This publication is part of the *xTREME toolkit* (eXtreme events Toolkit for Rural Emergency Management Enhancement) which is available online <u>www.resilientresearch.ca</u> as part of a project titled "Ontario Rural Municipal Emergency Management and Critical Infrastructure: Enhancing Planning and Preparedness Capacities for Climate Change Resilience"

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Acknowledgements

We thank members of the project advisory board who provided valuable feedback on this project

Funders

Ontario Ministry of Agriculture, Food, and Rural Affairs (OMAFRA)

Wilfrid Laurier University





Name of Table Top Exercise

Exercise Plan

June 2017

Logo of Municipality

EXERCISE OVERVIEW

| Exercise Name | Insert the name of exercise | |
|------------------------|--|--|
| Exercise Date | Date of the exercise | |
| | This exercise is a Table Top Exercise for the members of the Community Control Group, planned for exercise duration at exercise location. Exercise play is limited to discussions at the strategic level as it relates to a flash flood in the community that significantly impacts critical infrastructure. | |
| | This exercise consists of three modules: | |
| Exercise | 1. Pre-event Warning Phase | |
| Scope and Structure | 2. Response to Emergency Incident (Flash Flood) | |
| | 3. Post-event Recovery | |
| | Each module will begin with a narrative of the scenario and a listing of the key events. This will be a moderated plenary discussion followed by group(s) discussions, with the Community Control Group presenting a synopsis of key actions and responses. <i>(See Exercise</i> <i>Structure below for more details.)</i> | |
| Pre-event | Select the Mission Area(s): Prevention, Mitigation, Preparedness, Response, and/or Recovery | |
| | For this exercise – Preparedness, Response and Recovery | |
| Objectives | Understand the link between climate change and the increasing frequency and strength of extreme weather. | |
| | Validate the Community's Hazard Identification and Risk Assessment (HIRA), and confirm that extreme weather hazards have been sufficiently considered in the HIRA. | |
| | Test the Emergency Plan and extreme weather hazard-specific annexes to validate emergency procedures. | |
| | Educate members of the Community Control Group and emergency responders of their role in emergencies, and enhance inter-organizational coordination. | |
| | 5. Evaluate the municipality's ability to notify Town residents and businesses within minutes of a flood warning issued by Conservation Authority/ Ministry of Natural Resources' Surface Water | |

| | Monitoring Centre. | |
|--------------------------------|--|--|
| | Evaluate the Emergency Personnel Call-In Policy for activating essential staff. | |
| | 7. Practice emergency management and crisis response skills. | |
| | 8. Timely emergency declaration, request for outside and/or provincial resources, and preparation of an Incident Briefing Report (see Incident Management System [IMS] Form 201) | |
| Threat or Hazard | Flash Flood | |
| Participating Organizations | Insert a brief summary of the total number of participants and participation level (i.e. Municipal, Provincial, NGO/CBO, and Private Sector). Consider including the full list of participating agencies in Appendix B. Delete Appendix B if not required. | |
| Point of Contact | Insert the name, title, municipality, address, phone number, and email address of the Exercise Director. | |

EXERCISE STRUCTURE

Module 1: Pre-event Warning Phase

Scenario Narrative

The weather for the past two weeks can be summarized as hot steamy nights, sticky days and torrential downpours. The nighttime low temperature was the hottest on record, with lots of wind and concentrated bursts of heavy rain amid drought. This has resulted in saturated soil and creeks and streams that have little capacity to drain the storm flow without flooding. Local flood watch messages have been issued stating that there is a potential for flooding in the community.

Key Issues

- Increasing cases of asthma and other health problems related to poor air quality are straining the capacity of emergency medical services
- Older infrastructure, including bridges and culverts may be on the brink of failure
- The risk of a power outage from the increasing use of air conditioning is being compounded by erosion by the key above ground and/or underground electricity delivery infrastructure
- Drinking waster and sewage treatment facilities are at risk from flooding
- Most local businesses do not have business continuity plans or overland flood insurance
- Combined storm water and sewer systems are increasing the flood and water contamination potential

Discussion Questions

- What programs does your municipality have in place to reduce the impacts of flooding?
- What are the sensitive and risk prone areas for flooding and drought in your community?
- What risks does your community have of future water shortages?
- What are the impacts of high temperatures on the health and well-being of your residents?
- What are the health risks from poor water quality?
- What are the risk to soils from increased seasonal aridity and wetness?
- What are the risks to agriculture and wildlife from scarcity and flooding?
- Are land management practices exacerbating flood risk?
- What is the risk of cascading infrastructure failures across interdependent networks?
- What are the risks to infrastructure from river, surface/ ground water flooding?

- What are the risks to public water supplies and electricity generation from drought and low river flows?
- What are the risks to business operations from water scarcity?
- What are the risks to businesses from flooding?

Module 2: Response to Emergency Incident (Flash Flood)

Scenario Narrative

- (insert name of the local Conservation Authority or the Ministry of Natural Resources and Forestry) issued a Flood Warning to your community, advising that flooding is imminent
- Flash or sudden flood is now occurring with little warning time across the community
- Municipal Emergency Plan is in operation
- Community Control Group has assembled

Key Issues

- Overland flooding plus flooded roads, homes and buildings
- Subsidence issues causing concern for buried infrastructure, including high pressure pipelines and high voltage electricity cables
- Reduced transmission capacity with loss of hydroelectric power to the community, and substations are flooded
- Telecommunication and supply chain disruptions
- High river flows impacting bridges, and gas pipelines
- Damage from fallen trees and large branches

Discussion Questions

- What are the key decisions and actions that the Community Control Group is taking as a whole, as well as per each Department/ Organization?
- What key issues and/or concerns do you have?
- How is the Mayor communicating with the public at risk/ public at large, and what are the key messages?
- What are the elements of the Incident Briefing Report, and how is information being collected and disseminated, and to whom?
- What assistance from outside the community may be called upon, and how will this be undertaken?

Module 3: Post-event Recovery

Scenario Narrative

• The flash flood storm is over and the torrential downpour has stopped

- The 9-1-1 call-taking centre is overloaded with calls for assistance
- Citizens have returned to their homes to find extensive damage, and insurance adjusters are enroute to the community
- The volume of water in the river/stream has begun to recede
- Clean up and restoration activities have begun

Key Issues

- Much damage to homes, businesses, buildings, cars, energy and transportation infrastructure, the health care sector, and agricultural assets
- Financial hardship of costly home repairs, lost wages
- Downed wires and scattered debris that needs to be removed
- Emergency crews are running out of daylight
- Repair and restoration of damaged public facilities needs to begin
- Outside emergent volunteers and curious people are attempting to get into the community
- Media outlets are covering the story

Discussion Questions

- How will displaced people be accommodated?
- How will the municipality communicate with the public regarding the Disaster Recovery Assistance for Ontarians Program and the Municipal Disaster Recovery Assistance Program?
- How will the repair and restoration of damaged public facilities, transportation networks and other infrastructure be undertaken?
- What are the risks and opportunities from the changing demand for goods and services?
- How could you include the likely increased impacts from extreme weather events into your reconstruction plans?
- How will you assess the economic consequences, taking into account the destruction of natural assets and planning for future extreme weather events?

GENERAL INFORMATION

Participant Roles and Responsibilities

The term *participant* encompasses many groups of people, not just those playing in the exercise. Groups of participants involved in the exercise, and their respective roles and responsibilities, are as follows:

- **Players.** Players are personnel who have an active role in discussing or performing their regular roles and responsibilities during the exercise. Players discuss or initiate actions in response to the simulated emergency.
- **Controllers.** Controllers plan and manage exercise play, set up and operate the exercise site, and act in the roles of organizations or individuals that are not playing in the exercise. Controllers direct the pace of the exercise, provide key data to players, and may prompt or initiate certain player actions to ensure exercise continuity. In addition, they issue exercise material to players as required, monitor the exercise timeline, and supervise the safety of all exercise participants.
- **Simulators.** Simulators assist the Exercise Director, such as feed messages or updates into the exercise.
- Evaluators. Evaluators evaluate and provide feedback on the exercise. Evaluators observe and document performance against established capability targets and critical tasks, in accordance with the Exercise Evaluation Guides (EEGs).
- **Observers.** Observers (and VIPs) visit or view the exercise but do not play in the exercise, nor do they perform any control or evaluation functions.
- **Support Staff.** The exercise support staff includes individuals who perform administrative and logistical support tasks during the exercise (e.g., registration, catering).

Exercise Assumptions

In any exercise, assumptions and artificialities may be necessary to complete play in the time allotted and/or account for logistical limitations. Exercise participants should accept that assumptions and artificialities are inherent in any exercise, and should not allow these considerations to negatively impact their participation.

Assumptions constitute the implied factual foundation for the exercise and, as such, are assumed to be present before the exercise starts. The following assumptions apply to the exercise:

- The exercise is conducted in a no-fault learning environment wherein capabilities, plans, systems, and processes will be evaluated.
- The exercise scenario is plausible, and events occur as they are presented.

- Exercise simulation contains sufficient detail to allow players to react to information and situations as they are presented as if the simulated incident were real.
- Real-world emergencies take priority.

EXERCISE LOGISTICS

Safety

Exercise participant safety takes priority over exercise events.

Participant Identification

Exercise staff may be identified by badges, hats, and/or vests to clearly display exercise roles. Tent cards should be used for all players.

POST-EXERCISE AND EVALUATION ACTIVITIES

Debriefing

A post-exercise debriefing aims to collect sufficient relevant data to support effective evaluation and improvement planning.

Hot-Wash

At the conclusion of exercise play, the Exercise Director facilitates a Hot-Wash to allow players to discuss strengths and areas for improvement, and evaluators to seek clarification regarding player actions and decision-making processes. All participants may attend. The Hot-Wash should not exceed 30 minutes.

Controller and Evaluator Debriefing

Controllers and evaluators attend their own debriefing immediately following the Hot-Wash. During this debriefing, controllers and evaluators provide an overview of their observations, and discuss strengths and areas for improvement.

Participant Feedback Forms

Participant Feedback Forms provide players with the opportunity to comment candidly on exercise activities and exercise design. Participant Feedback Forms should be collected at the conclusion of the Hot-Wash.

Evaluation

Exercise Evaluation Guides

EEGs assist evaluators in collecting relevant exercise observations. EEGs document exercise objectives and aligned core capabilities, capability targets, and critical tasks.

Each EEG provides evaluators with information on what they should expect to see demonstrated during the exercise play. The EEGs, coupled with Participant Feedback Forms and Hot-Wash notes, are used to evaluate the exercise and compile the After-Action Report (AAR).

After-Action Report

The AAR summarizes key information related to evaluation. The AAR primarily focuses on the analysis of core capabilities, including capability performance, strengths, and areas for improvement. AARs also include basic exercise information, including the exercise name, type of exercise, location, participating organizations, mission area(s), specific threat or hazard, a brief scenario description, and the name of the host municipality and the Exercise Director.

Corrective Action Planning

Corrective action planning is the process by which the observations recorded in the AAR are resolved through development of concrete corrective actions and recommendations, which are prioritized and tracked as a part of a continuous corrective action program.

After-Action Meeting

The After-Action Meeting (AAM) is a meeting held among decision- and policy-makers from the municipality and other organizations deemed necessary, as well as Exercise Director, and Evaluators, to debrief the exercise and to review and refine the draft After-Action Report and Corrective Action Plan (CAP). The AAM should be an interactive session, providing attendees the opportunity to discuss and validate the observations and corrective actions in the draft AAR/CAP.

Corrective Action Plan

The Corrective Action Plan identifies specific corrective actions and recommendations, assigns them to responsible parties, and establishes target dates for their completion. It is created by elected and appointed officials from the organizations participating in the exercise, and discussed and validated during the AAM.

PARTICIPANT INFORMATION AND GUIDANCE

Exercise Rules

The following general rules govern exercise play:

- Real-world emergency actions take priority over exercise actions.
- Exercise players will comply with real-world emergency procedures, unless otherwise directed by the Exercise Director.

Players Instructions

Players should follow certain guidelines before, during, and after the exercise to ensure a safe and effective exercise.

Before the Exercise

- Review appropriate emergency plans, procedures, and exercise support documents.
- Sign in when you arrive.

During the Exercise

- Respond to exercise events and information as if the emergency were real, unless otherwise directed by the Exercise Director.
- If you do not understand the scope of the exercise, or if you are uncertain about an organization's participation in an exercise, ask the Exercise Director.
- Parts of the scenario may seem implausible. Recognize that the exercise has objectives to satisfy and may require incorporation of unrealistic aspects. Every effort has been made by the Exercise Planning Team to balance realism with safety and to create an effective learning and evaluation environment.
- Speak when you take an action. This procedure will ensure that evaluators are aware of critical actions as they occur.
- Maintain a log of your activities. Many times, this log may include documentation of activities that were missed by an evaluator.

After the Exercise

- Participate in the Hot-Wash.
- Complete the Participant Feedback Form. This form allows you to comment candidly on emergency response activities and exercise effectiveness.

APPENDIX A: EXERCISE SCHEDULE

| Time | Personnel | Activity | Meeting Room Location | | |
|--|---|--|--------------------------|--|--|
| Date – Pre Exercise | | | | | |
| | Controllers, evaluators, and exercise staff | Controller and Evaluator Briefing | | | |
| [Date] – Conducting the Exercise | | | | | |
| | Controllers and exercise staff | Check-in for final instructions | | | |
| | All | Exercise starts Module 1: Pre-event Warning Phase Module 2: Response to Emergency Incident (Flash Flood) Module 3: Post-event Recovery | | | |
| | All | Exercise ends | | | |
| Immediately Following the Exercise | All | Venue Hot-Washes/ Submit Participant Feedback Forms | | | |
| [Date] – Post Exercise | | | | | |
| | Controllers, evaluators, and elected and appointed officials | Controller and Evaluator After Action Review | | | |

APPENDIX B: EXERCISE PARTICIPANTS

| Participating Organizations |
|--------------------------------|
| Municipal |
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| Non Governmental Organizations |
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| Community Based Organizations |
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| Brovincial |
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| Private Sector |
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APPENDIX C: EXERCISE SITE MAPS

Figure C.1: Map Title Insert map

Figure C.2: Map Title Insert map

APPENDIX D: WEATHER REPORTS AND FLOOD WARNING MESSAGES

- For <u>Weather Reports</u> in your community, go to Environment Canada website <u>www.weather.gc.ca</u>
- For <u>Flood Warning Messages</u> issued in your community, go to your local conservation authority's website and/or the Ministry of Natural Resources and Forestry



FLOOD WARNING CANCELLATION/ FLOOD ADVISORY UPDATE

Date : July 26, 2009

Time : 12:00 AM

Issued To: Municipalities, Local Conservation Authorities, Local Police, Emergency Services, School Boards and Media

Toronto and Region Conservation advises that water levels in the Don River are receding and as such, the Flood Warning issued on July 25, 2009 at 7:50 pm has been cancelled.

Rivers and streams continue to run at high levels and should be considered dangerous. Please be advised that the Weather Office is predicting additional showers and thunderstorms throughout the day on Sunday. These rainfall amounts may again result in flooding of low-lying areas, and also create street flooding and sewer surcharging. Due to the potential for flooding, a Flood Advisory remains in effect.

The TRCA will continue to closely monitor the weather conditions and will issue an update or cancellation to the Flood Advisory by 10:00 pm on Sunday, July 26, 2009. The High Water Safety Bulletin will remain in effect until Monday July 27, 2009. Please visit our website at www.trca.on.ca to see the current Flood Advisory message.

Maggie Liu Flood Duty Officer 416-661-6514 Laurian Farrell Chief Flood Duty Officer 416-661-6514

NOTE: A Flood Warning is a notice that flooding which could be damaging to human lives or property is imminent or occurring in specific watercourses or municipalities.

APPENDIX E: ACRONYMS

| Acronym | Term |
|---------|--|
| | |
| CEMC | Community Emergency Management Coordinator |
| EOC | Emergency Operations Center |
| HIRA | Hazard Identification and Risk Assessment |
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