

MUNICIPALITY OF HURON SHORES
FLOOD EMERGENCY MANAGEMENT PLAN
ANNEX H(a) to EMERGENCY RESPONSE PLAN

1. Purpose

The Emergency Response Plan for the Municipality of Huron Shores identifies flooding as one of the primary hazards that may impact the municipality. The purpose of this Annex is to outline the coordinated approach by which the municipality and its partner agencies will monitor, prepare for, respond to, and recover from flood-related events

2. Aim and Scope

The aim and scope of this Annex is to:

- support a coordinated approach to flood monitoring, preparedness, response and recovery;
- establish the role of other levels of government and external partners during flood preparation and response, and a description of the relationships that exist between involved agencies and authorities such as:
 - Ministry of Natural Resources (MNR);
 - Evolgen by Brookfield Renewable– Mississagi Power Trust;
 - Municipal Flood Monitoring Committee Liaison; and
 - neighbouring municipalities and First Nations.
- establish the procedures to be followed for the development and dissemination of emergency information and public education that is accurate and coordinated with all other agencies.

This Annex is intended to establish a coordinated and risk-based framework for flood monitoring, preparedness, response and recovery. It does not prescribe fixed operational actions, timelines, or thresholds, as response activities will vary based on real-time conditions, available information, and professional judgment. Operational procedures are maintained separately by municipal departments and emergency services and are implemented in accordance with this Annex and the Emergency Response Plan.

3. Authority and Maintenance

The Flood Emergency Plan is published as Annex H(a) to the Emergency Response Plan (as authorized by By-law #25-50, as amended in accordance with the *Emergency Management and Civil Protection Act, RSO 1990*). The custodian of this Plan shall be the Community Emergency Management

Coordinator (CEMC), who is responsible for the annual review, revision, and testing of this Plan.

This Annex is intended to support the broader Emergency Response Plan adopted under By-law #25-50 and shall be interpreted in conjunction with the roles, responsibilities, and procedures outlines therein.

4. Description of Hazard and Risk

4.1 Characteristics of Hazard

The MNR defines flooding as an overflow of water associated with a lake, river or stream that threatens the safety, welfare of people and/or damage to public and/or private property.

4.2 Characteristics of Risk

Possible risks could include threat to population, property, industry, critical infrastructure, etc.

4.3 Risk-Based Classification of Flood Areas

For operational purposes, areas within the Municipality may be classified as:

- a) Known Flood Areas – locations with a documented history of flooding or overtopping;
- b) Potential Risk Areas – locations where water levels may approach infrastructure under elevated conditions but where no known history of flooding exists.

This classification supports a proportionate and risk-based approach to monitoring, communication, and response.

These operational categories are informed, in part, by established floodplain mapping prepared in support of the Municipality’s land use planning framework, as well as other identified flood-prone areas. However, actual flood conditions may vary depending on conditions, and mapping is considered alongside real-time observations, forecasts, and operational judgement. These operational categories are intended solely for emergency response purposes and do not replace or modify any regulatory mapping or planning designations.

5. Response

5.1 Implementation of Plan

As with the Emergency Response Plan, formal emergency measures under this Annex are implemented under the authority of the Municipal Emergency Control Group (MECG).

The MECG may be convened in accordance with the Emergency Response Plan where conditions warrant coordinated decision-making; however, municipal staff may undertake monitoring, communication, and operational actions in advance of a declared emergency, as outlined in this Annex.

5.2 Functional Roles and Responsibilities

The MNR has been identified by the Order-in-Council (OIC) as the ministry responsible for a provincial response to flood emergencies. The MNR provides flood forecast messages to municipalities to enable them to prepare for, track and manage local flooding. Flood forecast messages are not flood warnings.

The Municipality is responsible for coordinating and implementing emergency response actions to protect life, property, and the environment within its jurisdiction, in accordance with applicable legislation and within available resources. The Province provides assistance in support of municipal emergency response where required.

For areas north of the Municipality that are without municipal organization, the MNR provides the contingency planning, flood forecasting and the delivery of emergency response.

If a provincial emergency has been declared by the Premier, the Province will coordinate a provincial response to support municipal action. The Premier may delegate his/her powers to the Minister of Natural Resources, therefore, designating MNR as the lead ministry.

With respect the Mississagi River, Evolgen by Brookfield Renewable has developed a protocol to contact the Municipal Flood Monitoring Committee when discharge levels from Red Rock Dam reach 500 cubic metres per second (cms). Updates may also be provided on upstream water levels at the dam, which can influence downstream conditions.

5.3 Pre-Emergency Monitoring and Actions

In advance of a declared emergency, Municipal staff may undertake monitoring and response activities where conditions indicate a potential flood risk. These actions may include:

- Monitoring MNR flood advisories and watershed condition statements;
- Monitoring dam discharge levels and communications from the dam operator;
- Conducting site inspections of known or potential risk areas;
- Coordinating with the Municipal Flood Monitoring Committee;
- Issuing precautionary notifications to affected areas where appropriate.

These activities are consistent with the authority outlined in the Emergency Response Plan for action prior to a formal declaration of emergency.

Monitoring activities are ongoing and increase in frequency and intensity as conditions warrant. Further details are outlined in Section 18 – Flood Monitoring Protocol

5.4 Operational Approach and Decision-Making

Flood response actions are based on a continuous assessment of conditions using multiple sources of information, including:

- Provincial flood forecasting and advisories;
- Dam operations and upstream conditions;
- Local observations and field assessments; and
- Input from partner agencies and technical sources.

Municipal actions are implemented progressively and proportionate to assessed risk. Due to the dynamic nature of flood events, specific actions, timing, and resource deployment cannot be predetermined and will be adjusted based on evolving conditions.

6. Emergency Information and Communications

All public information and communications during flood-related events shall be coordinated through the Emergency Information Officer (EIO) in accordance with the Emergency Response Plan.

Communications may occur both prior to and during a declared emergency and will be proportionate to the level of risk and evolving conditions.

Information will generally fall into two categories:

- Pre-emergency information, based on monitoring, forecasts, and advisories; and
- Emergency information, issued during an active flood event or where public safety may be impacted.

Public communications are intended to provide timely and accurate information; however, they do not represent exhaustive real-time updates of all monitoring activities or operational decisions.

6.1 Pre-Flood Information (Monitoring and Advisory Phases)

The Ministry of Natural Resources (MNR) provides flood forecasting and messaging to support municipal monitoring and preparedness. These messages are used to inform municipal decision-making and may be communication to the public where appropriate.

Municipal communications during this phase may include:

- Updates on watershed conditions and water levels;
- Notification of elevated conditions in known or potential risk areas;
- Precautionary messaging to support public awareness and preparedness.

These communications do **not** indicate that a flood emergency has been declared.

6.2 Emergency Information during a Flood Emergency (Response Phase)

Where conditions escalate to the point that public safety or access may be impacted, communications will be issued in coordination with the Emergency Information Officer, in consultation with the MECG.

Emergency communications may include:

- Road closures or access restrictions;
- Shelter-in-place advisories;
- Evacuation notices or recommendations;
- Updates on conditions and response actions;
- Information to support safe re-entry and recovery.

Emergency communications will be issued where conditions present a risk to public safety or where access to affected areas may be compromised.

Communications will be based on assessed risk to public safety, access, and infrastructure, and may evolve as conditions change.

Where required, the Mayor or Acting Mayor, in consultation with the MECG, may declare a local state of emergency, in accordance with the Emergency

Response Plan.

6.3 Tiered Notification Framework

The Municipality will utilize a tiered communication approach based on assessed risk levels:

Level 1 – Routine Monitoring:

No public notification required.

Level 2 – Elevated Conditions – Flood Watch:

Targeted communication to potentially affected area advising of increased water levels and monitoring activities

Level 3 – High Risk Conditions – Flood Warning:

Broader communication issued advising of potential impacts, including possible access disruption.

Level 4 – Impact/Emergency Conditions – Flood Response:

Immediate communication regarding road closures, access limitations, evacuation considerations, or emergency conditions.

Communication methods may include direct contact lists, municipal website updates, social media, and other approved communication channels.

7. Shelter-In-Place / Evacuation / Recovery

Public preparedness information is provided for general guidance and should be supplemented by official instructions issued during an event.

In areas where access may be limited or temporarily unavailable, emergency response may be impacted by conditions beyond municipal control. In such cases, residents may be required to shelter in place until conditions allow for safe access.

Evacuation and shelter-in-place decisions will be made in coordination with the Municipal Emergency Control Group (MECG) and implemented in accordance with the Emergency Response Plan.

Once a **flood watch** has been issued, residents are encouraged to take the following precautionary actions:

- Ensure access to an emergency preparedness kit containing essential supplies (e.g., water, food, medications, flashlight, batteries);
- Monitor official communications from the Municipality through available channels, including the municipal website, social media, and other emergency alerts;
- Follow the instructions and advice of local authorities;
- Store clean water in bathtubs, sinks, and containers as flooding may impact water quality or availability;
- Secure outdoor furniture and loose items that could be displaced by rising water levels;
- Move valuables and important items to higher levels within the home, where possible;
- Be prepared to shut off utilities if directed by authorities; and
- Remain alert to changing conditions and be prepared to evacuate on short notice, if required.

Residents should be aware that during elevated flood conditions, temporary access restrictions or delays to emergency response may occur.

Once a **flood warning** has been issued, residents may be advised to evacuate. Evacuation decisions will be made in coordination with the Municipal Emergency Control Group (MECG) and communicated through official municipal channels. Evacuation may be recommended or required depending on the severity of conditions and the availability of safe access. Residents are encouraged to take the following actions if evacuation is advised:

- Follow all instructions provided by the Municipality of emergency services;
- Monitor official communications, including the municipal website, social media and other emergency alerts;
- Leave the area as early as possible when advised to do so, as conditions may deteriorate quickly;
- Take essential items, including medications, identification, and emergency supplies;
- Secure their residence where time permits, including shutting off utilities if directed;
- Avoid driving or walking through flooded areas, as water depths and road conditions may be unsafe; and
- Make arrangements for accommodation with family, friends, or other safe locations where possible.

Where evacuation routes are limited or unavailable, residents should be aware that temporary access restrictions or isolation may occur until conditions improve.

The Municipality may establish evacuation centres or warming centres where feasible; however, residents are encouraged to make personal arrangements where possible.

Responsibility for pets and livestock remains with the property owner. Municipal or external assistance may be provided where available but is not guaranteed.

What To Do After A Flood

Flood related hazards may persist after water levels recede. Residents are encouraged to take the following precautions:

- Seek medical attention, if required.
- Check on neighbours, particularly those who may require assistance.
- Do not enter any building until it has been deemed safe by appropriate authorities, as structural damage or hazards (e.g., gas leaks, electrical issues) may be present.
- Exercise caution when re-entering buildings, and avoid contact with electrical systems until they have been assessed.
- Report damaged or down utility lines to the appropriate service provider.
- If you detect the smell of gas or hear a hissing sound, leave the building immediately and contact emergency services or the gas utility.
- Do not use appliances, outlets, or electrical systems that may have been exposed to water until they have been inspected.
- Be aware that floodwater may be contaminated with sewage and other pollutants after a flood, and may pose a health risk.
- Follow guidance from the local public health unit regarding cleanup, disinfection, and safe re-entry.
- Dispose of food and household items that have been in contact with floodwater, in accordance with public health guidance.

Residents should be aware that access to services may be limited following a flood event and should plan accordingly.

8. Arrangements with Neighbouring Communities

The Municipality will endeavor to develop evacuation plans with neighbouring communities. If possible, evacuation facilities and warming centre locations will be made available and announced as part of the emergency information dissemination during the flood event. Coordination with neighbouring municipalities shall be undertaken through the Municipal Emergency Control Group (MECG) to support evacuation, sheltering, and resource sharing where needed.

9. Resources

Resource coordination and deployment shall be directed through the Municipal Emergency Control Group (MECG) in accordance with the Emergency Response Plan. This could include, but is not limited to:

- Sandbagging: Municipal staff, volunteers, and/or partner agencies may be utilized to support sandbagging operations, where resources are available and as directed by the MECG;
- Water Removal: Municipal resources may be used to support water management efforts where required during a flood event;
- Debris removal. Municipal Waste Sites may operate with extended hours, or alternative access arrangements may be implemented, to facilitate the disposal of flood-related debris, subject to operational capacity.

Resource Websites include:

- EC Alert Me
- Wateroffice.ec.gc.ca
- Office of the Fire Marshal and Emergency Management Ontario
- MNR Emergency Management

10. Finance

As per the Municipal Procurement Policy, Section 6.5.6, the Department Head or designate, under emergency conditions, may circumvent the policy to affect an emergency purchase. See the Municipal Procurement Policy for procedures to be undertaken following the purchase.

If applicable, the CAO/Clerk shall contact Ministry of Municipal Affairs and Housing for Disaster Recovery Assistance under the Disaster Recovery Assistance For Ontarians Program (DRAO).

11. Support/Supplement Plans

- Municipal Procurement Policy
- Emergency Response Plan

12. Prevention

As per the Municipal Official Plan, Section 23.1, no new buildings are permitted to be constructed within a flood plain, except under certain conditions. These measures support broader municipal flood risk reduction and land-use planning

objectives.

13. Mitigation

The Municipality participates in ongoing flood mitigation activities, including coordination with dam operators, the Municipal Flood Monitoring Committee, and provincial agencies.

The Municipality also utilizes a risk-based monitoring approach to identify areas requiring observation during elevated conditions and to support early response actions.

14. Preparedness

Public education is provided through the Municipal Website, social media platforms, and other available communication channels, including links to external resource materials. As decided by the CEMC, exercises are conducted annually that reflect potential emergency scenarios.

Preparedness activities include the development and maintenance of monitoring protocols, communication templates, and coordination procedures to support timely and effective response to flood conditions.

15. Continuity of Operations Planning

Municipal operations will continue as feasibly possible during a flood event.

16. Recovery

A recovery plan will lay the groundwork for the following recovery functions:

- Medical and public health support, including coordination with healthcare providers and public health agencies;
- Debris management, including consideration of measures to facilitate disposal of flood-related materials (e.g., extending waste site hours or other access arrangements);
- Emergency worker health and safety;
- Financial management, including tracking of costs, potential compensation programs, and funding opportunities;
- Donations and volunteer coordination, where applicable;
- Public information and education related to safe cleanup and recovery;
- Coordination of municipal, provincial and federal recovery programs,

including the Disaster Recovery Assistance for Ontarians Program (DRAO) where applicable;

- Documentation, record-keeping, and post-event analysis to support accountability and future mitigation efforts;
- Assessment of regulatory requirements and coordination with applicable authorities where temporary measures may be required;
- Structural damage assessment and coordination of inspection processes;
- Coordination with Public Health agencies regarding water quality, wells, and septic systems; and
- Coordination of utility restoration with service providers.

Implementation of recovery measures will be based on the scale of the event, available resources, and applicable approvals.

17. Post-Event Activities

Debriefs and post-event reporting will be conducted as required, and findings will be used to inform updates to this Annex and the Emergency Response Plan.

18. Flood Monitoring Protocol

The Municipality has established a Flood Monitoring Protocol to support the consistent monitoring of water levels, early identification of elevated risk, proportionate communication, and timely decision-making regarding public safety and access.

This protocol applies to both:

- Areas with a known history of flooding; and
- Areas where flooding has not historically occurred but may be possible under elevated conditions.

18.1 Monitoring Framework

This monitoring framework is adaptive and does not operate on fixed time intervals.

Flood conditions are monitored through a combination of:

- Ministry of Natural Resources (MNR) flood advisories, watches, and warnings;
- Dam operator communications regarding discharge levels and water

- flow;
- Input from the Municipal Flood Monitoring Committee and partner agencies;
- Site-specific observations conducted by Municipal staff.

Monitoring activities will increase during periods of elevated risk, including spring freshet, significant rainfall events, or sustain high water levels.

18.2 Levels of Monitoring and Response

The Municipality utilizes a risk-based approach to monitoring and response:

Level 1 – Routine Monitoring

Seasonal observation and coordination with external partners. No public notification required.

Level 2 – Elevated Conditions – Flood Watch

Triggered by increasing water levels, dam discharge, or weather conditions. Actions may include increase site inspections and targeted communication to potentially affected areas.

Level 3 – High Risk Conditions – Flood Warning

Triggered by water approaching municipal infrastructure or where impacts are reasonably anticipated. Actions may include enhanced monitoring, broader communication, and preparation for possible access restrictions or road closures.

Level 4 – Impact/Emergency Conditions – Flood Response

Triggered where flooding occurs or poses a risk to public safety. Actions may include road closures, restricted access, emergency notifications, and activation of the Emergency Response Plan, if required.

18.3 Communication and Notification

Communication will be coordinated through the Emergency Information Officer (EIO) and will be proportionate to the level of risk.

Depending on conditions, communications methods may include:

- Direct notification to affected or potentially affected areas;

- Municipal website updates;
- Social media and other public communication channels.

Messaging will focus on:

- Current conditions and monitoring activities;
- Potential impacts, including access disruption;
- Recommended precautionary actions.

18.4 Access and Road Considerations

Where municipal roads may be impacted by flooding or high-water levels:

- Conditions will be monitored regularly to assess proximity of water to the traveled surface;
- Road restrictions or closures may be implemented where required to protect public safety;
- In areas with limited or no alternate access, early notification will be prioritized to allow residents to prepare.

Residents should be aware that temporary access restrictions or delays to emergency response may occur during elevated conditions.

18.5 Documentation

The Municipality will maintain records of:

- Monitoring activities and observations;
- Communications issued;
- Decisions related to road restrictions or emergency actions.

This information supports post-event review and continuous improvement.

18.6 Integration with Emergency Response Plan

This protocol supports the Municipality's Emergency Response Plan and provides guidance for actions taken prior to and during a declared emergency.

Municipal staff are authorized to undertake monitoring, communication, and operational actions in accordance with this protocol during pre-emergency and elevated risk conditions.

Formal emergency measures, including evacuation, shelter-in-place directives, and declaration of an emergency, remain under the authority of the Municipal Emergency Control Group (MECG) in accordance with the Emergency Response Plan.