Updating the Flood Forecasting and Warning Implementation Guidelines

Ontario Flood Risk Management Workshop
September 20th, 2018
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History

- Five Conservation Authority Flood Forecasting and Warning Groups were formed in 1998 as a result of recommendations by the Province’s 1997 Red Tape Review Commission.
- These Groups consisted of CA staff from 5 different regions of the Province.
- The main purposes of these groups was to streamline the FFW process, allow for more consistency, and avoid duplication in efforts.
- In 2002, the GTA CA FFW group undertook to develop FFW Standards.
The purpose of the standards was to provide a more consistent approach to FFW amongst the GTA Group.

These standards were completed in April 2003.
Original GTA FFW Standards – Table of Contents

INTRODUCTION

SECTION 1 - PROGRAM DELIVERY / ADMINISTRATION

SECTION 2 – FORECASTING

SECTION 3 – COMMUNICATIONS

SECTION 4 - FLOOD OPERATIONS
Provincial FFW Committee

- Building on the work completed by the GTA CA Group, the Provincial Flood Forecasting and Warning Committee completed a similar document in 2008.
- These guidelines were last updated in 2014.
- Goals, Purpose and Definitions
- Success Factors
- Program (Common) Attributes
- Roles and Responsibilities
- Business Continuity
Planning and Administration

- Documentation
- Monitoring
- Training
- Models
- Contingency and Operations Plans
- Linkages to Emergency Management
Forecasting: The Daily Planning Cycle

• Weather forecasts obtained through the internet and radio broadcasts

• Antecedent soil and/or snow melt models maintained daily

• Snow conditions monitored based on snow surveys and internet sites

• Forecasted rainfall or snowfall entered into models to predict run-off amounts
Communications and Operations

• The issuance of flood messages

FLOOD WARNING
Lake Simcoe Region Conservation Authority
210 Bayview Parkway, Newmarket, Ont., L3Y 3W3
Telephone: (905) 855-1281 Fax: (905) 855-3681

Issued to the following groups:
1) Municipalities and Local Conservation Authorities
2) School Boards and Police
3) Media
4) LSROA Board of Directors and all LSROA Employees

Date: February 23, 2018
Time: 9:15 a.m.

The Lake Simcoe Region Conservation Authority advises that warm weather and another 10 mm of continued rainfall is forecast today. Flooding has been reported across low lying areas along Lake Simcoe through Innisfil and Georgina. High flows and flooding are occurring or imminent through the Pufferlaw River, Beaver River and Whites Creek.

Rivers and streams are already flowing high and the forecasted rainfall will make them higher and crest their banks.

This notice is to advise that significant flooding is imminent in various low lying areas of the watershed due to the heavy rainfall and melting snow pack. Ice jams are possible and occurring across many watercourses.

All watercourses in our area will experience higher than normal water levels. As a result, local streams and rivers will remain dangerous, especially in the vicinity of culverts and bridges. Children should be warned to stay away from all watercourses. Residents are advised to take immediate precautions to protect themselves, their pets and their property.

This Flood Warning will be in effect through Friday February 23, 2018.

Conservation Authority staff will continue to monitor the situation and provide updates as required. For more information, please contact the following person at (905) 855-1281.

[Flood Warning: Flooding is imminent or already occurring in specific watercourses or municipalities. Municipalities and individuals should take action to deal with flood conditions. This may include road closures and evacuations.]

• Documentation of Flood Events
Appendix B: Flood Message Terminology

**WATER CONDITIONS STATEMENT:**
a general notice of weather conditions that could pose a risk to personal safety or which have the potential to lead to flooding. There are two variations of these:

- **Watershed Conditions Statement – Water Safety:**
  High flows, unsafe banks, melting ice or other factors could be dangerous for recreational users such as anglers, canoeists, hikers, children, pets, etc. Flooding is not expected.

- **Watershed Conditions Statement – Flood Outlook:**
  Early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high wind or other conditions that could lead to high runoff, cause ice jams, lakeshore flooding or erosion.
Flood Message Terminology

**FLOOD WATCH:**
Flooding is possible in specific watercourses or municipalities. Municipalities, emergency services and individual landowners in flood-prone areas should prepare.

**FLOOD WARNING:**
Flooding is imminent or already occurring in specific watercourses or municipalities. Municipalities and individuals should take action to deal with flood conditions. This may include road closures and evacuations.
The FFW Guideline Update

Scheduled to be completed by the Provincial Flood Forecasting and Warning Committee in 2019.

- Update all references and acronyms and improve formatting.
- Revise and streamline document structure.
- Clarify roles and responsibilities
- Better emphasis on the need for consistent messaging
Examples will be added in Appendices showing how guidelines could be implemented depending on the size / resources of different CA’s or MNRF District Offices.
Key Sections in Updated Guidelines

SECTION ONE: FLOOD FORECASTING and WARNING PROGRAM WATERSHED CHARACTERISTICS and CATEGORIZATION
SECTION TWO:
FLOOD FORECASTING & WARNING PROGRAM
ROLES and RESPONSIBILITIES
SECTION THREE:
FLOOD FORECASTING & WARNING PROGRAM
OPERATIONAL COMPONENTS
SECTION FOUR:
FLOOD FORECASTING & WARNING PROGRAM
DOCUMENTATION, STAFFING and OTHER
ADMINISTRATIVE CONSIDERATIONS
Questions?