



## COMPENDIUM OF CANADA'S ENGAGEMENT IN INTERNATIONAL ENVIRONMENTAL AGREEMENTS AND INSTRUMENTS

### *Memorandum of Understanding between the National Oceanic and Atmospheric Administration U.S. Department of Commerce United States of America and the Department of the Environment Canada for Collaboration on Weather, Climate and Other Earth Systems for the Enhancement of Health, Safety and Economic Prosperity*

**SUBJECT CATEGORY:**

Meteorology

**TYPE OF AGREEMENT / INSTRUMENT:**

Canada – United States

**FORM:**

Memorandum of Understanding

**STATUS:**

- Renewed MoU signed by Canada on September 11, 2018.
- In force internationally September 13, 2018
- Will be reviewed every three years for relevance and will expire on September 13, 2028.

**LEAD & PARTNER DEPARTMENTS:**

**Lead Department:** Environment and Climate Change Canada

**Partner Departments:** Department of Agriculture and Agri-Food; Department of Fisheries and Oceans

**FOR FURTHER INFORMATION:**

**Web Links:**

- [Government of Canada Weather Information service](#)
- [U.S. National Oceanic & Atmospheric Administration \(NOAA\)](#)
- [North American Climate Service Partnership website](#)

**Contacts:**

[ECCC Inquiry Centre](#)

**COMPENDIUM EDITION:**

January 2020

#### PLAIN LANGUAGE SUMMARY

This Memorandum of Understanding (MoU) is important because it facilitates cooperation between Canada and the United States on activities that promote improved meteorological hydrological and environmental forecasts and information.

#### OBJECTIVE

This Memorandum of Understanding (MOU) outlines the responsibilities of the National Oceanic & Atmospheric Administration (NOAA) and the Department of the Environment (ECCC) to collaborate on weather, climate and other Earth Systems for the enhancement of health, safety and prosperity.

#### KEY ELEMENTS

The MOU recognizes the long-standing cooperation between the Participants and is intended to: facilitate the exchange of information, technology, and management practices; and to supply a mechanism through which future efforts can be coordinated.

#### EXPECTED RESULTS

This agreement is expected to:

- Enhance and maximize the program capabilities of both Participants;
- Encourage joint efforts to resolve common problems;
- Avoid unplanned duplication of effort;
- Promote compatibility in the collection, analysis, archival, and dissemination of data so that the data and results can be readily accessed, analyzed, integrated, compared, and pooled as desired; and
- Contribute to Earth observations and assessments.

#### CANADA'S INVOLVEMENT

This agreement is important to Canada, as it formalizes our longstanding cooperation with NOAA, with whom we need to share critical real-time data in order to

produce weather forecasts and warnings for Canadians, as well as providing a means to work together to improve weather, water, climate, air quality and ice research, monitoring and products and services for citizens and institutions.

This agreement is implemented in Canada through a Cooperation Steering Committee (CSC), co-chaired by the ADM-Meteorological Service of Canada (MSC) and a NOAA Director on a two-year rotating basis around their business lines (Weather service, satellite service, ocean service and research). The committee consists of senior officials from MSC and other Branches of Environment and Climate Change Canada (such as Science & Technology Branch), and other government Departments (such as Agriculture and Agri-Food) and the heads of the NOAA business lines. The CSC meets on a semi-annual basis to review progress of bilateral activities, which are developed according to a two-year work plan.

## **RESULTS / PROGRESS**

### **Activities**

A new work plan (2019-2020) was agreed to in May 2019. The work plan has retained the following thematic areas: Climate; Arctic; Marine Forecasting; Hydrology; Ecological Forecasting, Integrated Monitoring and Impact-based Decision Support Services (now called Environmental Decision Support).

### **Reports**

The Cooperation Steering Committee produces an Accomplishments Report which documents the results of all of the projects on a bi-annual basis. For 2016-2018; 11 activities were graduated; one was terminated; one has been completed and 17 will be continuing / evolving in the next biennium. As an Annex to the full Report, each Theme articulated the following:

- **CLIMATE:** The development and delivery of new climate information for both countries.
- **MARINE SERVICES:** Advancing the concept of a unified Great Lakes marine forecast product.
- **HYDROLOGIC SERVICES:** Modeling and forecasting activities to support the information and decision support framework necessary for water security, predict hydrologic extremes, and ensure

sufficient water quantity and quality to meet human needs and maintain ecosystem health.

- **ECOLOGICAL FORECASTING:** The development of new experimental and operational products related to Lake Erie Harmful Algal Blooms (HABs) and hypoxia.
- **INTEGRATED MONITORING:** Focus on lessons to be learned and applied to each organizations monitoring operations.
- **ENVIRONMENTAL DECISION SUPPORT:** Work was completed within the area of improved messaging of extreme temperature and communication of related health impacts

### **Results**

As noted under Activities, the cooperation under the MOU has enabled ECCC and NOAA to enhance bilateral scientific and technical collaboration, which contributes directly to societal benefits through more efficient operational programs (weather, ice and climate forecasting), and improved research related to weather, water and climate matters, enhanced coordination for trans-boundary forecasts in marine areas and the Great Lakes, and strengthened mutual participation in international fora such as the World Meteorological Organization and the Arctic Council.

### **Annex to MOU**

The North American Ice Service Collaborative Agreement Annex was established to develop collaborative systems and data exchanges between the two countries as it relates to providing ice information to relevant parties in each country.

This Annex supports the delivery of a harmonized suite of products and services for ice information for North American and adjacent international waters to serve the needs of users for safe navigation and decision making when ice hazards are present.

The annex outlines the responsibilities U.S. National Ice Center of the National Oceanic and Atmospheric Administration and the U.S. Coast Guard; the Canadian Ice Service of the Meteorological Service of Canada; and the International Ice Patrol of the U.S. Coast Guard in the integrated North American Ice Service (NAIS).