanctuary webpage
- Monterey Bay National Marine Sanctuary webpage
- Blue Whale and Blue Skies program webpage
- USCG District 11 Local Notice to Mariners
- USCG VTS Puget Sound Cetacean Desk
- Whale Report Alert System

Report whale sightings and vessel strikes

- Call NOAA West Coast Stranding Hotline +1 (866)767-6114
- Call NOAA Entanglement Hotline +1 (877) SOS-WHAL (767-9425)
- Dolphin & Whale 911 app (available on Apple devices)
- Call the Coast Guard on VHF Ch 16



1.7 North America: United States (Others)1.7.1 In the Region of the Aleutian Island Archipelago

1.7.1.1 Voluntary:

• Five Areas to Be Avoided

In order to reduce the risk of a marine casualty and resulting pollution and damage to the environment "In the Region of the Aleutian Island Archipelago", all ships 400 gross tonnage and upwards solely in transit should avoid the areas to be avoided bounded by lines connecting the following geographical positions:

East area to be avoided		<u>Unalaska area to be avoided</u>	
(1) 54° 07'.94 N	162° 19'.48 W	(13) 51° 41′.19 N	170° 52'.93 W
(7) 56° 19'.83 N	161° 04'.29 W	(19) 54° 21′.96 N	165° 43′.77 W
(2) 54° 22'.14 N	164° 59'.57 W	(14) 51° 53'.22 N	171° 32′.60 W
(8) 56° 04'.91 N	160° 29'.04 W	(20) 54° 11′.15 N	163° 41′.63 W
(3) 54° 43′.51 N	165° 09'.77 W	(15) 52° 41′.95 N	171° 50'.08 W
(9) 55° 40'.94 N	159° 32′.43 W	(21) 53° 40′.84 N	163° 41′.67 W
(4) 54° 59'.45 N	165° 14'.74 W	(16) 53° 17′.64 N	171° 50'.31 W
(10) 55° 22′.58 N	158° 49'.19 W	(22) 53° 24′.39 N	164° 07'.37 W
(5) 55° 43′.20 N	163° 38'.05 W	(17) 54° 09'.49 N	169° 23′.53 W
(11) 54° 41′.38 N	158° 31′.66 W	(23) 52° 46′.62 N	165° 56′.33 W
(6) 56° 08'.30 N	162° 22′.14 W	(18) 54° 17′.62 N	168° 11'.32 W
(12) 54° 21′.99 N	159° 11'.54 W	(24) 51° 57′.40 N	168° 57′.60 W
thence back to point	(1).	thence back to point ((13).
<u>Atka area to be avoid</u>	<u>ed</u>	<u>Amchitka area to be a</u>	<u>voided</u>
(25) 50° 38'.55 N	180° 00'.00 W	(34) 51° 51′.50 N	174° 47'.54 E
(30) 52° 41′.07 N	171° 56.15'W	(39) 52° 36′.31 N	179° 22.09'W
(26) 51° 11′.83 N	179° 50'.46 W	(35) 52° 15′.54 N	174° 53'.24 E
(31) 51° 37′.86 N	171° 34.53'W	(40) 51° 32′.27 N	179° 41.19'W
(27) 52° 39′.35 N	178° 39′.78 W	(36) 52° 46′.63 N	176° 15'.15 E
(32) 51° 15'.27 N	172° 36.40'W	(41) 50° 33'.65 N	179° 33.12'E
(28) 53° 13'.18 N	173° 49'.18 W	(37) 52° 57′.86 N	177° 37'.91 E
(33) 50° 21′.63 N	179° 24.20'W	(42) 50° 44'.11 N	178° 10.33'E
(29) 53° 02′.71 N	172° 51′.16 W	(38) 52° 48′.39 N	180° 00'.00
thence back to point	(25).	(43) 51° 21′.00 N	175° 59.57'E
		thence back to point ((34).
West area to be avoid	led		
(44) 53° 40'.90 N	171° 50'.53 E		
(50) 52° 08'.23 N	174° 21'.75 E		
(45) 53° 49'.20 N	172° 29'.47 E		
(51) 51° 40'.59 N	172° 45'.27 E		
(46) 53° 47′.85 N	173° 25'.48 E		
(52) 52° 20'.90 N	171° 29'.34 E		
(47) 53° 24'.41 N	174° 54'.79 E		
(53) 52° 40′.53 N	171° 10'.34 E		
(48) 53° 07'.49 N'	175° 18'.74 E		
(54) 53° 00'.92 N	171° 06'.20 E		
(49) 52° 19'.54 N	174° 51′.62 E		
(55) 53° 23′.69 N	171° 19'.71 E		
thence back to point	(44).		



1.7.2 In the Bering Sea & Bering Strait

1.7.2.1 Voluntary:

• Three Areas to Be Avoided

Nunivak Island	King Island
(1) 60° 17'.05 N 167° 37'.80 W	(6) 65° 03'.12 N 168° 19'.56 W
(4) 59° 32'.80 N 165° 28'.80 W	(8) 64° 53'.54 N 167° 46'.98 W
(2) 59° 54'.89 N 167° 40'.98 W	(7) 64° 51'.01 N 168° 14'.82 W
(5) 60° 39'.86 N 165° 41'.70 W	(9) 65° 05'.53 N 167° 52'.92 W
(3) 59° 41'.44 N 166° 49'.08 W	thence back to point (6).
thence back to point (1).	
St. Lawrence Island	
(10) 63° 08'.57 N 173° 31'.02 W	
(14) 63° 17'.99 N 168° 12'.54 W	
(11) 62° 44'.38 N 168° 58'.32 W	
(15) 63° 59'.95 N 171° 06'.18 W	
(12) 62° 46'.14 N 168° 21'.24 W	
(16) 63° 54'.80 N 171° 50'.94 W	
(13) 63° 01'.78 N 168° 04'.38 W	
thence back to point (10).	



References / Resources:

- IMO Ships' Routeing 2019 Edition Part D Section II/18
- IMO Ships' Routeing 2019 Edition Part D Section II/19



1.8 North America: Salish Sea (Canada & United States)

Cetacean Desk: U.S. Puget Sound Vessel Traffic Service (VTS) Managed Waters

1.8.1 Voluntary:

Report sighting on VHF Channels 5A or 14, or call the Cetacean Desk at 1-206-217-ORCA (6722).

<u>Seattle Traffic (VHF Ch. 5A)</u>: The waters of the Strait of Juan de Fuca east of 124 °40 'W. excluding the waters in the central portion of the Strait of Juan de Fuca north and east of Race Rocks; the navigable waters of the Strait of Georgia east of 122 °52 'W.; the San Juan Island Archipelago, Rosario Strait, Bellingham Bay; Admiralty Inlet north of a line connecting Nodule Point and Bush Point and all waters east of Whidbey Island North of a line drawn due east from the southernmost tip of Possession Point on Whidbey Island to the shoreline.

<u>Seattle Traffic (VHF Ch. 14)</u>: The waters of Puget Sound, Hood Canal and adjacent waters south of a line connecting Nodule Point and Bush Point in Admiralty Inlet and south of a line drawn due east from the southernmost tip of Possession Point on Whidbey Island to the shoreline.

Marine Mammal Desk: Canadian Marine Communications & Traffic Services Center (MCTS) Managed Waters

1.8.2 Voluntary:

Report sightings through the Marine Mammal Desk at 1-833-339-1020 or via CCG Radio.

<u>Prince Rupert MCTS</u>: The waters west of 124 °40 ′W. within 12 nautical miles of the coast of Vancouver Island including the waters north of 48 °N., and east of 125 °15 ′W.

<u>Victoria MCTS</u>: The waters of the Strait of Georgia, including Vancouver Harbor, Boundary Pass, and Haro Strait north and west of a line drawn from Church Point on Vancouver Island, to Race Rocks Light, due easterly to the intersection of the U.S./Canadian border at 48 °17.883 ′N., 123 °14.1 ′W., north-easterly to Hein Bank in position 48 °21.093 ′N., 123 ° 02.762 ′W., northerly to Cattle Point Light on San Juan Island, along the shoreline to Lime Kiln Light, to Kellett Bluff Light on Henry Island, along the shoreline to the tip of McCracken Point at the northernmost point of Henry Island, to the southernmost point on Stuart Island in position 48 °39.467 ′N., 123 °11.083 ′W., along the shoreline to Turn Point Light, to Sandy Point on Waldron Island, along the shoreline to Point Hammond, to Patos Island Light, to Alden Bank in position 48 °50.389 ′N., 122 °52.227 ′W., then due north to Boundary Bay in position 49 °00.125 ′N., 122 °52.227 ′W., then due east along the international boundary to the shoreline in Semiahmoo Bay.



References / Resources:

- USCG District 11 Local Notice to Mariners
- USCG VTS Puget Sound Cetacean Desk
- Whale Report Alert System





Report whale injuries/strikes, entanglements, or strandings In U.S. waters:

- NOAA West Coast Stranding Hotline 1-866-767-6114
- NOAA Entanglement Hotline 1-877-SOS-WHAL (767-9425)
- Dolphin & Whale 911 app (available on Apple devices)
 - U.S. Coast Guard on VHF Channel 16

In Canadian waters:

- DFO Marine Mammal Incident Reporting Hotline 1-800-465-4336
- CCG Marine Mammal Desk at 1-833-339-1020 or CCG radio

Report incidents of harassment or disturbance of marine animals In U.S. waters:

- NOAA Enforcement Hotline 1-800-853-1964
- WDFW Enforcement Hotline 1-877-933-9847
- U.S. Coast Guard on VHF Channel 16
- Be Whale Wise Violation Report Form (https://www.bewhalewise.org/report-violators/)

In Canadian waters:

- DFO Marine Mammal Incident Reporting Hotline 1-800-465-4336
- CCG Marine Mammal Desk at 1-833-339-1020 or CCG radio
- Be Whale Wise Violation Report Form (https://www.bewhalewise.org/report-violators/)



2. Central & South America

2.1 Panama



Source: Panama Canal Authority

2.1.1.1 Voluntary:

• ≤10 knots speed recommendation in TSS (annually – 1 August to 30 November)

In order to help reduce the risk of lethal strikes with cetaceans, it is recommended that, as far as it is safe and practical to do so, ships should proceed at a speed of not more than 10 knots from 1 August to 30 November every year. This recommendation applies to both traffic lanes of the Traffic Separation Scheme in the Gulf of Panama, north of latitude 08°00'.00 N. (Source: IMO COLREG.2/Circ.65)

Traffic Separation Scheme in the Gulf of Panama

(a) A separation zone bounded by a line connecting the following geographical positions:
(4) 08°44'.70 N, 079°27'.00 W
(5) 08°35'.00 N, 079°26'.00 W
(6) 07°45'.00 N, 079°26'.00 W
(7) 07°45'.00 N, 079°23'.00 W
(8) 08°35'.00 N, 079°23'.00 W
(9) 08°45'.42 N, 079°25'.44 W

The separation zone is approximately three miles wide in the south and narrowing in the north.

(b) A southbound traffic lane between the separation zone and a separation line connecting the geographical positions 1, 2 and 3:
(1) 07°45'.00 N, 079°28'.20 W
(2) 08°35'.00 N, 079°28'.20 W
(3) 08°44'.00 N, 079°28'.00 W



The southbound traffic lane is approximately one mile wide at the northern limit and two miles wide in the south.

(c) A northbound traffic lane between the separation zone and a separation line connecting the geographical positions 10, 11 and 12:
(10) 08°46'.00 N, 079°24'.62 W
(11) 08°35'.00 N, 079°21'.00 W
(12) 07°45'.00 N, 079°21'.00 W

The northbound traffic lane is approximately two miles wide in the south and one mile wide at the northern limit.



References / Resources:

- Panama Canal Authority Advisory to Shipping No. A-31-2019
- Panama Maritime Authority Merchant Circular MMC-304
- Panama Canal Authority webpage
- Recommendations on navigation for the new traffic separation scheme "On the Pacific coast of Panama" (Part 1 "Gulf of Panama") in IMO Circular SN.1/Circ. 326
- Annex 1 Part 1 "Gulf of Panama" in IMO COLREG.2/Circ.65



2.2 Costa Rica



2.2.1.1 Mandatory:

- Areas to be Avoided called Bahía Pavón located at the entrance to Golfo Dulce, Pacific coast of Costa Rica and the Osa Peninsula Avoidance Zone
- Traffic Separation Device and Coastal Navigation Zones in the Gulf of Nicoya

Areas to be Avoided (Bahía Pavón)

(1)	08° 32.480' N	083° 8.795' W
(2)	08° 32.480' N	083° 12.070' W
(3)	08° 20,000' N	083° 12.070' W
(4)	08° 20,000' N	083° 6.610' W

Areas to be Avoided (Osa Peninsula)

(1)	8° 32.50' N	83° 17.06' W
(2)	8° 32.48' N	83° 14.10' W
(3)	8°20.00' N	83° 14.10' W
(4)	8°24.50'N	83° 40.00' W
(5)	8° 43.60' N	84° 0.00' W
(6)	8° 47.25' N	83° 38.69' W

Traffic Separation Device in the Gulf of Nicoya

(a) A traffic separation zone, 10.6 nautical miles long, one nautical mile of broad, this limited by a line that connect the following geographical positions:

(5) 09° 39.520' N 084° 48.685' W
(6) 09° 50.020' N 084° 47.030' W
(7) 09° 49.860' N 084° 46.045' W
(8) 09° 39.370' N 084° 47,700' W

(b) A southbound traffic lane, one nautical mile wide, is established between the separation zone and a line connecting the following geographic positions:



(1)	09° 39.670' N	084° 49.670' W
(2)	09° 50.170' N	084° 48.020' W
(6)	09° 50.020' N	084° 47.030' W
(5)	09° 39.520' N	084° 48.685' W

(c) A lane of traffic towardt he north, of a mile nautical of broad, between the separation zone and a line connecting the following geographical positions:

(3) 09° 49.710' N 084° 45.060' W
(4) 09° 39.205' N 084° 46.705' W

(8) 09° 39.370' N 084° 47,700' W

(7) 09°49.860' N 084°46.045' W

Coastal Navigation Zones in the Gulf of Nicoya

(a) A coastal navigation zone is designated to the west of the Gulf of Nicoya traffic separation device, between Punta Gigante and Cabo Blanco, in an area between the following geographic coordinates:

(10)	09° 54.310' N	084° 54.995' W
(2)	09° 50.170' N	084° 48.020' W

(1) $09^{\circ}39.670'N 084^{\circ}49.670'W$

(9) 09° 33.520' N 085° 6.720' W

(b) A coastal navigation zone is designated to the East of the Gulf of Nicoya traffic separation device, between Punta Loros and Punta Guapinol, in an area between the following geographic coordinates:

(11)	09° 51.520' N	084° 42.015' W
(3)	09° 49.710' N	084° 45.060' W
(4)	09° 39.205' N	084° 46.705' W
(12)	09° 35.460' N	084° 37.420' W



References / Resources:

Decree No. 41003-MOPT-SP-MINAE

• IMO Ships' Routeing 2019 Edition Section III/18



2.3 Brazil 2.3.1 São Sebastião

2.3.1.1 Voluntary (annually – May to November)

- Consider reducing the ship's speed to 10 knots once 20nm from São Sebastião Island, especially during nighttime
- Consider putting a lookout on the bow
- Ensure maximum maneuverability of the vessel
- Consider stop the propeller from turning, as an ultimate protection measure if whales are sighted very close to the vessel and it's not possible to change course to avoid collision
- Prioritize the North Bar pilot station as a port entry if the draft of the ship allows
- Contribute, whenever possible, to the voluntary observation system and lookout to identify the presence of whales inside the channel and anchorage area
- Departure via South Bar pilot station
- Avoid the area around the Southwestern shore of São Sebastião Island (off Ponta da Sela):



Source: Whale Guardians

Avoid the area around the Southwestern shore of São Sebastião Island (off Ponta da Sela). This will exclude the area with the highest whale records around the island

Coordinates of the area to be avoided:

- a. 23°53.2'S 045°27.7'W (Ponta da Sela)
- b. $23^{\circ}56.0'S 045^{\circ}30.5'W$
- c. 24°03.6'S 045°30.5'W
- d. 24°03.6'S 045°15.1'W
- e. 23°58.0'S 045°15.1'W (Ponta do Boi)

References / Resources:

<u>Recommended routing guidelines for São Sebastião (Whale Guardians)</u>



3. Europe3.1 Spain3.1.1 Spanish waters

ESPACIO MÓVIL DE PROTECCIÓN DE CETÁCEOS



Source: ROYAL DECREE 1727/2007, of December 21, establishing protection measures for cetaceans.

3.1.1.1 Mandatory:

- Any conduct that may cause death, damage, discomfort or concern to cetaceans must be avoided in the Mobile Space for the Protection of Cetaceans
- If during the performance of any activity in the Mobile Space for the Protection of Cetaceans, any sign of alarm, discomfort or alteration in the behavior of a cetacean or a group of them is observed, such as sudden changes of direction or speed, jumps before the repeated approach, flight or departure, said Space must be abandoned in the shortest possible time, trying to avoid further inconvenience to the animals during the removal maneuvers.
- Mobile Space for the Protection of Cetaceans: that whose perimeter is the contour of the surface of an imaginary cylinder that encompasses the marine and air spaces in a radius of 500 meters, with a height of 500 meters in the air space and a depth of 60 meters in the underwater space, included from a cetacean or group of cetaceans:
 - 1st Exclusion Zone, which will have a radius of not less than 60 meters measured at the surface of the water from the cetacean or group of cetaceans.
 - 2nd Restricted Permanence Zone, which includes the area between the limit of the Exclusion Zone (60 m) and the limit of the Approach Zone (300 m).
 - 3rd Approach Zone, which includes the surface between 300 meters from the limit of the Restricted Permanence Zone and 500 meters from the outer contour of the Mobile Space for the Protection of Cetaceans.
 - 4th Air Zone, which includes the airspace zone within the 500 meter radius of the imaginary
 - o cylinder vertically, and horizontally, from the cetacean or group of cetaceans.
 - 5th Submarine Zone, which includes the zone of underwater space within a 500meter radius of the imaginary horizontal cylinder and 60 meters in depth from the cetacean or group of cetaceans.



3.1.2 Strait of Gibraltar



Source: Ministerio de fomento / D.G. de la Marina Mercante 04-01-07

3.1.2.1 Voluntary:

- ≤13 knots speed recommendation
- Navigate with maximum vigilance

Critical area for cetaceans in the Strait of Gibraltar

36°00,6'N 5°28,8'W 35°55,2'N 5°Z7,0'W 35°51,6'N 5°38,4'W 35°57,0'N 5°40,2'W



References / Resources:

- ROYAL DECREE 1727/2007, of December 21, establishing protection measures for cetaceans
- Ministerio de fomento / D.G. de la Marina Mercante 04-01-07
- MEPC 57/INF.15



3.2 Greece 3.2.1 Hellenic Trench



Longitude E

Source: R.Leaper using data from GEBCO_2020 Grid doi:10.5285/f98b053b-0cbc-6c23-e053-6c86abc0af7b

3.2.1.1 Voluntary:

imaginary line which joins the following

points and the opposite coastline starting

• Intensify look out and avoid collisions with marine mammals (year-long)

PILOT A (1ST EDITION 2015) - MEDITERRANEAN SEA - HELLÁS - Iónio Sea (Hellenic Trench) - West Coasts of Zákynthos Island, Pelopónnisos - Area of Frequent Presence Marine Mammals.	PILOT VOLUME B' (E' EDITION 2019) - MEDITERRANEAN SEA - HELLÁS - Kríti Island - Southwest, West Coasts of Kríti Island - (Hellenic Trench) - Area of Frequent Presence Marine Mammals.
«Area of Frequent Presence of Marine	«Area of Frequent Presence of Marine
Mammals is located in the sea area of the	Mammals is located in the sea area of the
Southern Iónio Sea (Hellenic Trench). To	Southwest, West Coasts of Kríti Island -
protect them from passing ships, mariners	(Hellenic Trench). To protect them from
are requested to intensify their lookout to	passing ships, mariners are requested to
detect and avoid collisions with marine	intensify their lookout to detect and avoid
mammals, which usually lead to fatal	collisions with marine mammals, which
injuries. The area is delimited inside the	usually lead to fatal injuries. The area is

delimited inside the imaginary line which

joins the following points and the opposite



from a point of the NW coast of Zákynthos island (37° 53,0 N - 020° 38,0 E), extends up to 5, 8, and approximately 23 n. miles, S, SW and SSW of the rocky islet Vardiánoi (southwest coast of Kefallinia island), at the points (38° 03,0 N - 020° 26,0 E), (38° 03,0 N - 020° 18.0 E) & (37° 48.0 N - 020° 09,4 E) respectively. Then it extends up to about 22 n. miles, S of Strofádes islands, at the point (36° 53.2 N - 020° 58.6 E) and up to about 17 n. miles, S of Venétiko islet (SW border of Messiniakós gulf (36° 25.0 N - 021° 53.0 E). It then extends to about 12, 5, and 5 n. miles, SW, SSE, and NW of the Taínaro point, at the corresponding points (36° 18,0 N - 022 ° 16,2 E), (36° 18,0 N - 022° 31,5 E) & (36° 27,0 N - 022° 31,5 E).»

Source: Hellenic Notice to Mariners No. 24/2021)

coastline starting from a point at cape Litinos of Messaras gulf (southern limit of Kriti island) at the point (34° 55,0´ N - 024° 44,0 ´ E), extends up to approximately 8 n. miles, S of the above cape, to the point (34° 47,0´ N - 024° 44,0´ E). Then it extends up to about 4 n. miles, SSW of cape Trypiti (Gavdos island), at the point (34° 45,0 ´ N -024° 05,0´ E) and up to about 9 n. miles, SW of Elafonissos Islet (southwest coasts of Kriti island) at the point (35° 10,0 ´ N - 023° 22,0 ´ E). It then extends to about 14, and 0,5 n. miles, SW and NW of Agria Gramvousa (northwest coasts of Kriti island), at the corresponding points (35° 30,0 ' N - 023° 22,0 ' E), (35° 39,0 ' N - 023° 34,0´E)."

Source: Hellenic Notice to Mariners No. 27/2021



References / Resources:

- Hellenic Notices to Mariners No. 24/2021 & 27/2021
- Whale Guardians Recommended Routing Guidelines for Hellenic Trench, Greece





3.3 Mediterranean Sea 3.3.1 North-Western Mediterranean Sea

Source: Resolution MEPC.380(80)

3.3.1.1 Voluntary Associated Protective Measures (APMs) in the NW Med Sea Particularly Sensitive Sea Area (PSSA)

- Navigate with particular caution in areas where large and medium cetaceans are detected or reported
- Reduce speed to between 10 and 13 knots as voluntary speed reduction (VSR)
- Keep an appropriate safety distance or speed reduction measure from any large and medium cetaceans observed or detected in close quarter situation
- Broadcast on VHF or other available means on scene, the position of medium and large cetaceans observed or detected, and transmit the information and the position to a designated coastal Authority
- Report any collision with cetaceans to a designated coastal Authority

<u>NW Med Sea PSSA</u> is located between the coastline of France, Italy, Monaco and Spain and is defined by a line encompassing the following coordinates:

(A) 38° 39' 59.379" N	000° 6'0.000" E
(B) 38° 39' 59.379" N	000° 47' 59.476" E
(C) 38° 50' 03.331" N	001°00'00.398" E
(D) 39° 19' 01.812" N	001° 00' 25.212" E
(E) 39° 28' 42.075" N	001° 40' 02.495" E
(F) 39° 51' 21.986" N	002° 16' 09.853" E
(G) 40° 34' 13.067" N	004° 04' 31.926" E
(H) 40° 58' 0.000" N	008° 12'0.000" E
(I) 41° 09' 10.800" N	009° 31'10.800" E
(J) 42° 21' 14.400" N	011° 31'0.000" E



To be noted, from H (Falcoe Cape) to I (Ferro Cape) the south boundary follows the coastline of Sardinia. Coordinates are provided by the WGS84 datum.



References / Resources:

• Resolution MEPC.380(80) on Designation of the North-Western Mediterranean Sea as a particularly sensitive sea area (adopted at IMO's MEPC 80 on 7 July 2023)



4. Australia & New Zealand

4.1 Australia

4.1.1 Australian Whale Sanctuary



Source: Department of Agriculture, Water and the Environment

4.1.1.1 Mandatory:

• Notification of activities affecting cetaceans to the Department of Agriculture, Water and the Environment

4.1.1.2 Voluntary:

- Maintain a look out for cetaceans
- Warn other vessels in the vicinity using all appropriate means of communication, if cetaceans have been sighted
- Consider reducing vessel speed in areas where cetaceans have been sighted
- Consider modest course alterations away from sightings



References / Resources:

- Department of Climate Change, Energy, the Environment and Water webpage
- Map of the Australian Whale Sanctuary



The Secretary: Department of Agriculture, Water and the Environment, GPO Box 858, Canberra ACT 2601, Australia

Hotline: 1800 803 772

Email: protected.species@environment.gov.au



4.2 New Zealand 4.2.1 Hauraki Gulf



4.2.1.1 Voluntary:

- ≤10 knots speed recommendation
- Recommended vessel routing
- Post whale lookouts during daylight hours
- If a whale is sighted forward of the beam, slow down and/or change course to keep as far from the whales as possible. Whenever safe to do so, no vessel should pass closer than 1,000 meters from a whale.
- Report whale sightings to Ports of Auckland Harbour Control

References / Resources:

- Port of Auckland Hauraki Gulf Transit Protocol for Commercial Shipping
- New Zealand Annual Notices to Mariners 2022/2023, Section 10: Shipping routes around the New Zealand coast
- <u>Auckland (Waitemata) Port Information Handbook (December 2022 Version 3)</u>



5. Asia & Middle East 5.1 Oman 5.1.1 Port of Dugm



Source: Port of Duqm

5.1.1.1 Mandatory:

- ≤10 knots speed restrictions
- Keep a continuous watch
- Report sightings to VHF Ch14
- Avoid whales (1km for vessels <300 Gt; 2km for vessels >300 Gt)

5.1.1.2 Voluntary:

Recommended approach

Port of Duqm recommended approach 19° 42.481' N 057° 49.998' E

19°42.788'N 058°21.976'E



References / Resources:

- Port of Duqm advisory
- Port of Duqm HSSE manager contact



5.2 Sri Lanka 5.2.1 South of Dondra Head



Source: MEPC 80/16/3. AIS data from October 2022 to January 2023. Red lines indicate westbound traffic and green lines indicate eastbound traffic. Blue dots indicate sightings of blue whales from surveys and whale watching.

5.2.1.1: Voluntary:

The Traffic Separation Scheme (TSS) south of Dondra Head, Sri Lanka was created in 1980 (IMO Ships' Routeing – Section IV/16). The existing TSS south of Dondra Head is now known to overlie an area that is a major feeding area for a significant population of Blue Whales and other marine species that inhabit these waters. The natural upwelling that occurs in this area attracts not only these cetaceans, but also numerous small fishing and whale watching boats. Numerous organizations including the World Shipping Council have called on Sri Lanka and other governments to establish a new second TSS roughly 15 nm south of the existing TSS, to mitigate the risk of ship strikes with cetaceans as well as the risk of collision with the numerous small boats operating and congregating in and around the existing TSS.

No action has been taken to date by the Sri Lankan Government or other governments to create a new TSS further offshore, but numerous masters and shipping companies now sail 15 nm miles or further south of the existing TSS to avoid the relevant environmental and safety risks. AIS data in early 2023 indicates that one third of the East-West commercial traffic now sails roughly 15 nm south of the existing TSS. The same data also indicates that roughly 50% of the largest vessels now sail 15nm or further south.



References / Resources:

 Document MEPC 80/16/3 "Call for establishment of a new traffic separation scheme south of Sri Lanka"



6. Others 6.1 In the Bering Sea & Bering Strait

6.1.1 Voluntary:

• Six (6) recommendatory two-way routes and six (6) precautionary areas are established in the Bering Sea and Bering Strait

(a) A precautionary area "A" is established, the waters contained within a circle of radius 4.00 miles centred at geographical position 58°45'.00 N, 167°27'.81 W.

(b) <u>A two-way route, connecting with precautionary area "A" and precautionary area "B", is</u> established between the following geographical positions:

(1) 58°48'.91 N	167°26′.26 W
(7) 64°55′.19 N	168° 27'.77 W
(2) 60°10′.86 N	168°19'.58 W
(8) 63°29′.57 N	167° 42'.57 W
(3) 61°29′.47 N	167°35′.89 W
(9) 62°25′.26 N	167° 11′.99 W
(4) 62°25′.14 N	167°03'.13 W
(10) 61°30'.52 N	167° 43′.95 W
(5) 63°30'.44 N	167°33′.86 W
(11) 60°10'.74 N	168° 27'.94 W
(6) 64°56′.08 N	168°18'.60 W
(12) 58°47′.65 N	167° 33′.56 W

(c) A precautionary area "B" is established, which is bounded by a line connecting the following geographical positions:

(6) 64°56′.08 N	168°18'.60 W
(16) 65°02'.60 N	168°37'.28 W
(13) 64°59',22 N	168°20'.29 W
(17) 64°58'.14 N	168°29'.36 W
(14) 65°05′.00 N	168°20'.30 W
(7) 64°55′.19 N	168°27'.77 W
(15) 65°05'.00 N	168°29'.75 W
thence back to the p	oint of beginning (6)

(d) A two-way route, connecting with precautionary area "B" and precautionary area "C", is established between the following geographical positions:

(14) 65°05'.00 N	168°20′.30 W
(19) 66°26′.57 N	168°29'.75 W
(18) 66°26′.57 N	168°20'.30 W
(15) 65°05'.00 N	168°29'.75 W

(e) <u>A precautionary area "C" is established, the waters contained within a circle of radius</u> 4.00 miles centred at geographical position 66°30'.00 N, 168°25'.00 W.

(f) <u>A two-way route, connecting with precautionary area "C" and precautionary area "D", is</u> established between the following geographical positions:



(20) 66°30′.64 N	168°34'.79 W	
(22) 66° 20'.83 N	169°11'.21 W	
(21) 66°24′.59 N	169°14′.72 W	
(23) 66° 26'.90 N	168°31′.34 W	
()		
(g) <u>A precautionary a</u> <u>4.00 miles centred a</u>	rea "D" is established, the waters contained within a circle of radius t geographical position 66°21'.50 N, 169°21'.00 W.	
(b) A two wov routo	connecting with process tioners area "D" and process tioners area "E" is	
(II) <u>A two-way toute</u> ,	connecting with precautionary area D and precautionary area E, is	
established between	<u>i the rollowing geographical positions</u> .	
(24) 66°18' 05 N	160°16' 11 W	
(24) 00 10.00 N	160975' 9711/	
(20) 05 50 .20 N	109 25.07 W	
(23) 66 16.03 N	109 23.07 W	
(27) 65-56.20 N	109-10.11 W	
(i) A precoutionary or	as "F" is established which is bounded by a line connecting the	
following geographic	ea Lisestablished, when is bounded by a line connecting the	
<u>rottowing geographic</u>		
(26) 65°56', 20 N	169°25'.87W	
(29) 65°45' 52 N	169°25' 87 W	
(27) 65°56' 20 N	169°16' 11 W	
(30) 65°47' 69 N	169°34' 01 W	
(28) 65%/5' 52 N	169°16' 11 W	
(20) 00 40 .02 N	169°25' 87W	
thence back to the n	oint of beginning (26)	
(i) A two-way route o	connecting with precautionary area "F" and precautionary area "B" is	
established between	the following geographical positions:	
(28) 65°45′.52 N	169°16'.11 W	
(16) 65°02'.60 N	168°37'.28 W	
(29) 65°45′.52 N	169°25′.87 <i>W</i>	
(15) 65°05'.00 N	168°29′.75 W	
(32) 65°29'.65 N	169°25′.87 <i>W</i>	
(33) 65°30'.71 N	169°16'.11 W	
(k) <u>A two-way route, (</u>	connecting with precautionary area "E" and precautionary area "F", is	
established betweer	the following geographical positions:	
(29) 65°45′.52 N	169°25'.87W	
(34) 64°28'.31 N	171°36'.35 W	
(30) 65°47′.69 N	169°34'.01 W	
(35) 64°26'.14 N	171°28'.60 W	
(l) A precautionary area "F" is established, the waters contained within a circle of radius		
4.00 miles centred at geographical position 64°24'.36 N, 171°36'.61W.		



References / Resources:

• IMO Ships' Routeing 2019 edition Section E/40



6.2 South Georgia & the South Sandwich Islands



Source: Visiting South Georgia (2023-2024)

6.2.1 Voluntary:

• 10 knots speed limit within the polygon of waypoints

- **References / Resources:**
- South Georgia Visitor Information Document



Contact World Shipping Council Wei-Jun Mun Email: <u>wjmun@worldshipping.org</u>

About World Shipping Council

The World Shipping Council is the united voice of liner shipping, working with policymakers and industry groups to shape the future growth of a socially responsible, environmentally sustainable, safe, and secure shipping industry. We are a non-profit trade association with offices in Brussels, London, Singapore and Washington, D.C. Read more at <u>www.worldshipping.org</u>