



Environment
Canada

Environnement
Canada



Hydrometric Data and Information Service

Service Standards

ISBN: 978-1-100-25912-3
Cat. No.: En56-251/2015E-PDF

Unless otherwise specified, you may not reproduce materials in this publication, in whole or in part, for the purposes of commercial redistribution without prior written permission from Environment Canada's copyright administrator. To obtain permission to reproduce Government of Canada materials for commercial purposes, apply for Crown Copyright Clearance by contacting:

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

© Her Majesty the Queen in Right of Canada, represented by the Minister of the Environment, 2015

Aussi disponible en français

Table of Contents

1.0 Introduction.....	2
2.0 The National Hydrological Service	2
3.0 Hydrometric Data and Information Service Standards	3
3.1 Accessibility Standards.....	3
3.1.1 Accessibility of the Meteorological Service of Canada.....	3
3.1.2 Accessibility of Hydrometric Data and Information Products	4
3.1.3 Service Limitations	6
3.2 Timeliness	6
3.3 Accuracy	7
4.0 Disclaimer.....	8
5.0 Review Cycle.....	8
6.0 Contact Us	8

Key to acronyms used in this document:

EC	Environment Canada
MSC	Meteorological Service of Canada
NHS	National Hydrological Service
NHP	National Hydrometric Program
NIRT	National Inquiry Response Team
WSC	Water Survey of Canada

1.0 Introduction

The National Hydrological Service (NHS) provides Canadian hydrometric data and information services. NHS services provide:

- 1) near real-time Canadian hydrometric data 24 hours a day, 365 days a year; and
- 2) value-added historical Canadian hydrometric data and statistical information.

NHS hydrometric data and information are used in flood risk management, emergency response management, water-resources planning, water allocation, infrastructure planning and design, environmental monitoring and management, analysis of climate change and long-term weather effects, power generation, and recreational uses of waterways.

This document outlines the service standards for the provision of hydrometric data and information by the NHS.

2.0 The National Hydrological Service

The NHS consists primarily of the Water Survey of Canada (WSC). The work of the WSC involves:

- 1) measurement of hydrometric data (primarily water levels);
- 2) hydrometric data analysis (primarily to estimate discharge); and
- 3) publication of hydrometric data and information.

Supporting activities include technology R&D and network analysis and planning.

The WSC is overseen by the Meteorological Service of Canada (MSC) of Environment Canada (EC). The WSC is the federal component of the National Hydrometric Program (NHP). The NHP is responsible for collecting, interpreting and disseminating standardized information about surface water levels and flows (water quantity) across Canada. Under the authority of the *Canada Water Act*, the federal, provincial and territorial governments entered into bilateral agreements, established in 1975 and currently being updated, to manage the funding and provision of water quantity monitoring services on a cost-shared basis. The WSC operates approximately 2200 water gauging stations in partnership with the provinces, territories and other agencies, and maintains a database containing historic data from an additional approximately 5600 inactive stations for the country.

3.0 Hydrometric Data and Information 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 partners and clients, and are intended to clearly state what normal level of service our partners and clients can normally expect from the MSC's hydrometric data and information service.

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

3.1 Accessibility Standards

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

3.1.1 Accessibility of the Meteorological Service of Canada

The MSC is committed to being accessible to users of its services and products. This commitment is demonstrated by the numerous ways in which clients may contact the MSC directly to ask questions, make suggestions or submit comments, receive one-on-one weather consultation, or file a complaint.

Users of hydrological data and information products may access the MSC via the National Inquiry Response Team (NIRT), whose main function is to receive and respond to client inquiries directed to the MSC. NIRT may be contacted either by postage mail, telephone, facsimile, or teletypewriter at the following:

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

Additionally, NIRT may also be contacted by completing the “Contact Us” form on EC’s Wateroffice website at the following link:

http://wateroffice.ec.gc.ca/contactus/contact_us_e.html

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

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

3.1.2 Accessibility of Hydrometric Data and Information Products

Hydrometric data and information are collected and disseminated according to schedules laid out in partnership agreements among the federal, provincial and territorial members of the NHP. The MSC strives to make all of its hydrometric data and information available to its clients and to its NHP partners. **In normal operations, data and information should be available 24 hours per day, 7 days per week.**

The MSC disseminates NHP hydrometric data and information through:

- Wateroffice: www.wateroffice.ec.gc.ca
- Datamart: <http://dd.meteo.gc.ca/hydrometric/>

NHP hydrometric data can be explored offline through the following applications:

- Environment Canada Data Explorer (MSC supported):
<https://www.ec.gc.ca/rhc-wsc/default.asp?lang=En&n=0A47D72F-1>
- Green Kenue™ (National Research Council supported):
www.nrc-cnrc.gc.ca/eng/solutions/advisory/green_kenue_index.html

EC publishes NHP hydrometric data and information online through:

- Canadian Environmental Sustainability Indicators – Water Indicators:
<https://www.ec.gc.ca/indicateurs-indicators>

The Government of Canada provides access to NHP hydrometric data online through Open Government: <http://open.canada.ca>.

NHP hydrometric data and information can be accessed online through applications supported by organizations external to EC:

- North-America WaterWatch (United States Geological Survey supported)
<http://watermonitor.gov/naww/en/index.php>

NHP provincial and territorial partner websites provide access to NHP hydrometric data and information:

- Alberta – Environment and Sustainable Resource Development
<http://esrd.alberta.ca>
- British Columbia – Ministry of Environment
www.gov.bc.ca/env/index.html
- Manitoba – Conservation and Water Stewardship
www.gov.mb.ca/conservation/index.html
- New Brunswick – Department of Environment and Local Government
<http://www2.gnb.ca/content/gnb/en/departments/elg/environment.html>
- Newfoundland and Labrador – Environment and Conservation
www.env.gov.nl.ca/env/waterres/index.html
- Northwest Territories – Environment and Natural Resources
www.enr.gov.nt.ca
- Nova Scotia – Environment
<http://www.novascotia.ca/nse/>
- Nunavut – Department of Environment
<http://env.gov.nu.ca>
- Ontario – Ministry of Natural Resources and Forestry
www.ontario.ca/ministry-natural-resources-forestry
- Prince Edward Island – Environment, Labour and Justice
www.gov.pe.ca/jps/index.php3
- Quebec – Ministry of Sustainable Development, Environment and the Fight Against Climate Change
www.mddelcc.gouv.qc.ca/index_en.asp
- Saskatchewan – Water Security Agency
<https://www.wsask.ca>
- Yukon – Environment Yukon
www.env.gov.yk.ca

3.1.3 Service Limitations

Hydrometric data and information is available only for locations where monitoring stations are currently or have been established.

In normal operations, data and information should be available 24 hours per day, 7 days per week. Sometimes data and information accessibility might be interrupted for reasons outside of EC's control. For example, extreme weather conditions may adversely impact the functioning of hydrometric monitoring equipment or data transmission infrastructure.

Hydrometric data and information generated by the NHS is first posted to <https://wateroffice.ec.gc.ca/>. Other sources outlined in section 3.1.2 will be updated according to their own update schedule. Although all sources might not be updated synchronously, users can always refer to <http://wateroffice.ec.gc.ca/> for the most up-to-date data and information.

Users should also note that NHP hydrometric data and information dissemination mechanisms beyond the control of the MSC are subject to the service limitations of their supporting organizations.

For additional information regarding service limitations, either internal or external to the MSC, please contact the MSC directly.

3.2 Timeliness

The MSC recognizes that it is of vital importance to users that the most up-to-date hydrometric data and information be made available in a timely manner. The MSC also recognizes that its NHP partners expect to receive hydrometric data and information on a reliable schedule. As such, **real-time hydrometric data is posted online at www.wateroffice.ec.gc.ca within three hours of occurrence.**

3.3 Accuracy

The MSC endeavours to deliver accurate hydrometric data and information at all times and actively seeks and tests technologies and methods to improve accuracy.

The WSC delivers consistent quality by generating **100%** of its hydrometric data and information products **according to Standard Operating Procedures**. Results from regular audits of office and field activities provide evidence that Standard Operating Procedures have been followed.

While it is not always possible to quantify it, accuracy of hydrometric data and information depends upon many factors, including:

- 1) Choice of measurement techniques;
- 2) Physical conditions at the monitoring site;
- 3) Frequency of measurements; and
- 4) Choice and applicability of computation and interpretation methods.

The following caveats assist users in understanding the accuracy, and thus reliability, of hydrometric data:

- 1) Data identified as “provisional” is subject to change and improvement, and therefore is considered less accurate than data published as “approved.”
- 2) Data identified as “estimated” is considered less accurate than measured data.
- 3) Measured data identified as affected by ice or other influences that limit the applicability of models is less accurate than measured data unaffected by ice and other influences.
- 4) A daily value based on an incomplete dataset is of lower accuracy than other daily values.

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 its service standards annually. As such, these service standards may be subject to change due to factors such as, but not limited to, operational or policy considerations, technological advances, science improvements, and/or client feedback. However, any proposed changes will not be adopted without prior consultation with the MSC's key water 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

Internet: http://wateroffice.ec.gc.ca/contactus/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