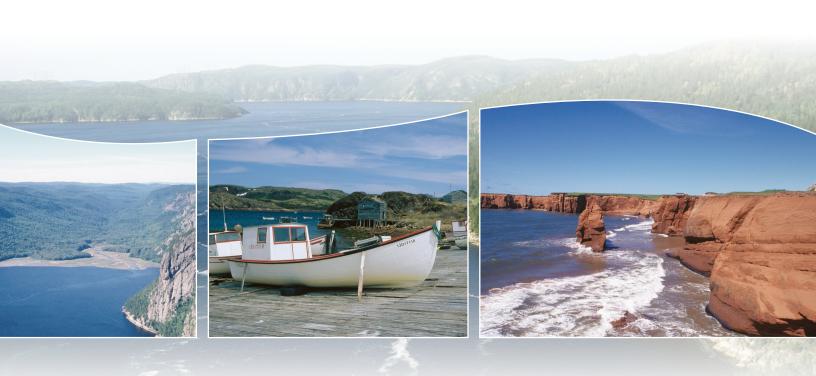


National Marine Weather Guide Quebec Regional Guide





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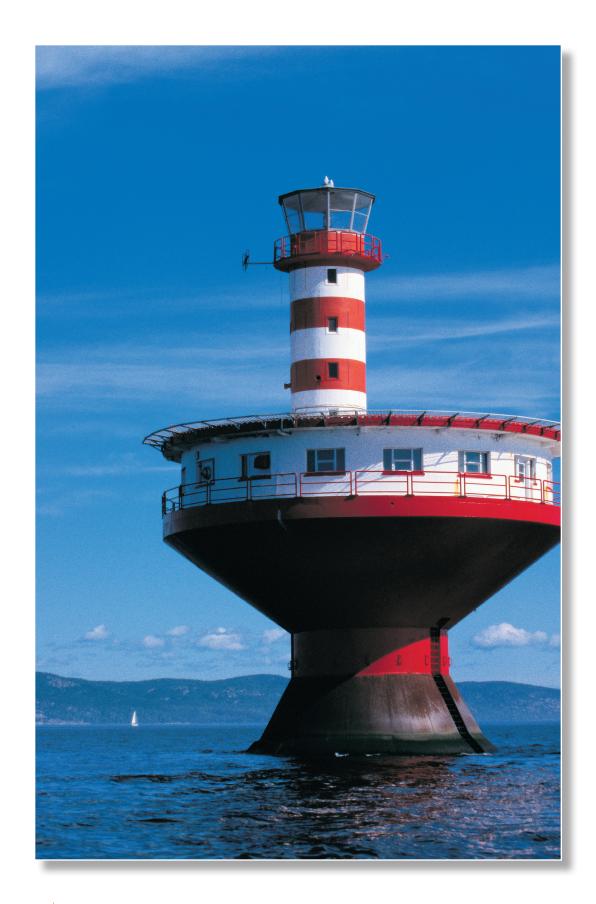
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QUEBEC REGIONAL GUIDE

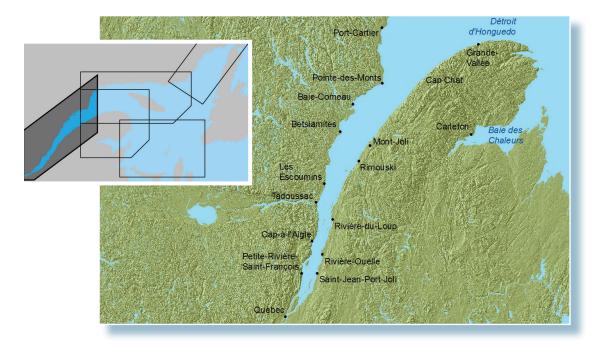
1. Introduction

The St. Lawrence could be called "the Beethoven of rivers"—not for any reason pertaining to music, but because of its wild temperament. Anything but long and lazy, the stretch of the river bordering Quebec is known for its strong tidal currents, high cliffs, and mountain-lined shores, making it an ideal starting point for transatlantic races.

This chapter of the guide examines local marine weather effects on the St. Lawrence under five main sections: from Québec (Quebec City) to Pointe-de-Monts; from Pointe-de-Monts to Cap Whittle; from Cap Whittle to Blanc-Sablon; Gaspésie and Baie des Chaleurs (the Gaspé Peninsula and the Bay of Chaleur); and Îles de la Madeleine (the Magdalen Islands). Within each section, numbered references are made to conditions in specific areas on corresponding maps.

Wave Symbols	Wind Symbols	Weather Symbols	
Choppy Sea	Barrier Wind	Fog	
⇔	Channelling Coastal Convergence	Freezing Spray	
Large Sea	Coastal Convergence Cornering	Snow Streamer Thunderstorm	
Reflection Rough Water	Gap Wind	Waterspout	
Shoaling	Gusty Wind Katabatic Wind	A	
Strong Current	Lee Wave		
Tidal Rip	₩ Wind		
√ Water Level	Wind Opposing Current		
	△ Downslope Wind		
	Funnelling		

Wind, weather and wave symbols used in this guide.



2. Québec to Pointe-des-Monts

This section of the river is an immense southwest-northeast corridor that is basically walled in by the Laurentian and Appalachian mountain ranges. As such, the winds have no choice but to follow its path. Although the two shores are close together, each has a different face: gentle to the south, but steep and dotted with valleys to the north, where the wind whips along the cliffs and valley openings.

2.1 Québec to Tadoussac

Mariners encounter the most trying conditions in this area, as the tides are highest and the currents are the strongest and most turbulent—in some places reaching up to 8 kt. Islands and shoals abound, making some areas barely navigable in strong winds due to gusting and choppy seas.

2.2 Downstream from Tadoussac

The majesty of the St Lawrence becomes apparent from Tadoussac to Pointe-des-Monts—in particular, from Cacouna to Les Méchins. The river in this area is calmer but even more awe-inspiring in its ocean-like nature. While the north shoreline doesn't reach the same heights as it does upriver, the bottom is deeper. An interesting phenomenon occurs near the mouth of the Saguenay, where extremely cold water accumulated deep in the river over the winter months periodically rises to the surface. Even in mid-summer, this tidal phenomenon keeps the surface water-temperature at 1-7°C and causes frequent fog. In this part of the estuary, the largest islands are located along the Saguenay River and Rimouski, with the exception of Île Rouge. Around Rimouski, the river current stabilizes at about 1 kt and is known as the Gaspé Current.



1. Portneuf to Québec

Winds northeasterly or southwesterly, against the current

Short, choppy seas

Difficult

Strong downstream current

2. Quebec City Bridges

Winds southwesterly or northeasterly, even at 15 kt, against the current

- Short, choppy seas
- Strong current

Difficult

3. Quebec City to Île aux Coudres Winds northeasterly

- Wind accelerates strongly, reaching maximum strength in the Île d'Orléans area
- Funnelling

4. Pointe Saint-Jean to Cap Tourmente Haze or fog

• Visibility often reduced because of colder water in the Chenal Nord.

5. Pointe Argentenay

Winds southwesterly

- Stronger winds and cross seas to the north of and off the point
- Corner effect around Île d'Orléans, accentuated by barrier effect from Cap Tourmente

6. Cap Tourmente to Saint-Siméon

Wind frequently turbulent close to shore Winds westerly or northwesterly

• Wind follows passes and valleys and gusts out over the river

Sudden gusts possible



7. Petite-Rivière-Saint-François

Winds northeasterly, against the current

Strong chop

Winds southwesterly, even at 15 knots, against the current

- Strong chop: avoid in strong winds

Dangerous

Conditions calmer on south side of channel

8. Baie Saint-Paul

Winds northwesterly

- · Wind accelerates
- Channelling through valley of Rivière du Gouffre

9. Passage de l'Île aux Coudres

Winds easterly or southwesterly, against the current

- Strong chop
- · Strong tidal current

10. Traverse de Saint-Roch

Winds northeasterly or southwesterly, against the current

- · High, steep waves
- Chop
- Very strong tidal currents
- · Shallow area

Navigation very difficult

11. Pointe du Bout d'en Bas (Île aux Coudres)

Winds southwesterly

- Cross seas from the southwest and the west, offshore
- At rising tide, breaking waves

Dangerous

12. Banc des Anglais

Winds northeasterly or southwesterly

• High, breaking waves

13. Cap aux Oies to Pointe aux Orignaux

Significant chop, particularly at ebb tide

Winds northeasterly, even at 15 kt

- Near Cap aux Oies, immediately after low tide, very strong chop
- Tidal cross currents

Very difficult conditions

14. Haut-fond Morin

Winds northeasterly

 Breaking waves, refraction, and cross seas to the south—accentuated by tidal currents

15. Îles de Kamouraska

Winds westerly or northwesterly

 High waves and breaking waves near the flats

16. Gros Cap à l'Aigle and Cap au Saumon

Winds northeasterly and easterly

- Cross seas near the points of the capes
- Wind deviates and accelerates as a result of corner and barrier effects.
- Chop and eddies at certain points in the tide cycle

17. Passe de l'Île aux Lièvres

Winds easterly at ebb tide

• Strong chop on top of swell waves

18. Île Blanche

Winds northeasterly, against the current, on the northeast side of the island

Navigation difficult

19. Pointe de la rivière du Loup

Winds northerly or northeasterly, at ebb tide

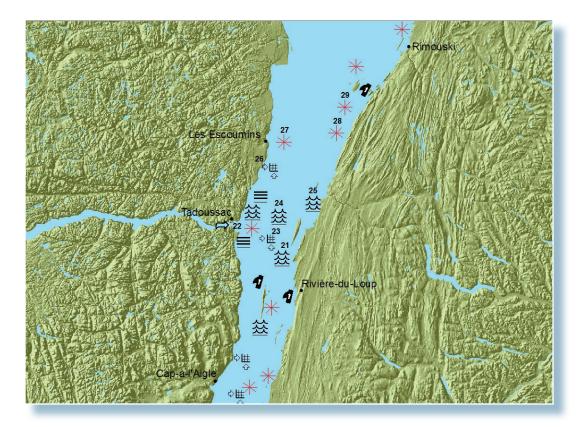
High waves near the wharf

20. Brisants Barrett and Hauts-fonds du Milieu

Winds northeasterly

• Breaking waves, especially at ebb tide





21. Rocher de Cacouna to the South tip of Île Verte

Winds against the current

- Strong chop
- Strong tidal eddies

22. Mouth of the Saguenay

Winds easterly at ebb tide

- Dangerous conditions: avoid this area
- · Current 7 kt

Winds westerly or northwesterly: gusts of up to 60 kt or more

- Northwesterlies may be 10-15 kt stronger than reported at Île Rouge station
- Channelling and funnelling
- Frequent fog, particularly in August

23. Île Rouge

Winds northeasterly

Cross seas southwest of the island

24. Bancs de l'île Rouge Winds from any direction

- Very confused seas
- At all times: strong chop, particularly on the west side

25. Île Verte to Île aux Basques

Strong chop, particularly between Île Verte and the Bancs de l'Île Rouge

Winds southwesterly at rising tide

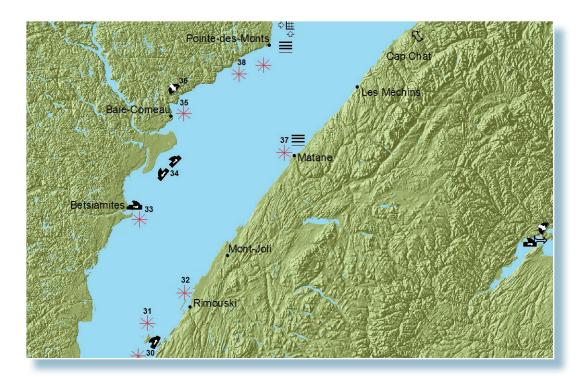
- Short, steep waves near Île Verte
- Convergence

26. Cap de Bon-Désir

Winds northeasterly

- Wind accelerates and deviates, cross seas off the point
- Barrier and corner effects

Difficult to make way



27. 48° 21' - 69° 20' - Point 6A

Winds northeasterly or southwesterly

• When gale force, high waves

Difficult seas

28. 48° 21' - 69° 07'

Winds northeasterly or southwesterly

• When gale force, high waves due to underwater mountain

29. Île du Bic - 5 nautical miles to the west

Winds northeasterly or southwesterly

• When gale force, high waves due to underwater mountain

30. Île du Bic

Winds northeasterly

 At ebb tide, high waves between the island and the shore due to wind blowing against the current

31. Île du Bic - Northern part and close to Île Bicquette lighthouse

- · Winds northeasterly
- · High waves

Difficult conditions

32. Rimouski (harbour)

Winds northeasterly

 High waves over shoals, up to about 3 NM offshore

33. Pointe à Michel

Winds southwesterly

• Strong seas offshore • Shallow waters

Winds easterly at ebb tide

- Strongly breaking seas
- Wind opposing current at mouth of Rivière Bersimis

Difficult

34. Battures de Manicouagan (flats)

Winds easterly, northeasterly, southeasterly or southwesterly, against tide

• Short waves accentuated by shoals *Navigation difficult*

35. Baie-Comeau

Winds easterly and southeasterly

- Significant swell flowing into Baie des Anglais
- Navigate with caution

36. Anse Saint-Pancrace

Winds southeasterly and southerly

• Significant swell flowing into bay

Navigate with caution

· Watch for katabatic wind

37. Matane

Winds northerly or northeasterly

 Steep waves and very strong swell at entrance to pleasure-boat harbor due to channelling of waves between two wharfs and outflow from the Rivière Matane

Frequent fog

• Potentially dangerous conditions

38. Godbout

Winds easterly or southeasterly

• Significant swell flowing into bay



3. Pointe-des-Monts to Cap Whittle

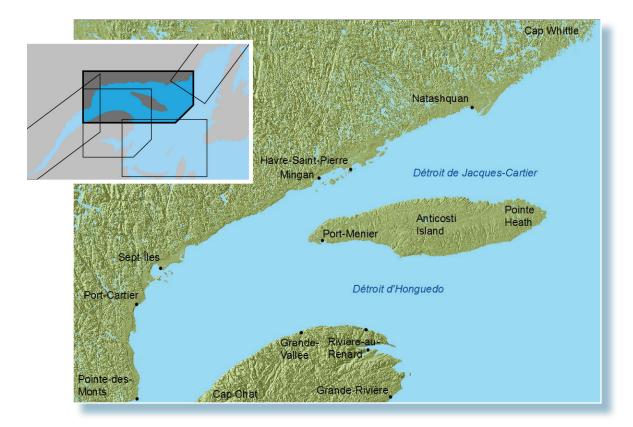
This region is the gateway to the veritable inland sea known as the Gulf of St. Lawrence. It is also the door through which the easterly wind surges into the estuary, forced into the funnel formed by the north and south shores.

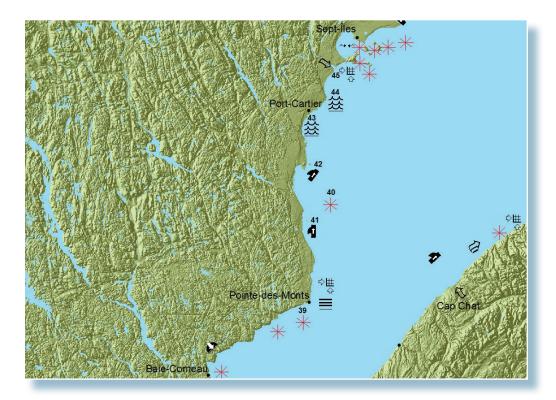
3.1 The North and South Shores

Northeast of Pointe-des-Monts, the sharp relief of the Archipel des Sept Îles creates gusty winds. In the Archipel de Mingan, the combination of an uneven seabed and strong tidal currents sometimes makes navigation dangerous, as is often the case among the islands on the mid and lower Côte-Nord.

Moving eastward, the tide becomes weaker—although the strength of the tidal currents does not necessarily correspond to the height of the tides. The easterly wind is particularly strong in the Détroit de Jacques-Cartier, where Anticosti and the north shore form a huge funnel. This wind produces a significant swell on the Bancs de Mingan.

Along the Basse-Côte-Nord—the lower north shore—there are deep waters and a smooth shoreline from Baie Johan-Beetz to Kegaska. Caution should be exercised near the mouths of the rivers on the north shore, as strong currents from these waterways create very difficult if not dangerous seas at ebb tide.





3.2 Anticosti Island

Anticosti Island has two faces. On the north side, the water is quite deep, and there are steep cliffs and numerous capes, near which mariners will encounter cross seas. On the south side, the land slopes gently away to the sea: but looks can be deceiving. The reefs and shoals off this side of the island are the graveyard of over 400 ships. Sudden gusts of wind should be watched for, and there is frequent fog in the Pointe-des-Monts and Havre-Saint-Pierre areas as a result of cold water rising from the river bottom.

39. Pointe-des-Monts

Winds easterly

- Cross seas
- Wind deviates and accelerates as a result of barrier and corner effects
- Conditions may become very difficult

Dangerous seas within 3-4 NM of the point

Winds gale force from the southwest

- High, short, sharply breaking waves
- Southeast of point, bottom rises from 330 m to 70 m
- Frequent fog

40. Pointe-des-Monts to Pointe aux Jambons

Winds gale force from the east

- High waves 3-5 NM offshore
- Bottom rises rapidly

41. Île aux Oeufs

Winds easterly or northeasterly at ebb tide

Breaking waves

Avoid passing between island and shore



42. Île du Grand Caouis

Winds easterly or northeasterly at ebb tide

· Breaking waves

Avoid passing between island and shore

43. Port-Cartier

Winds easterly or southeasterly

- High waves near the Cascades (Rayonnier) wharf
- Convergence or barrier effects

44. Pointe aux Jambons

Winds easterly

- High waves due to underwater cliff
- Corner effect near point accentuates waves

Mariners should stay several nautical miles off point

45. Rivière Sainte-Marguerite

Winds southeasterly

- Cross seas and breaking waves against the currents and over sandy shoals
- Rough waters accentuated by wind acceleration on northeast side of the bay
- Corner effect

Winds northerly or northwesterly

- Short, steep waves that break easily at rising tide
- · Accelerating wind
- Channeling effect

Dangerous conditions at mouth of river

46. Chenal de l'Ouest

Winds southwesterly or southerly

 High waves amplified by funnelling from Îlets Dequen and Pointe à la Chasse

47. Pointe à la Chasse

Winds southerly or southwesterly

 Strong swell between the point and Île du Corossol

Winds southeasterly

 Wind accelerates along the west side of the point, toward Rivière Sainte-Marguerite



48. Baie des Sept Îles

Winds southerly or southwesterly

- Significant swell flowing into the Chenal du Milieu
- High, steep waves up to 2 NM offshore from the Iron Ore wharfs
- Reflection effect
- Surf occurs during a southerly swell, even when winds are light

49. Île du Corossol

Winds easterly

- Confused seas and accelerating wind around southern tip
- Corner effect

50. Ile La Petite Boule

Winds easterly

Strong swell on eastern side

51. Ile La Grosse Boule

Winds easterly

- Confused seas and strong swell
- Wind accelerates around southern tip
- Corner effect

52. Sept-Îles to Rivière-Saint-Jean Winds gale-force out of the south,

southwest, or southeast

 Strong swell caused by shallow and irregular seabed along shore, up to 20 NM offshore

53. Rivière Moisie

Winds southerly, southwesterly, and, in particular, southeasterly

 High, very short waves break at mouth of river due to river current

Very dangerous: risk of capsizing, especially at ebb tide

- Stay several NM offshore in these conditions
- Enter river only at high tide



54. Banc Blaskowit

Winds gale-force out of the east

 Strong refraction effect and breaking waves near bank due to underwater point

55. Rivière Sheldrake

Winds southerly, southeasterly, or southwesterly

- High breaking waves forming a bar ~20 m offshore
- Wait for rising tide before entering river

56. Rivière-au-Tonnerre

- Winds southwesterly at ebb tide
- High, breaking waves at entrance to harbour
- Hazardous
- Avoid Banc Rouge, 20 NM to the eastsoutheast: breaking waves and shoals

57. Banc Parent

Winds gale-force out of the southeast

 Cross seas near shoals and due to channelling from east in Détroit de Jacques-Cartier

Dangerous conditions

58. Pointe de l'Ouest

Winds gale-force out of the southeast

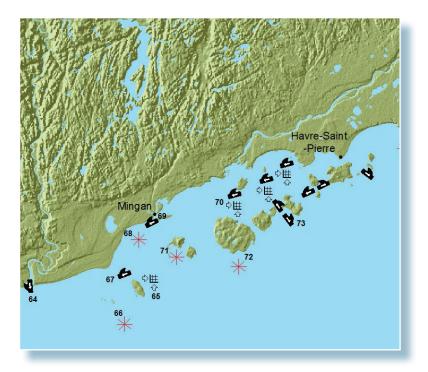
 Heavy, cross seas offshore due to easterly winds channelled to the north of Anticosti by Détroit de Jacques-Cartier

59. Port-Menier

Winds southerly and, in particular, southeasterly

Strong, breaking waves due to rise in sea bottom

Very difficult access to wharf



60. Rivière Jupiter

Winds southerly, southwesterly, or westerly

- Breaking waves create bar
- Numerous sandbanks

Dangerous river mouth

61. Pointe Carleton

Winds westerly

Cross seas up to a few NM offshore

62. Cap de la Table

Winds westerly

· Cross seas up to a few NM offshore

63. Pointe Heath

Winds easterly

 Swell accentuated offshore by submerged segment of point

Winds westerly

Heavy, cross seas offshore, created by refraction

Difficult to very difficult conditions

64. Rivière Saint-Jean

Winds westerly or southwesterly at ebb tide

• Breaking waves caused by sandy shoals form bar

Dangerous river mouth

65. Île aux Perroquets and Île Nue de Mingan

Winds westerly or southwesterly

- Cross seas in lee of islands
- Produced by refraction

Sometimes very difficult

66. Banc de Mingan

Winds southerly, southeasterly, southwesterly or easterly

Significant swell produced by shoals

67. La Longue Pointe to Île Nue de Mingan

Winds westerly at rising tide

· High, breaking waves in channel

68. La Longue Pointe to Mingan Winds southerly

• Strong, breaking waves close to shore

Strongly advised to avoid this area

69. Île du Havre de Mingan

Winds westerly or southwesterly at rising tide

- Heavy seas between shore and island at western entrance to channel
- Funnelling
- Shoals

70. Chenal de Mingan

Winds westerly at rising tide

 High, breaking waves—in particular, between Île du Havre de Mingan and La Grande Île

Winds southerly or southwesterly

Cross seas accentuated by tidal currents

May be dangerous

71. Île aux Bouleaux to Petite Île aux Bouleaux

Winds westerly or southwesterly

- Heavy seas at western entrance to islands, particularly at rising tide
- Funnelling
- Shoals

72. La Grande Île

Winds westerly, southwesterly, southerly, southeasterly or easterly

- High waves south of the island due to shoals
- Navigation difficult

73. Chenal à la Proie - South entrance Winds northerly or southerly,

against current

· Very confused seas





74. Chenal du Fantôme

Winds against current

Very confused seas

75. Chenal de la Petite Île au Marteau (Chenal Walrus)

 Winds southerly at ebb tide Difficult

76. Haut-fond à l'Eau Claire

Winds westerly, easterly, southwesterly, southerly, or southeasterly

• Strong swell and breaking waves *Difficult area*

77. La Grande Pointe à l'Eau Claire Winds easterly

Willus Castell

- · Cross seas
- Stay more than 3 NM offshore
- Corner effect strengthens wind at tip, causing it to shift to northeast

78. Baie des Trilobites

Winds southerly or southwesterly

Strong swell at entrance to bay

79. Île Saint-Charles

Winds southerly or southwesterly

- Zone of standing waves extends several NM offshore
- Pronounced reflection effect west of island

80. Île à la Chasse - Northwest tip Strongly breaking seas

- Exceptionally strong chop
- Conditions worse when wind is southwesterly, against current

81. Rocher de la Garde

Winds easterly, southeasterly, southerly, or southwesterly

High, breaking waves

Stay more than 3 NM offshore

82. Haut-fond Collins

Winds gale force out of the east, southwest, south, or southeast

High, breaking waves

Stay more than 3 NM offshore

83. Chenal des Saints

- Winds southeasterly
- · Strong swell
- Funnelling



84. Île Sainte-Geneviève

Winds easterly

 High, breaking waves over La Cormoraillère Sainte-Geneviève (Rochers Les Saints) and Rochers Bowen

85. Pointe Nord-Est

Winds easterly

- Strong swell
- Funnelling

86. Baie Johan-Beetz

Winds southerly or southwesterly

- Strong swell
- Funnelling
- · Outflow from Rivière Piashti

Difficult access to harbour

Avoid area at ebb tide: strongly breaking seas

87. Baie Johan-Beetz to Natashquan

Winds gale-force out of south, southeast, or southwest

High waves

Stay more than 3 NM offshore

88. Rivière Natashquan

Winds westerly, southwesterly, or southerly at ebb tide

Dangerous: strong river current Winds southerly

• Wharf exposed to swell

Very difficult to come alongside

89. Pointe de Natashquan

Winds southerly, southeasterly, or southwesterly

Difficult

Winds southwesterly

• Shorter, breaking waves at rising tide

More difficult

Winds southeasterly

Strong swell at ebb tide
 Offshore winds gale-force

• High waves due to uneven sea bottom

90. Haut-fond Court

Winds southerly, southeasterly or southwesterly

Breaking seas

91. Kegaska

Winds southerly, southeasterly, or easterly

Very difficult access

92. La Romaine

Winds southerly, southeasterly, or southwesterly

• Waves flowing directly into harbour

Very difficult

Maneuvering dangerous: attempts to come alongside not advised

93. La Romaine to Îles Sainte-Marie

Winds southerly, southeasterly, southwesterly, and, in particular, easterly

• Breaking seas up to 10 NM offshore

94. Rivière Olomane

Winds southerly or southwesterly

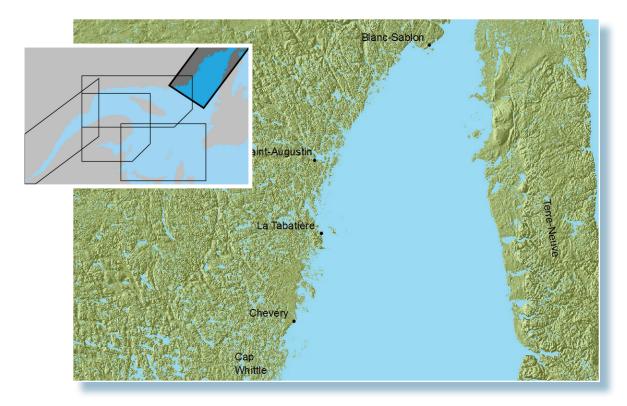
Breaking waves at river mouth

95. Banc Beaugé

Winds gale-force out of east, west, or south

Seas always stronger over bank





4. Cap Whittle to Blanc-Sablon

This section marks the eastern boundary of both Quebec and the St. Lawrence and leads directly to the Strait of Belle Isle. Its shoreline is jagged and fairly low, dotted over most of its length by a string of islands and islets. Local effects are significant, with channeling effects and katabatic winds in some of the valleys.

The tides are weak, but the narrow passages between the islands create strong currents. Up to 20-25 NM offshore, high seas are accentuated by the shallow bottom, which is less than 35 m deep. In addition to creating high seas, the southwesterly wind is strengthened by funneling between the shores of Quebec and Newfoundland. The area's most famous trademark is its persistent fog, which increases with proximity to the Strait.

96. Cap Whittle

Winds easterly

 Steep waves created by channelling and funneling between Île du Lac and Cap Whittle lighthouse

97. Île Galibois

Winds easterly

- Strong swell accentuated by ebb tide between Île Galibois and Îles Sainte-Marie
- Channelling and funnelling

Mariners advised to avoid this area



98. Îles Sainte-Marie

Winds gale-force out of southwest, southeast, south, and, in particular, east

- Violent, breaking seas up to 20 NM offshore
- Area scattered with reefs and shoals

99. Chevery — Rivière Nétagamiou

Winds southerly or southwesterly at ebb tide

Sharply breaking, short waves

Dangerous

100. Cap Mackinnon (Île du Petit Mécatina)

Winds easterly

- Breaking seas offshore
- Corner effect
- Shoals

Mariners advised to avoid area and stay more than 3 NM offshore

101. Baie des Moutons

Winds southwesterly, close to point

- Strong, breaking waves sometimes impassable
- Sea bottom rises abruptly

Dangerous area

Winds gale-force from any direction, except northwest

• Uneven bottom up to 10-20 NM offshore

Very difficult seas

102. Île du Gros Mécatina

Winds easterly

- Strongly breaking seas between Île du Gros Mécatina and Île Plate
- Channelling

103. Île aux Trois Collines

Winds easterly

- · Heavy seas
- Pronounced corner effect



104. Baie de Jacques-Cartier to Baie du Vieux Fort

Winds northerly

- Strong wind channelled by shoreline out to several NM offshore
- Wind particularly strong at heads of Mistanoque, Napetipi, and des Homards bays

105. Baie de Brador

Winds southwesterly

High waves

Access difficult

In poor weather, avoid passing between Île du Bassin and shore

106. Banc Perroquet to Île Greenly Winds southwesterly at rising tide

Very strong chop

107. Baie de Blanc-Sablon

Winds westerly or southwesterly at rising tide

• Heavy, confused seas in channel between bay and Île au Bois

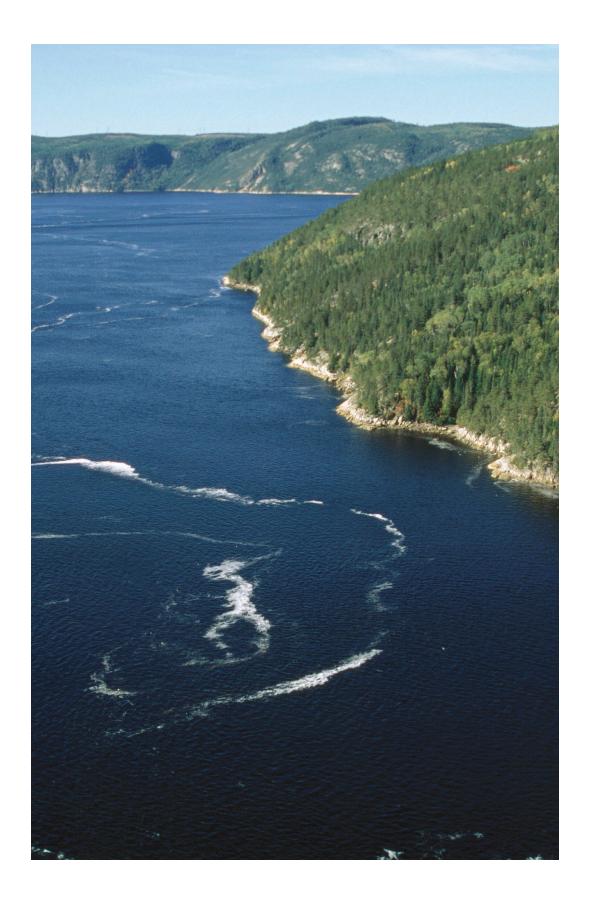
108. Strait of Belle Isle

Winds southwesterly

- Very strong swell at western entrance, more pronounced when against current During summer, risk of enormous fog banks in strait
- Persistent fog close to Labrador coast
 Winds easterly
- Fog in entire strait: Newfoundland coast normally clears first

Winds southwesterly or northeasterly, against current

· Heavy seas





5. Gaspésie and Baie des Chaleurs

5.1 Gaspésie

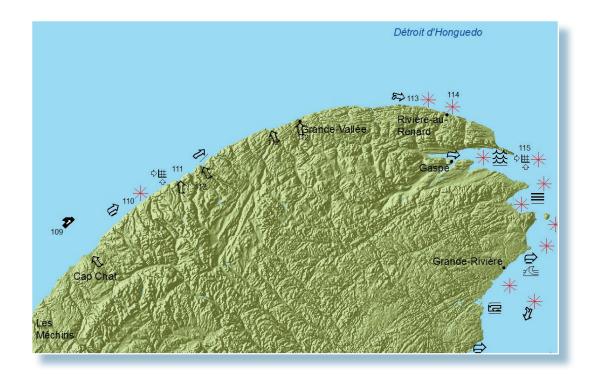
Where the mountains of the north shore bow out, those of the south shore step in. The steep cliffs and mountains on the Gaspé Peninsula form a barrier that causes

the winds to shift and accelerate. This phenomenon is particularly marked in late summer, when the northwesterly wind blows more frequently and strongly. All along the St. Lawrence, the winds that rush into these deep valleys are strengthened; those from the south gust out over the river.

At sea, the Gaspé Current follows the coast up to 20 NM offshore; close to shore, it can reach 2 kt. When the wind is against the current, it produces waves that tumble and may even break. Northwesterly and southeasterly winds are channeled in the Baie de Gaspé, so mariners must be cautious. Two offshore banks—the Banc des Américains and the Banc de l'Orphelin—are known for their choppy seas.

5.2 Baie des Chaleurs

The entrance to Baie des Chaleurs is guarded to the north by the Haut-fond Leander; to the south, by the Miscou shoals. Its configuration—that is, the steep cliffs on its north side and its V-shape—tends to channel the wind. As a result, there is a zone in the middle of this section, off Nepisiguit Bay, that is particularly windy and subject to high seas if the wind is



from the northwest or northeast. Tidal currents in this section rarely reach 1 kt, except at the mouths of some rivers and channels.

109. Matane to Cap-des-Rosiers Winds easterly

• High waves against the Gaspé Current

110. Les Méchins to Grande-Vallée

Winds violent from the south, from fall to spring

- Strongly breaking seas and turbulence close to shore
- Wind off the Appalachians occasionally reaches storm force

111. Les Méchins to Rivière-la-Madeleine

Winds northwesterly

 Cross seas along shoreline due to wind shifting to westerly along the coast and acceleration from barrier effect

Difficult conditions

112. Mont-Louis - L'Anse-Pleureuse - Rivière-la-Madeleine - Grande-Vallée

Winds southerly

- Steep valleys cause channelling
- Katabatic winds possible, with gusts up to 40 kt or more
- Problems with anchoring at night

Dangerous river mouths

113. Petite-Vallée to Cap Gaspé

Winds gale force out of north, northeast, or northwest

 Heavy to very heavy seas close to shore

Winds northwesterly

Wind accelerated by convergence

Sea bottom rises rapidly



114. Rivière-au-Renard

Winds northerly, northeasterly, or northwesterly

• Breaking waves up to harbor entrance

Difficult

Winds northeasterly

 Risk of surging sea in harbor: possible moorage problems

115. Cap Gaspé

Winds westerly or northwesterly

- · Cross seas offshore
- Refraction on both sides of the Presqu'île de Forillon

Winds southerly

- Waves breaking on shoals northwest of cape
- Refraction
- Chop southeast of cape at certain times during the tide cycle
- · Shallow

116. Baie de Gaspé*

Winds westerly or northwesterly

- Strong wind from mountains
- Acceleration not very noticeable on Gaspé side, but marked on Forillon side
- Channelling

Winds southeasterly

- Channelling in bay
- Sea breeze, easily reaching 20 kt

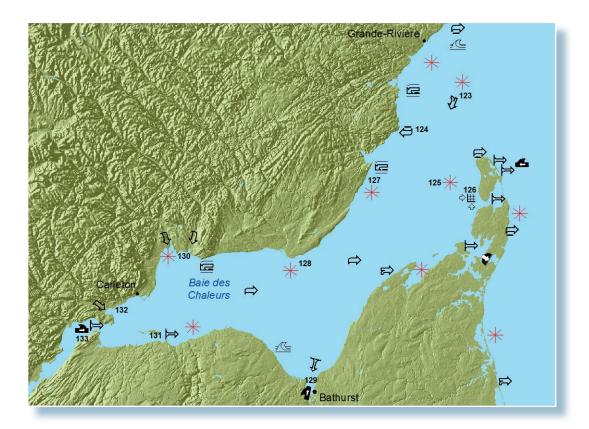
Winds gale-force out of east or southeast

- Very strong swell
- *Weather reported from airport, so may not correspond to actual conditions

117. Douglastown

Winds southeasterly

Strong swell



118. Banc des Américains

Winds gale-force from any direction, except west or northwest

High, breaking waves

119. Baie de Malbaie

Winds gale force out of southeast

Heavy seas often preceded by fog

120. Île Bonaventure

Winds southerly or northeasterly

- Strong swell between island and the shore
- Shoals
- Channelling

Navigation difficult

Winds gale-force out of east

• Cross seas up to 10 NM offshore due to reflection

121. Banc de l'Orphelin

Winds gale-force from any direction

High, breaking waves

122. Haut-fond Leander

Winds easterly or southeasterly

- High, breaking waves
- Cap d'Espoir extends underwater

One of most difficult areas in Baie des Chaleurs

123. Cap d'Espoir to Pointe Bonaventure

Winds easterly or northeasterly

- Large seas close to shore
- Convergence

124. Pointe au Maquereau

Winds easterly or northeasterly

• Convergence accentuated by corner effect

125. Northwest Miscou Point to Maisonnette Point

Winds westerly, northwesterly, northerly, or northeasterly

· High waves and shoals

Difficult access to all bays

126. Miscou Island (Northwest side)

Winds northwesterly

- Cross seas accentuated by Miscou and Shippegan shoals
- Wind shifting to southwesterly, along shore

127. Port-Daniel

Winds easterly

Strong swell

128. Baie de Paspébiac

Winds southwesterly

• Strong swell

129. Bathurst

Winds northerly, northwesterly, or northeasterly

- High waves at harbour entrance
- Shoals

- Funnelling
- Tidal currents make access difficult *Dangerous area*: without proper information, should be avoided, except in fair weather

130. Petite rivière Cascapédia and Rivière Cascapédia

Winds northerly or northwesterly

- · Very strong wind from valleys
- Channelling

131. Heron Channel

Winds westerly or easterly

- · High waves over shoals
- Funnelling between Heron Island and New Brunswick coast

132. Rivière Nouvelle (baie Tracadigache)

Winds northerly or northwesterly

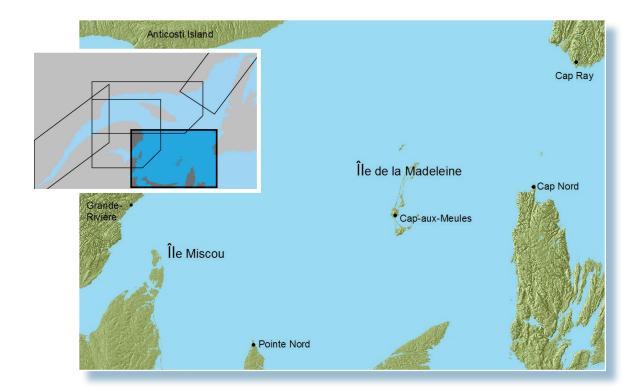
- Very strong wind from valley
- Channelling

133. Eel Bay

Winds easterly at ebb tide

- High waves due to shoals and river current
- Funnelling from Baie des Chaleurs





6. Îles de la Madeleine

The Îles de la Madeleine are another striking feature of the St. Lawrence River. Located in the centre of the Gulf, 40 NM off the nearest shore, these islands are swept by winds from every direction—making their sheltered lagoons a windsurfer's paradise.

Shoals, which are found everywhere around the islands and form a crescent from Pointe de l'Est to Rochers aux Oiseaux (with Île Brion in the middle), produce high seas in the area. Winds in the eastern part of the islands sometimes heralds the arrival of a storm that brings strong northwesterly winds. As the summer progresses, the northwesterlies produce higher and higher seas along the north shore because of their strength and the available fetch. Even if the tidal currents are less than 1 kt, they will be stronger around points and at the mouths of lagoons. In spring and summer, humid air from the warmer waters to the south and southwest of the islands brings fog.

134. Northwest side (in particular, Pointe Hérissée area)

Winds southwesterly

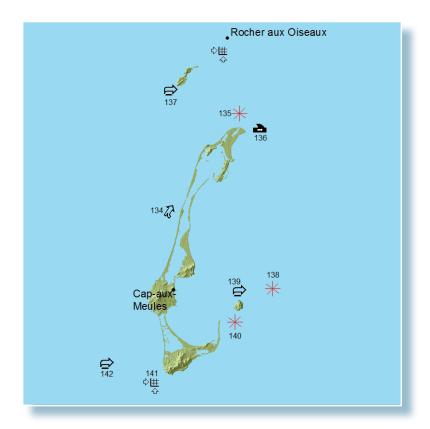
- · Wind strengthens
- Convergence

135. Northeast side

Winds northeasterly

 Breaking waves produced by numerous reefs and shoals

Navigation very difficult



136. Pointe de l'Est

Winds northwesterly, northerly, and northeasterly at ebb tide

 High, breaking seas—especially off point—due to crossing of two westerly currents from both sides of point

137. Île Brion and Rocher(s) aux Oiseaux

Winds from any direction

Corner effect

Winds northeasterly

 Heavy, cross seas southwest of Rochers aux Oiseaux

138. La Perle (reef)

Breaking waves even with winds of 15 kt from any direction

139. Île d'Entrée

Winds from any direction

Corner effect

140. La Passe

Winds southerly and southeasterly

- Breaking seas, especially at ebb tide
- Shoals between Dune Sandy Hook and Île d'Entrée

141. Southwest side

Winds northeasterly

- · Cross seas
- Refraction effect in lee of all islands

Seas may become very confused

142. Le Corps-Mort

Winds from any direction

Corner effect

