

SOUTH NATION
CONSERVATION
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Flood Contingency Plan

2025





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Executive Summary

The South Nation Conservation (SNC) 2025 Flood Contingency Plan was prepared following the provincial standards established in *Ontario Flood Forecasting and Warning: Implementation Guidelines for Conservation Authorities and Ministry of Natural Resources and Forestry (2008)*. The Flood Forecasting and Warning Program is part of the Ministry of Natural Resources' Emergency Response Plan that describes how to respond in the event of flood conditions. To reduce the risk of loss of life, injury and property damage, SNC strives to provide flood warning messages with enough lead time for municipalities and the public to take action.

Messaging

Four types of flood messages may be issued by SNC depending upon the situation. From least to most urgent, they are:

WATERSHED CONDITIONS STATEMENT	Water Safety Statement	General notice of high flows, melting ice or other factors which could be dangerous for users such as boaters, anglers and swimmers, but flooding is not expected.
	Flood Outlook Statement	General notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high winds or other conditions.
SHORELINE CONDITIONS STATEMENT	Water Safety Statement	Identical to the Watershed Conditions – Water Safety Statement but adapted for use along the St. Lawrence River (see Section 6.2).
	Flood Outlook Statement	Identical to the Watershed Conditions – Flood Outlook Statement but adapted for use along the St. Lawrence River (see Section 6.2).
FLOOD WATCH		There is the potential for flooding within specific watercourses and municipalities.
FLOOD WARNING		Flooding is imminent or occurring within specific watercourses and municipalities.



Roles and Responsibilities

- **Ministry of Natural Resources (MNR):** Will maintain a provincial flood warning system to alert Conservation Authorities.
- **South Nation Conservation (SNC):** Will maintain a flood warning system throughout its jurisdiction for alerting municipal representatives, the media, local police, the Ontario Provincial Police and the MNR.
- **Municipalities:** Municipalities are responsible for responding to a flood. When a flood event occurs, it is the responsibility of the municipality to implement their Emergency Response Plan, or similar.

Communication

- SNC shall maintain lines of communication between municipalities and appropriate agencies during a flood event.
- Any questions or feedback regarding this plan or other aspects of dealing with flood emergencies may be directed to SNC. SNC's Flood Forecasting and Warning team may be reached by phone: 1-877-984-2948 or email: waterwatch@nation.on.ca. See **Appendix A** for additional contact details.

1.0 Background

Flood Forecasting and Warning is part of the Ministry of Natural Resources (MNR) Emergency Response Plan, which was developed in accordance with Ontario's *Emergency Management & Civil Protection Act*. The Emergency Response Plan describes the services provided by the MNR and its partners in response to flood conditions and how to respond in the event of flood conditions. To reduce the risk of loss of life, injury and property damage, South Nation Conservation (SNC) strives to provide flood warning messages with enough lead time for municipalities and the public to take action.

As the leading agency, the MNR delegates to Conservation Authorities, such as SNC, the responsibility for monitoring water levels and conducting flood forecasting and warning at a local level. The goal of the Conservation Authorities is to provide the greatest lead time possible for municipalities to react in order to reduce the risk of loss of life, injury and property damage as a result of flooding.

The SNC 2025 Flood Contingency Plan was prepared following the provincial standards established in the *Ontario Flood Forecasting and Warning: Implementation Guidelines for*

Conservation Authorities and Ministry of Natural Resources and Forestry (2008) prepared by the Provincial Flood Forecasting and Warning Committee.

2.0 Purpose of the Plan

The purpose of this plan is to summarize the course of action that will be taken by SNC if a flood event threatens to occur, or does occur, in SNC's jurisdiction (see **Figure 1**).

One of the responsibilities of SNC is to maintain a flood warning system throughout the jurisdiction to alert municipalities, counties, media, local police, Ontario Provincial Police, MNR and other stakeholders of flood threats.

The purpose of SNC's flood warning system is two-fold:

1. To provide advance notice of flood conditions to member municipalities and the public so that municipal officials and citizens can respond in a timely manner to avoid or minimize the loss of property.
2. To provide on-going updates of flood forecasts and watershed conditions during a flood event.

Flood forecasting is a provincially mandated service provided to municipalities by Conservation Authorities. SNC maintains a network of flood forecasting stations and monitors weather and flood information to notify municipalities of potential or imminent flood conditions.

In this role, SNC acts in an advisory capacity only, providing continuous monitoring of flood conditions. SNC is not responsible for flood response other than in the operation of its own water control structures. During a flood situation, SNC's office will be available to monitor water levels and weather conditions on a 24-hour basis, as required.

See Appendix A for SNC staff contact details.

Municipalities are responsible for responding to an impending flood. If a municipality declares a state of emergency, the MNR becomes the lead ministry responsible for flooding emergencies.

This plan will be revised, updated and sent to the emergency contacts distribution list by SNC, on an annual basis.

The list includes emergency contacts from:

- Member Municipalities and Counties;
- MNR Surface Water Monitoring Centre;
- MNR Kemptville;



- MNR Provincial Response Centre;
- Emergency Management Ontario;
- Ontario Provincial Police (OPP);
- Other stakeholders: Ontario Power Generation, Hydro Quebec, Laplante Hydro Station, etc.;
- Neighbouring Conservation Authorities; and
- SNC Staff and Board Members.

3.0 Roles and Responsibilities

As per the MNR's Flood Forecasting and Warning Guidelines, the following describes the roles and responsibilities of the MNR, SNC and municipalities:

3.1 Ministry of Natural Resources

The MNR will maintain a provincial flood warning system to alert Conservation Authorities.

To implement its responsibilities, the MNR will:

- Design approval and maintenance of the basic data collection system and archiving;
- Provide early alerts of major precipitation events;
- Issue Provincial Advisories;
- Provide interpretation of precipitation and runoff forecasting;
- Coordinate programs;
- Respond to a request by a municipality for provincial assistance should the total resources of the municipality be committed or inadequate or the municipality has declared an emergency situation; and
- Coordinate delivery of the provincial response in a declared emergency.

3.2 South Nation Conservation

SNC will maintain a flood warning system throughout its jurisdiction for alerting municipal representatives, the media, local police, the OPP, the MNR, etc.

To implement its responsibilities, SNC will:

- Operate and maintain a data collection and monitoring network;
- Interpret area conditions affecting flooding, including weather patterns, ice jams, etc.;
- Forecast stream flows and water levels; and
- Prepare flood messages outlined in **Section 6.0** of this document and send to the emergency contacts distribution list.
- Maintain communication with partner Conservation Authorities and the Ottawa River Regulation Board to support a timely, accurate and collaborative response to flooding events along the Lower Ottawa River according to the Lower Ottawa River Early Flood Warning Working Group Terms of Reference located in Appendix B.

3.3 Municipalities

Municipalities are encouraged to have their own flood contingency plan, which could incorporate SNC's Flood Contingency Plan. While SNC will provide continuous monitoring of water levels and weather conditions, it is a municipal responsibility to respond to a flood by implementing their own plan. The Municipality is responsible for:

- Developing and maintaining an emergency plan to deal with a flood or other emergencies;
- Liaising with SNC;
- Assessing the flood situation;
- Declaring a municipal emergency;
- In case of municipal emergency, implementing the municipal Emergency Response Plan, or similar, and coordinating the municipal response; and
- Requesting provincial assistance if additional resources are needed.

4.0 Flood Prone Areas

Flood prone areas are low-lying areas that are susceptible to flooding.

Within SNC's jurisdiction, there are six flood prone areas, including (see **Figure 1**):

- Brinston - Oak Valley Area (North & South Dundas)
- Plantagenet - Fournier Area (Nation & Alfred-Plantagenet)



- Bear Brook Area (Cumberland & Clarence-Rockland)
- South Castor Area near Vernon (Osgoode)
- Middle Castor Area upstream of Metcalfe (Osgoode)
- Lords Mills (Augusta & Edwardsburgh)
- St Lawrence River
- Ottawa River

With the expansion of SNC's jurisdiction, additional flood prone areas may exist but are not currently mapped. SNC conducts additional surveillance in these unmapped areas to collect the necessary data for future mapping.

Flooding problems normally occur during the spring runoff from a combination of snowmelt and rainfall. However, flooding can also occur any time of the year with the onset of excessive rainfall or snowmelt.

5.0 SNC Flood Forecasting and Warning System

The goals of flood forecasting and warning are:

- To reduce the risk of loss of life and property damage due to flooding through the issuance of flood messages; and
- To provide information for the safe operation of water control structures.

To accomplish these goals, SNC maintains a Flood Forecasting and Warning System as follows:

A) Monitoring Network and Data Collection System

SNC, in partnership with the MNR and Environment and Climate Change Canada, maintains a network of stream gauges, rain gauges, as well as ice and snow survey sites within SNC's jurisdiction. The data collected can be used to quantify the components of a hydrologic cycle. Monitoring can also include visual inspections of watercourses.

B) Daily Planning Cycle

The Daily Planning Cycle is a series of scheduled tasks, performed daily to ensure that the flood potential can be identified in a timely manner. The Daily Planning Cycle includes the analysis of the following parameters:

- i. Daily water levels and flows collection at 6:00 a.m.;



- ii. Daily check of forecasts for weather conditions, precipitation and temperatures; and
- iii. Snow and ice survey data.

After the Daily Planning Cycle parameters are analyzed, SNC predicts the flood potential (i.e. Low, Moderate or High).

C) Flood Duty Officer

The Flood Duty Officer is a designated SNC staff member responsible for carrying out the Daily Planning Cycle. This individual will be available on a 24-hr basis, seven days a week during potential flood periods. To contact SNC's Flood Duty Officer, see the contact list in **Appendix A**, beginning with the first entry.

D) Messaging

SNC will make every effort to send out flood warning messages with enough lead time to allow member municipalities and the public to respond to a flood. See **Section 6.0** for the types of messages that may be issued by SNC.

6.0 Messaging

Four types of flood messages may be issued by SNC depending on the situation, (see **Figure 2** for example). They will be issued by e-mail and made available on SNC's website:

www.nation.on.ca. Updates about road closures can also be found on SNC's website. SNC's contact list for Flood Forecasting and Warning is located in **Appendix A**.

The Provincial Icon will be included on the statements. The statements will be organized by region as follows; South Nation Watershed; Ottawa River; and St. Lawrence River.

6.1 Watershed Conditions Statement

A Watershed Conditions Statement is a general notice of potential flooding or other conditions that pose a risk to personal safety, such as high flows, and unsafe ice. There are two types of Statements:

- **Water Safety Statement:** Indicates that high flows, melting ice or other factors could be dangerous for users such as boaters, anglers and swimmers, but flooding is not expected.
- **Flood Outlook Statement:** Gives early notice of the potential for flooding based on



weather forecasts calling for heavy rain, snow melt, high winds or other conditions.

A Watershed Conditions Statement is usually issued before overbank flow occurs, before Spring break-up or any other time of year, as conditions warrant, or as a general reminder of the potential for high flows and unsafe conditions. The Watershed Conditions Statement will be emailed to the emergency contacts distribution list.

Represented as yellow in the Provincial Icon.

Copies of all transmissions shall be maintained at the SNC office in Finch, Ontario.

6.2 Shoreline Conditions Statement

The Shoreline Conditions Statement is a Watershed Conditions Statement (the lowest severity message) adapted for use along the St. Lawrence River in accordance with the Interim Strategy for Issuing Provincial Flood Messages for Static Water Levels on the Great Lakes and St. Lawrence River.

There are two types of Shoreline Conditions Statements:

- **Water Safety Statement:** Indicates that high flows, melting ice or other factors could be dangerous for users such as boaters, anglers and swimmers, but flooding is not expected.
- **Flood Outlook Statement:** Gives early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high winds, or other conditions.

Represented as yellow in the Provincial Icon.

6.3 Flood Watch

A Flood Watch is issued to notify Municipalities and other primary contacts that the potential for flooding exists within specific watercourses and municipalities. The Flood Watch will include the watershed conditions, the potential impact and a hydro-meteorological forecast. Municipalities receiving a Flood Watch should initiate a check on their municipal emergency plans. The Flood Watch will be emailed to the emergency contacts distribution list.

Represented as orange in the Provincial Icon.

6.4 Flood Warning

A Flood Warning with the title “ACTION” will be issued as a notice that flooding is imminent or occurring within specific watercourses and municipalities. Municipalities receiving a Flood Warning should commence the issuing of warnings to households, businesses and industries, which may be threatened. Municipalities should be referring to their municipal emergency plans.



Flood Warnings shall be emailed to the emergency contacts distribution list and reception confirmed by telephone. When a Flood Warning message has been prepared and the prime method of communication is inoperable, every alternate means of transmission must be considered, whether it is by radio, vehicle or on foot. The back-up communication system shall be the Ontario Provincial Police Communications Unit (1-888-310-1122) or alternatively, a Flood Warning message shall be passed to the local police detachments or municipal police. The officer-in-charge will then be responsible for alerting the proper municipal officials.

Represented as red in the Provincial Icon.

7.0 Lines of Communication

SNC shall maintain lines of communication between municipalities and appropriate agencies during a flood event (see **Figure 3**).

Any questions or feedback regarding this plan or other aspects of dealing with flood emergencies should be directed to SNC (see SNC contacts in **Appendix A**, beginning with the first entry). For more information, visit www.nation.on.ca or email waterwatch@nation.on.ca.

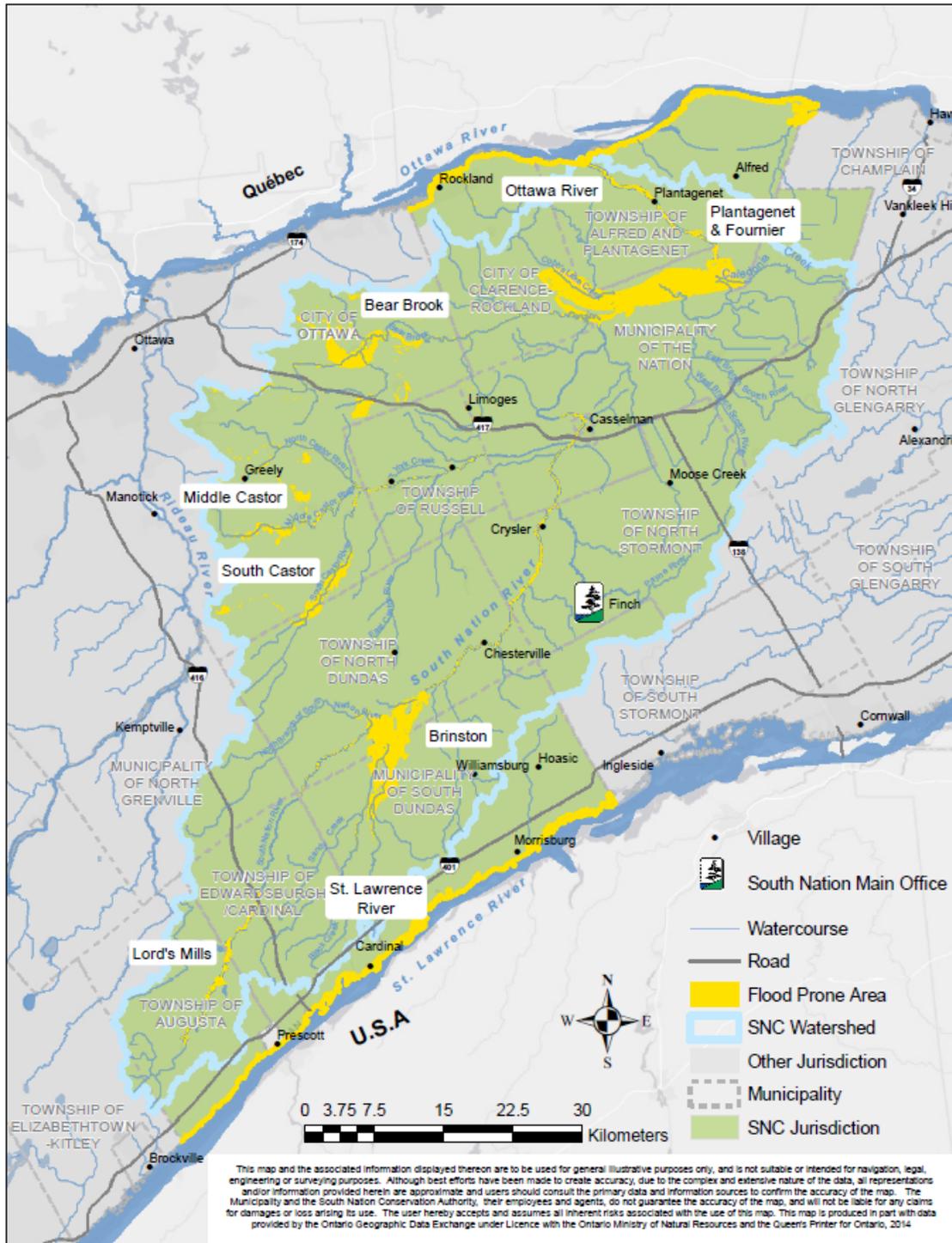


Figure 1: Map of South Nation Conservation's jurisdiction, flood prone areas, and the location of office.



**[WATERSHED CONDITIONS/FLOOD WATCH/FLOOD WARNING] STATEMENT:
REGION [Ottawa River, St. Lawrence River or South Nation Watershed]**

[mm/dd/yyyy]

Flood Warning

Weather Forecast:
The weather conditions forecasted by Environment Canada and/or Ministry of Natural Resources and Forestry. Includes information such as approximate precipitation if available and temperature changes.

Environmental Conditions:
Current conditions of the jurisdiction which include water levels, snow conditions, soil conditions, soil moisture and/or current flooding issues or concerns.

Risks:
The potential impacts from the weather forecast, and the environmental conditions pose on public and property safety.

ACTION:
CAUTION TO RESIDENTS ON WHAT TO DO IN THE TIME PERIOD OF THIS STATEMENT.

Duration:
The period which this statement will be in effect for.

SNC monitors the water levels and weather forecasts as part of the Flood Forecasting and Warning Program. Updates are provided as conditions change.

Please visit www.nation.on.ca and to also provide feedback with respect to changes in water related conditions in their local areas. All feedback can be sent to waterwatch@nation.on.ca; posted on our Facebook (/SouthNationConservation), or Twitter (@SouthNationCA).

For more information, please contact Duty Officer's Name at 1-877-984-2948 ext. XXXX.

Figure 2: Example of a flood message distributed to the Flood Forecasting and Warning contact list, which are distributed in both French and English

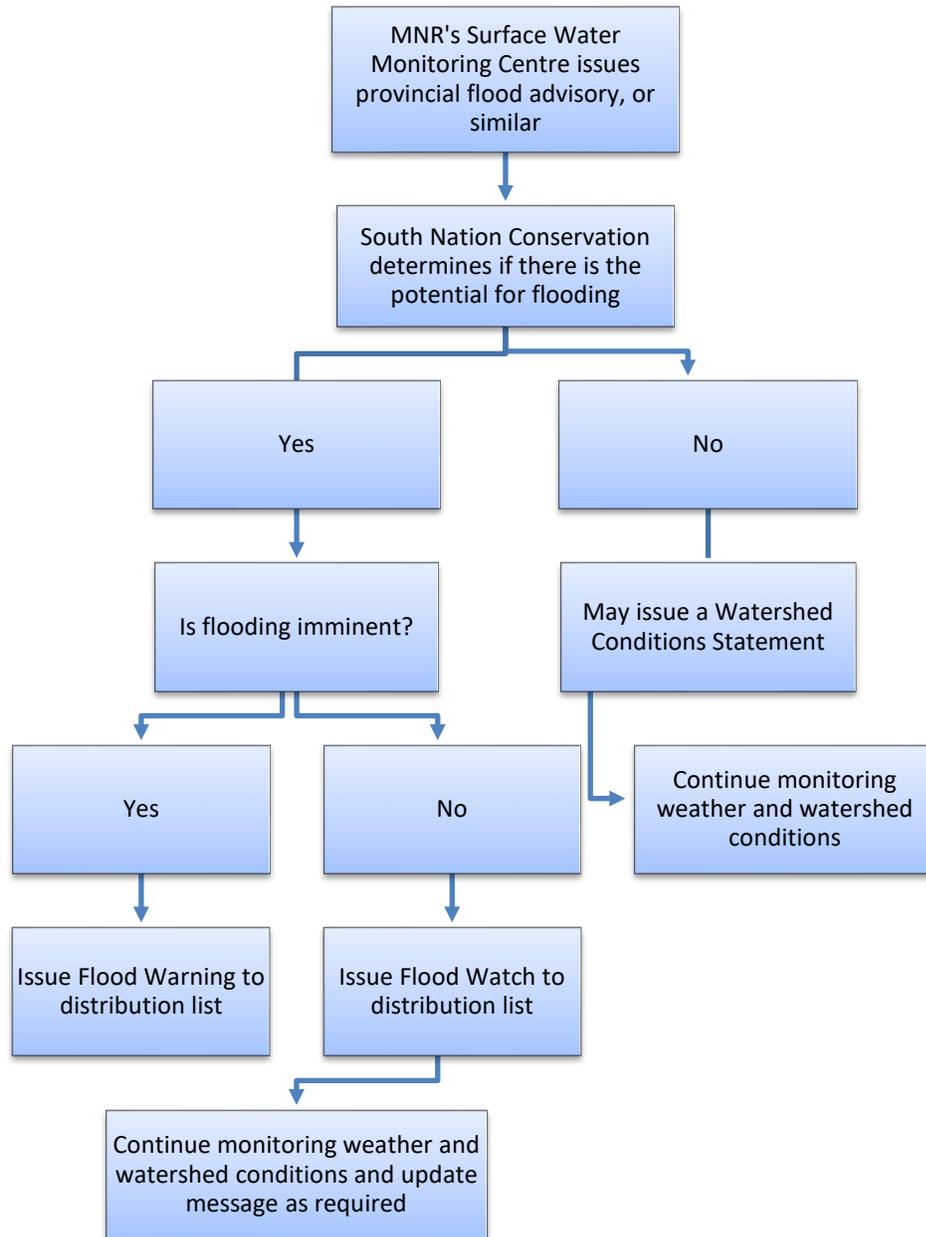


Figure 3: Diagram illustrating how South Nation Conservation will maintain lines of communication between municipalities and appropriate agencies during a flood event.



Appendix A

SOUTH NATION CONSERVATION DIRECTORY

	BUSINESS	CELLULAR	E-MAIL
Sandra Mancini <i>Managing Director, Natural Hazards and Infrastructure</i>	(613) 984-2948	(613) 551-3242	smancini@nation.on.ca
John Mesman <i>Managing Director, Property, Conservation Lands, and Community Outreach</i>	(613) 984-2948	(343) 803-3417	jmesman@nation.on.ca
Katherine Watson <i>Coordinator, Early Warning Systems and Watershed Plans</i>	(613) 984-2948	(343) 803-3733	kwatson@nation.on.ca
Phillip Dagenais <i>Water Resource Specialist – Monitoring</i>	(613) 984-2948	(343) 505-0197	pdagenais@nation.on.ca
Arielle Noonan <i>Stewardship Assistant II</i>	(613) 984-2948	343-803-3725	anoonan@nation.on.ca
Chesney McNeely <i>Water Resources Assistant</i>	(613) 984-2948	343-803-3542	cmcneely@nation.on.ca
Erin Thorne <i>Communications Specialist</i>	(613) 984-2948	(613) 551-7158	ethorne@nation.on.ca



Appendix B

Lower Ottawa River Early Flood Warning Working Group Terms of Reference

LOWER OTTAWA RIVER EARLY FLOOD WARNING WORKING GROUP TERMS OF REFERENCE

Following historic flooding along the Ottawa River in 2017, the Ottawa Conservation Authority Partners (Mississippi Valley, Rideau Valley, and South Nation) worked with partner agencies in 2019 to form a Lower Ottawa River Early Flood Warning Working Group to address flood conditions along the Ottawa River from Arnprior east to the Carillon Dam near Hawkesbury (referred to as the Lower Ottawa River).

The Working Group is comprised of the three Ottawa Conservation Authority Partners, the Ottawa River Regulation Planning Board and the Ontario Ministry of Natural Resources (MNR/Kemptonville Work Centre and the Surface Water Monitoring Centre).

The Lower Ottawa River Early Flood Warning Working Group works together to address flood conditions along the Lower Ottawa River to provide enhanced flood risk assessments and consistent communication framework.

These Terms of Reference are used to guide the Working Group meetings and procedures:

Mandate

- To enhance and ensure consistent flood assessment and warning in Ontario communities along the Ottawa River from east of Arnprior to Hawkesbury.
- To administer a communication framework in advance of the spring freshet.

Membership

- Ottawa River Regulating Secretariat
- Ministry of Natural Resource and Forestry's Surface Water Monitoring Centre
- Ministry of Natural Resource and Forestry Kemptonville Work Centre
- South Nation Conservation Authority
- Mississippi Valley Conservation Authority
- Rideau Valley Conservation Authority

Leadership

The role of the Chair will be rotated among the Conservation Authority Partners, in the following order:

- South Nation
- Rideau Valley
- Mississippi Valley

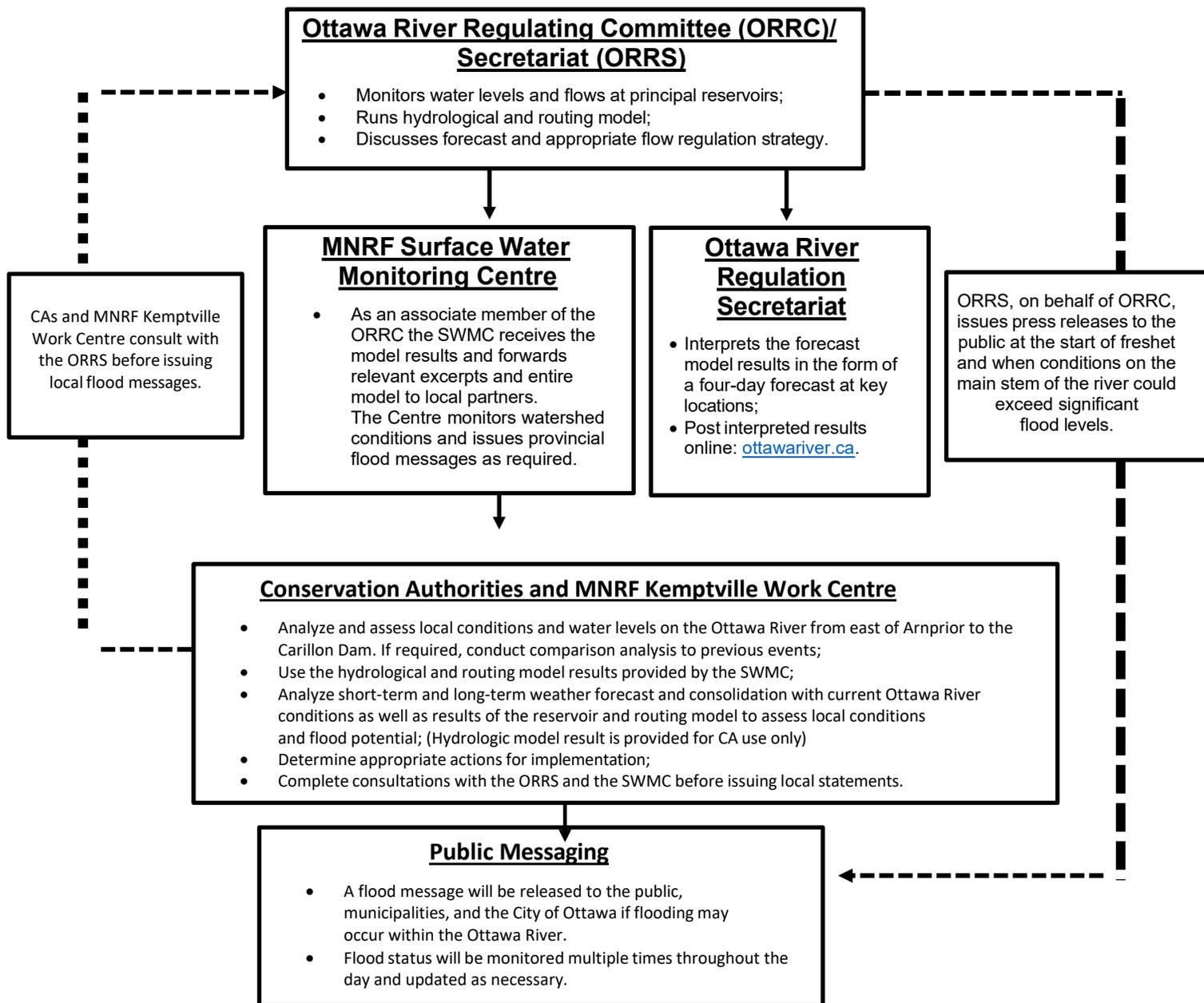
Duties of the Chair would include:

- Preside the meetings,
- Organization of meetings and conference calls,
- Request agenda items and prepare meeting agenda,
- Preparation of meeting minutes,
- Annual update of the Contact List and Terms of Reference,
- Follow-up action items,
- Liaison with other agencies outside of the Lower Ottawa River Early Flood; and, Warning Working Group.

Roles and Responsibilities

During these meeting group members would be expected to share their knowledge and expertise with the Working Group, including agency-specific information and local data. The following framework provides guidance on some of the associated duties.

Roles and Responsibilities Framework



Frequency of Meetings

The Working Group would establish meeting frequency depending on the group's needs. An annual meeting should take place before the spring freshet.

During the spring freshet, Working Group members could organize meetings through teleconference calls or in person to maintain ongoing communication and ensure consistent and accurate messaging among agencies.

After the spring freshet, a debrief meeting is recommended.

Meeting minutes should be recorded at each meeting.

Emergency Contact List

Contact lists will be updated annually, organized by the Working Group Chair.

Terms of Reference

The Terms of Reference and the Roles and Responsibility Framework will be reviewed annually. Updates will be coordinated by the Working Group Chair.

Statements

Public messaging should be consistent. Conservation Authorities and MNRF Kemptville Work Centre are responsible for preparing and issuing the local scale flood messaging for the Lower Ottawa River. The responsibility of preparing the draft statements will rotate between the four partners. The final statement will be approved by all partners. Statement templates should be reviewed annually.