



Environment
Canada

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Canada



Marine Forecasts and Warnings for Canada

Service Standards

ISBN: 978-1-100-25913-0
Cat. No.: En56-252/2015E-PDF

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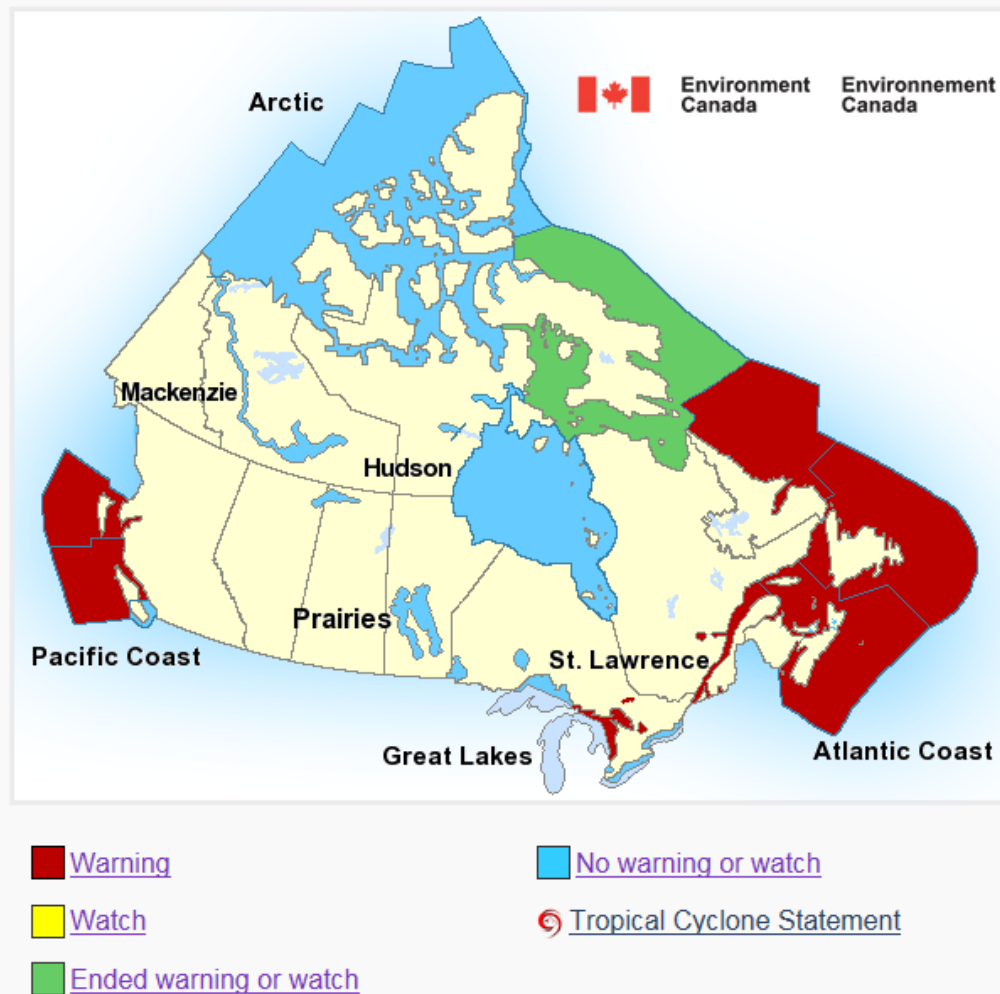
Environment Canada
Inquiry Centre
10 Wellington Street, 23rd Floor
Gatineau QC K1A 0H3
Telephone: 819-997-2800
Toll Free: 1-800-668-6767 (in Canada only)
Fax: 819-994-1412
TTY: 819-994-0736
Email: enviroinfo@ec.gc.ca

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Aussi disponible en français

Marine Forecasts and Warnings for Canada

Choose a coloured marine region for the latest marine weather



► Marine Forecasts and Warning for Canada. [Click for more details](#)

This is a simple map of the Marine Forecasts and Warnings for Canada.

To view real-time alerts, please see Weather.gc.ca [Marine](#) section.

In this example, there are warnings issued for the following Canadian marine sections:

- Arctic (excluding Hudson Bay)
- South Pacific Coast
- St. Lawrence River, Lac St. Jean, Rivière Saguenay to and including the South Atlantic Coast

- Mackenzie River to and including Great Slave Lake
- Prairie lakes (Lake Athabasca, Lake Winnipegosis, Lake Manitoba and Lake Winnipeg)
- Northern portion of Lake Superior, Lake Nipigon and Lake of the Woods

Table 1. Colours used for different marine alert types






Colour	Meaning
	Red: region with a marine warning in effect
	Yellow: region with a marine watch in effect
	Green: region where warning or watch has ended
	Blue: region with no marine warning or watch in effect
	Hurricane icon: Tropical Cyclone statement

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Key Acronyms used in this document

CCG	Canadian Coast Guard
EC	Environment Canada
HF NBDP	High Frequency Narrow Band Direct Printing of HF telex
JCOMM	Joint Commission for Oceanography and Marine Meteorology
MSC	Meteorological Service of Canada
NIRT	National Inquiry Response Team
SOLAS	Safety of Life of Sea
IMO	International Maritime Organization
WMO	World Meteorological Organization

1.0 Introduction

Environment Canada's Meteorological Service is the national marine weather service provider, as established by the Department of the Environment Act (1985). The Meteorological Service of Canada's (MSC's) marine forecast and warning program operates year-round; except in regions where shipping is not possible due to prevailing ice conditions, or in areas where there are scheduled seasonal/recreational marine forecast programs. Operational meteorologists monitor weather conditions 24 hours a day, 7 days a week.

The information provided by the MSC's marine forecast and warning program enables mariners to make informed decisions about marine weather conditions that may impact their safety, security and/or operations. Furthermore, the MSC provides marine forecasts in order to meet Canada's treaty obligations under the International Maritime Organization's (IMO) Safety of Life at Sea (SOLAS) Convention.

2.0 The Marine Forecast and Warning Program

The MSC's marine forecast and warning program offers a variety of products and services.

Marine weather forecasts describe the anticipated weather conditions in Canadian marine environments for the next five day period. The short-term two-day forecast provides detailed information related to marine weather including warnings and watches, as well as wind, weather, visibility and wave heights. The three-day extended marine forecast contains just wind information to allow mariners to make longer-range planning decisions.

To supplement the marine forecasts, two additional products are also provided: Technical synopses, which give an overview of major weather systems affecting the area, and Marine Weather Statements, which are used to provide additional information regarding non-routine marine weather events.

The Marine Warning Program is intended to provide an effective warning service to alert mariners to particularly hazardous marine meteorological conditions that may pose a hazard to marine operations.

3.0 Marine Program Service Standards

These service standards were developed to supplement performance reporting mechanisms that currently exist at EC, including the departmental Report on Plans and Priorities, the Performance Management Framework, and the ISO 9001:2008 Quality Management System. They have been developed in consultation with key clients and are intended to

clearly state what level of service our clients can normally expect from the MSC's marine forecast and warning program.

These service standards have been categorized under three different types, as defined by the Treasury Board of Canada Secretariat: **accessibility**, **timeliness** and **accuracy**.

3.1 Accessibility

The MSC recognizes that a standard of accessibility for both the organization and its products is key to client services. Clients have several means of access to both the MSC and its products.

3.1.1 Accessibility of the Meteorological Services of Canada

The MSC is committed to being accessible to Canadians. To demonstrate this commitment there are numerous ways in which mariners can contact the MSC directly to ask questions, make suggestions, receive one-on-one weather consultation, or file a comment or complaint.

The primary contact portal for this is via the National Inquiry Response Team (NIRT) whose main function is to receive and respond to client inquiries. The NIRT can be contacted by telephone, fax or email, or by completing the "[Contact Us](#)" fields on EC's Weatheroffice website.

NIRT has established the following performance targets to ensure client feedback is addressed in a timely fashion:

- a) NIRT reports will be analyzed within 10 working days; and**
- b) Specific NIRT requests will be responded to within 10 working days.**

For one-on-one forecaster consultation, the MSC provides a dedicated 1-900 user-pay telephone service that gives clients the option to speak directly with a forecaster. This provides an opportunity for clients to discuss any forecast information they may require in additional detail. Furthermore, a separate dedicated 1-900 telephone line and website are available for historical meteorological or climate information. Both of these services are available during daytime hours which are user pay per minute and are posted on [EC's website](#).

3.1.2 Accessibility of Marine Forecast and Warning Products

The MSC strives to make its marine forecast and warning information as accessible as possible to its clients. Its weather forecast centres operate 24 hours a day, 7 days a week and constantly monitor weather conditions.

Forecasts are issued according to a prescribed schedule and then disseminated to clients via a robust dissemination network. Should conditions change updates are provided as required and are immediately disseminated. To ensure the forecast information is delivered to the client, a variety of dissemination tools are used – both internal and external to EC – and in partnership with both federal agencies and private companies specializing in the provision of information pertinent to the marine community. Thus, the MSC ensures that the most up-to-date marine forecast information is available to mariners from as many sources, and in as many locations, as possible.

The following media are used by the MSC to disseminate marine weather forecast and warning information:

EC internally supported media:

- [Weatheroffice](#)
- [Weatheradio](#)
- [Automated Telephone Answering Devices](#) (ATAD)
- Weather One-on-One Forecaster Consultation (1-900-565-6565 or 1-888-292-2222 for cellular telephone access and credit billing)
- Marine RSS feed (accessible via the Weatheroffice website)
- [Datamart](#)

External providers that disseminate the MSC's marine forecast and warning information:

- Canadian Coast Guard (CCG) marine radio-telephony (VHF, MF, HF)
- CCG NAVTEX (Navigational Telex)
- CCG High Frequency Narrow Band Direct Printing (HF NBDP)
- CCG weather-facsimile
- Inmarsat-C SafetyNET
- World Meteorological Organization (WMO) Joint Commission for Oceanography and Marine Meteorology (JCOMM) [website](#)

Note that not all of these sources are available in all areas. Please contact the MSC for more information pertaining to your specific area or for additional information regarding any of these dissemination media. Also, please note the service limitations outlined in the following section as several factors may impact service availability.

3.1.3 Service Limitations

It should be noted that levels of service differ somewhat geographically and service delivery of a particular product may sometimes be interrupted for reasons outside of EC's control.

Local geography, weather/atmospheric conditions, and technological capabilities are all factors impacting the availability of some services. For example, coastal topography may result in interruptions to the Weatheradio signal in some near-shore locations, or geographic

location may result in loss of the signal used to obtain marine forecast products via Inmarsat.

Furthermore, EC marine products that are disseminated via a third party (i.e. external to EC) may be subject to service limitations resulting from a disruption to the third party's services, for example, a local Internet Service Provider may experience an outage at its service facility, thereby preventing subscribers from accessing EC's website. For more information regarding service limitations please contact the MSC directly.

3.2 Timeliness

The MSC recognizes that it is of vital importance to its clients that the most up-to-date weather information be made available in a timely manner. The MSC also recognizes that mariners rely on receiving marine weather forecasts based on a prescribed schedule.

As such, **the MSC endeavours to ensure that marine forecasts are issued according to the established schedule.**

These schedules vary based on product and region. Please visit the EC website or contact the MSC directly for this information.

3.3 Accuracy

The MSC endeavours to deliver accurate forecasts at all times. However, the uncertainty inherent in the science of meteorological prediction coupled with the complex meteorological dynamics of the marine environment require that a realistic and obtainable performance standard be established.

The marine meteorological parameter that has been identified for use as a measurement indicator to quantify the performance of the marine forecast is **the prediction of gale-force wind**, defined as wind speed of 34 to 47 knots inclusive.

This parameter was chosen because a **gale warning** will be placed in effect upon gale-force wind being either expected or observed, thus gale-force wind provides a readily identifiable marine alert event that is relatively common throughout all maritime regions of Canada. Also, gale-force wind has been identified as an important threshold for mariners in general, so establishing this event as a performance measurement indicator will be meaningful to most of the clients using MSC's marine forecast products.

The service standard regarding gale-force wind will thus be **to place gale warnings in effect at least 18 hours prior to the onset of gale-force wind events.**

A lead time of 18 hours was chosen because this time-interval is a realistic service standard objective. Also, it is a sufficient period of time for mariners to take whatever precautions they may deem appropriate before the onset of a gale-force wind event.

4.0 Disclaimer

While the MSC endeavours to meet the service commitments as outlined in this document, there may on occasion be times when the service standards will not be met due to extenuating circumstances beyond the control of the MSC. The aforementioned service standards are therefore meant for defining service level objectives only. No guarantee of meeting the service standards as defined in this document is either stated or implied by the MSC.

5.0 Review Cycle

The MSC is committed to reviewing the service standard annually. As such, the service standards are subject to change based on operational or policy changes, technological advances, science improvements and/or client feedback, among any other unanticipated changes. Any changes, however, will not be adopted until appropriate consultation is conducted with key marine clients.

6.0 Contact Us

Our service standards are meant to be a commitment to our clients, and as such, feedback from our clients is always welcomed. Any feedback should be directed to:

Mailing Address:	Environment Canada National Inquiry Response Team 77 Westmorland Street Suite 260 Fredericton, New Brunswick E3B 6Z3
Telephone:	877-789-7733
Fax:	506-451-6010
TTY:	819-994-0736
Email:	weather.info.meteo@ec.gc.ca
Internet:	www.weather.gc.ca/mainmenu/contact_us_e.html

www.ec.gc.ca

Additional information can be obtained at:

Environment Canada

Inquiry Centre

10 Wellington Street, 23rd Floor

Gatineau QC K1A 0H3

Telephone: 1-800-668-6767 (in Canada only) or 819-997-2800

Fax: 819-994-1412

TTY: 819-994-0736

Email: enviroinfo@ec.gc.ca