EAST HANTS

**MEMO**

Planning & Development Department

Date: January 26, 2024
To: Council for Information
cc: Kim Ramsay, Chief Administrative Officer
From: Kelly Ash, Emergency Management Coordinator
Re: Hazard Identification & Risk Analysis (HIRA)

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In emergency planning, hazard analysis is the first step in identifying the known and potential impacts a hazard may create. Once the impacts have been assessed, priorities for planning are identified. Effective emergency plans offer mitigation and response solutions to impacts identified during the hazard assessment.

Hazard analysis determines:

- What might occur;
- How often it is likely to occur; and
- How vulnerable the region is to the hazard.

Conducting the HIRA process will identify those hazards that are specific to East Hants and may require a specific action plan (ie. flooding).

Some possible changes within or near East Hants that could cause hazard analysis information to change over time include:

- New mitigation measured (ie. stronger building codes)
- The opening or closing of facilities or structures that pose potential hazards (ie. hazardous materials facilities or transportation routes)
- Local development activities
- Changes in available resources
- Climatic changes
- Mass gatherings
- Civic threats

There may be other long-term changes to examine as well. These changes, such as climatic changes in average temperatures or rainfall/snowfall amounts, are harder to track but could be very important to the hazard analysis.

After the most recent Hazard Identification and Risk Analysis for East Hants was reviewed and completed by the Emergency Management Planning Committee, the hazards identified as having the greatest potential for disruption in the East Hants area are outlined below in the Risk and Hazards Matrix.

| | | | Severity<br>What is the Severity of Injuries/Potential Dangers/Financial impacts | | | | |
|---|---|---|---|---|---|---|---|
| | | | 1 - Insignificant | 2 - Minor | 3 - Moderate | 4 - Significant | 5 - Catastrophic |
| Likelihood<br>How likely is the event to occur | 5 | **Highly Probable:** Every 5 years or less | | | | Ice Storm<br>Wildland Fire | |
| | 4 | **Likely to Occur:** Once every 10 years | | Highway Closure | Blizzard<br>Communication Failure<br>Extended Power Outage<br>River Flooding<br>Hurricanes<br>Major Vehicle Accident | | |
| | 3 | **Might Occur:** Once every 20-30 years | | Drought<br>Water Main Break<br>Air Quality<br>Sinkholes | Coastal Flooding<br>Epidemic<br>Extreme Heat<br>Flash Flood<br>Fuel Shortage<br>Major Frost<br>Major Fuel Spill<br>Major Hailstorm<br>Pandemic<br>Washout Infrastructure<br>Water Shortages | Major Urban Fire | |
| | 2 | **Not Expected:** Could occur every 50 years | | Dam Breach<br>Landslide<br>Civil Disobedience<br>Waste Disposal | Earthquake<br>Pipeline Explosion<br>Terrorist Attack<br>Industrial Explosion<br>Chemical Spill<br>Food Shortage<br>Mass Shooting<br>Plane Crash<br>Structural Collapse<br>Tornado<br>Train Derailment<br>Water Pollution | | |
| | 1 | **Rare:** Once every 100+ years | | Agricultural Dyke | Radiological Event<br>Terrorist Attack | | Solar Flare<br>Asteroid |

Low Risk  Medium Risk  High Risk  Very High Risk

The survey was sent out to 32 individuals representing different agencies and groups throughout the Municipality. 22 responses were received. There were no events classified as “Very High Risk” for East Hants.

There were 3 hazards noted as “High Risk” for East Hants. These risks are classed as significant. They may have high or low likelihood of occurrence, however, their potential consequences are sufficiently serious to warrant appropriate consideration, after those risks classed as ‘very high’ are addressed. Consideration will be given to the development of strategies to reduce or eliminate the risks, and that mitigation in the form of (multi-agency) generic planning, exercising, and training should be put in place and monitored on a regular basis.

Contingency plans will be drafted for the following identified hazards:

**Hurricane/Blizzard/Ice Storm – Severe Weather events**

During the winter months, severe weather conditions often occur in this area including heavy snowfalls, ice storms and severe winds. Long-term power outages resulting from these conditions can cause serious hardship. During hurricane season, Nova Scotia often receives the tail end of the storms.

Since 2000, the Canadian Hurricane Centre reports about one land-falling hurricane every other year and 1-2 storms of tropical origin moving over land each year.

**Wildland Fires/Major Urban Fire**

Wildland fires are a serious concern in themselves as large fires can devastate forested areas in mere days. The Westwood Hills/Tantallon fires, as well as the Barrington Lake fires in 2023 have brought this issue to the fore front of emergency planning. 2023 was the worst wildfire season on record for Nova Scotia with 220 wildfires recorded. Wildland fires that migrate from the forest into communities are referenced as wildland urban interface fires and these types of fires impact the lives of people and structures.

Other risks identified in the assessment will be reviewed at a later date.