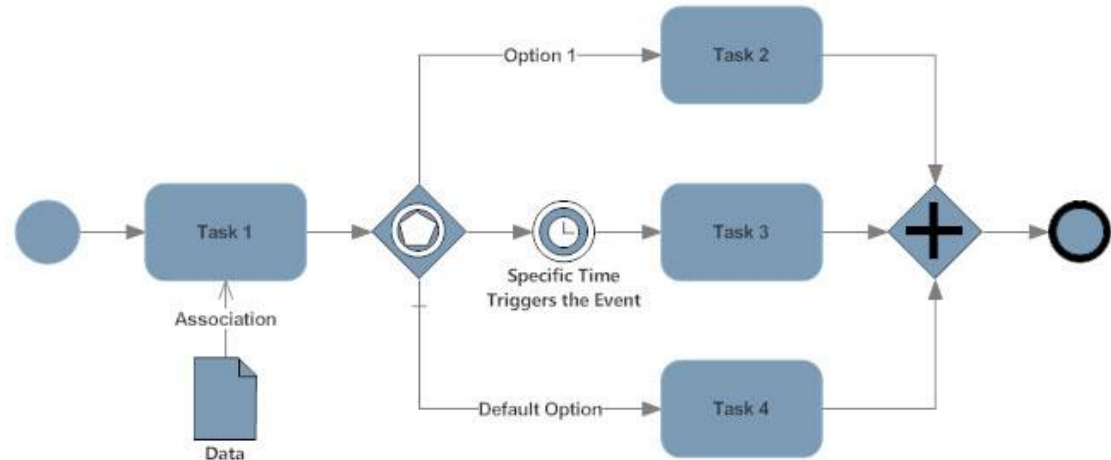# GIS in Emergency Operations Centres

Presented to: 2019 Tech Transfer Workshop

Division: Risk Assessment

Date: March 05, 2019

Agenda

- Emergency Management
- Roles and Responsibilities
- Clients
- Data
- Products
- Examples
- Long Term
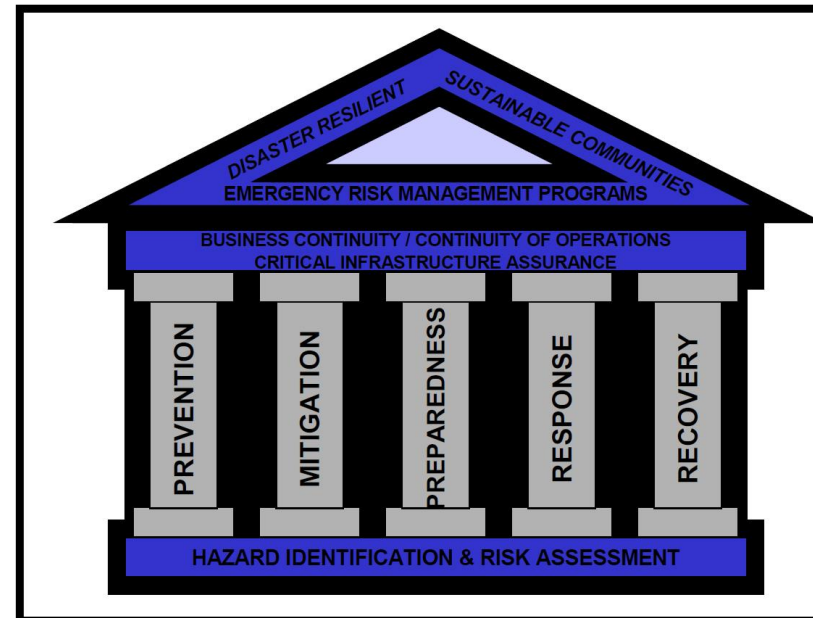- Future
- Q & A
- Contact

The only thing we have to fear is sphere itself

Emergency Management

- Definition: Organized and comprehensive programs and activities taken to deal with actual and potential emergencies or disasters. It is based on a risk management approach and includes activities in five components: prevention, mitigation, preparedness, response and recovery.

- Hazard – conditions or processes that have the potential to cause harm or loss to people and property

- The reduction of risks to public safety depends on the participation of many partners fulfilling specific emergency management responsibilities.

DISASTER RESILIENT SUSTAINABLE COMMUNITIES

EMERGENCY RISK MANAGEMENT PROGRAMS

BUSINESS CONTINUITY / CONTINUITY OF OPERATIONS
CRITICAL INFRASTRUCTURE ASSURANCE

PREVENTION MITIGATION PREPAREDNESS RESPONSE RECOVERY

HAZARD IDENTIFICATION & RISK ASSESSMENT

Roles and Responsibilities

- Incident Management System (IMS) is a standardized approach to emergency management encompassing personnel, facilities, equipment, procedures and communications operating within a common organizational structure.

- There are certain management functions that must be carried out regardless of the number of persons available or involved, or the size and scope of the descriptors for an incident.
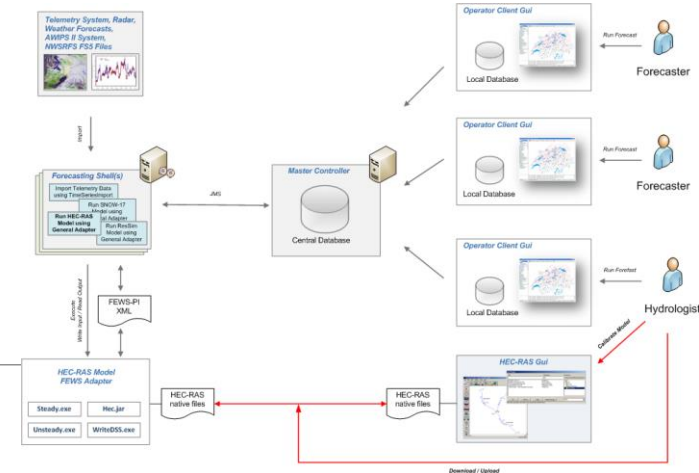

INCIDENT MANAGEMENT SYSTEM (IMS) – Organizational Structure:
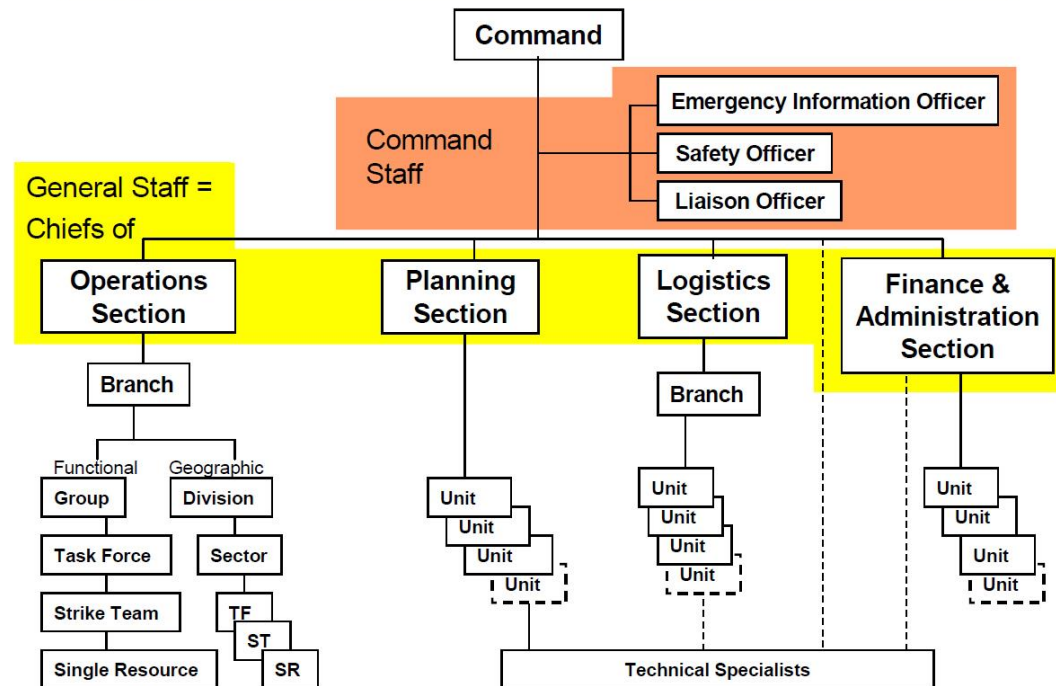
Clients

Internal

- CEMC, Mayor, CAO, Council, First Responders, Public Works, etc.
- May contain sensitive/secure information
- Specific needs/requirements/formats

External

- NO sensitive/secure information
- Translation may be required
- AODA compliance

Data

The lifeblood of any GIS system is DATA

- Identify most likely data sets ahead of time
  - Determine most authoritative source
  - Data sharing agreement?
  - IT involvement?
  - Council/legal permission?
  - Compatibility issues?
- Test periodically to ensure access still valid
  - Things change … people … organizations … budgets … regulations … technology …
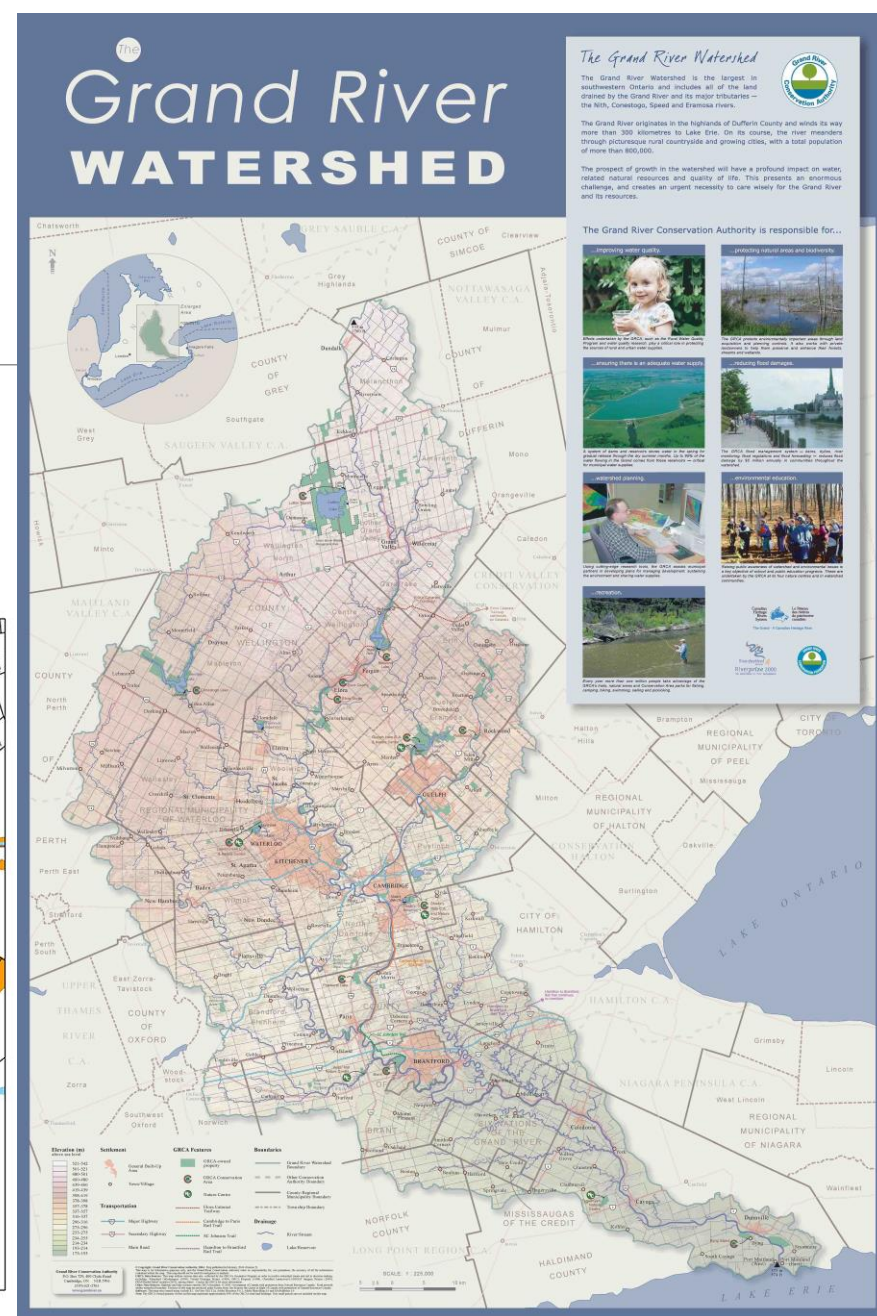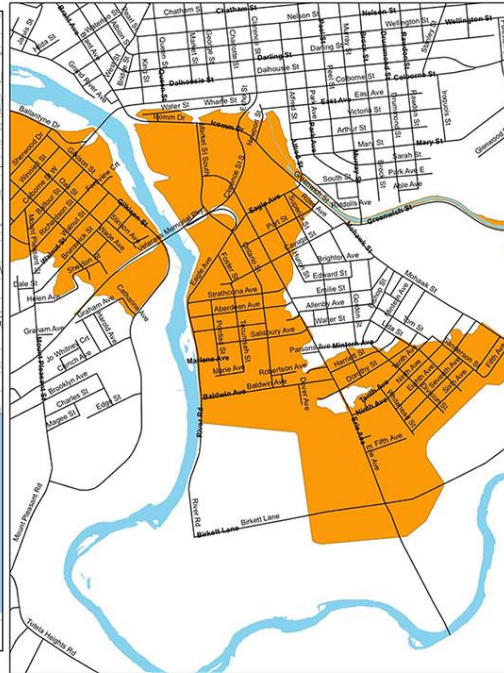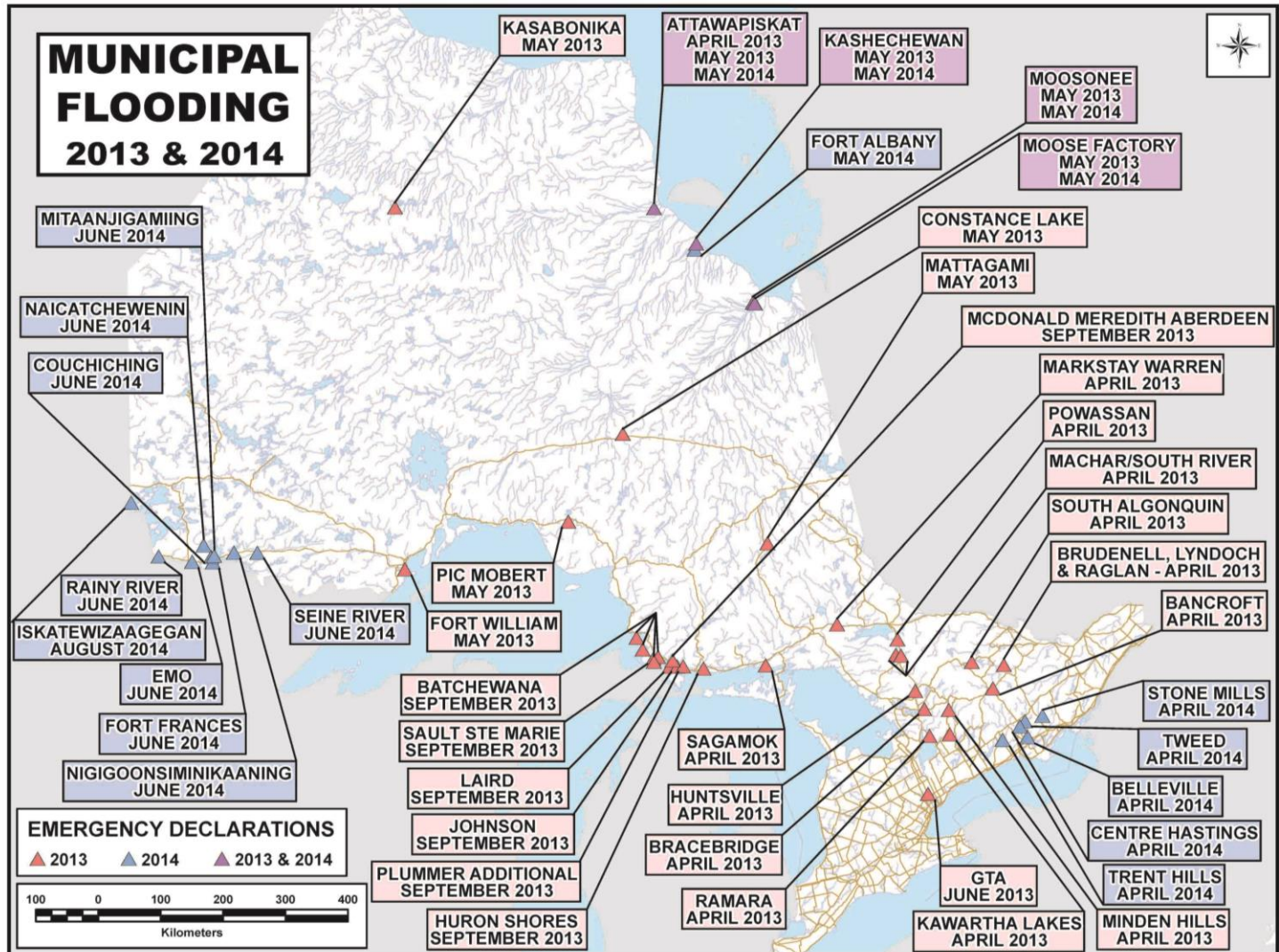- Who you gonna call?
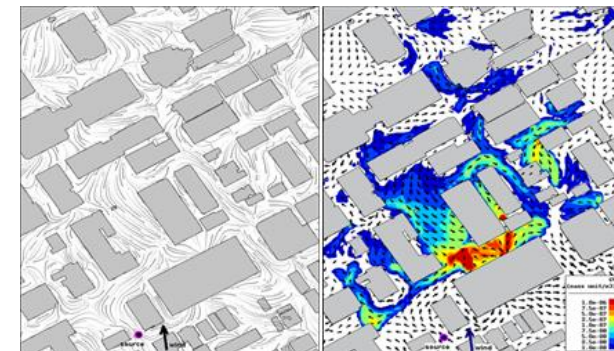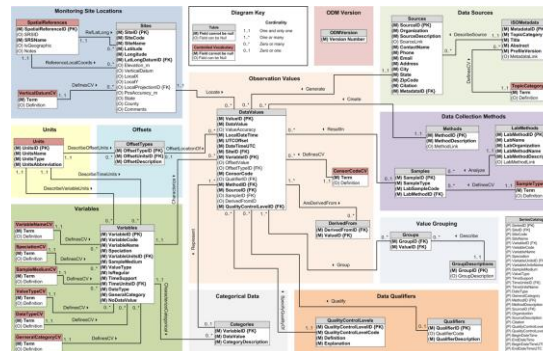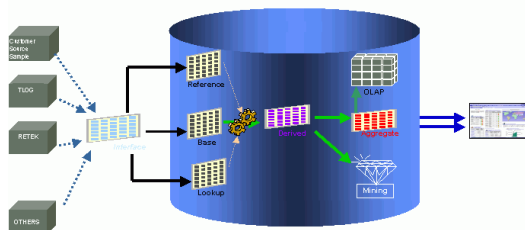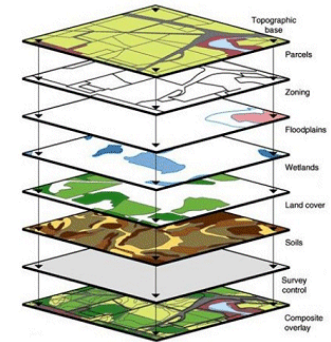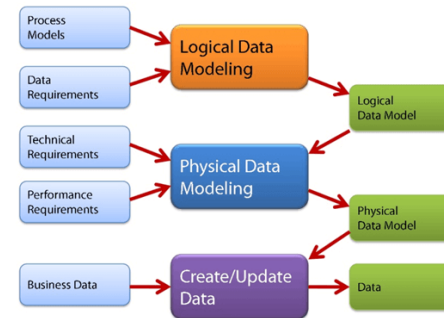
Products

What do EM clients want?

- Situational awareness
- Risk assessment
- Modeling/projecting
- Notification guidance
- Damage assessment
- Response activities guidance
- Recovery activities prioritization
- Planning guidance
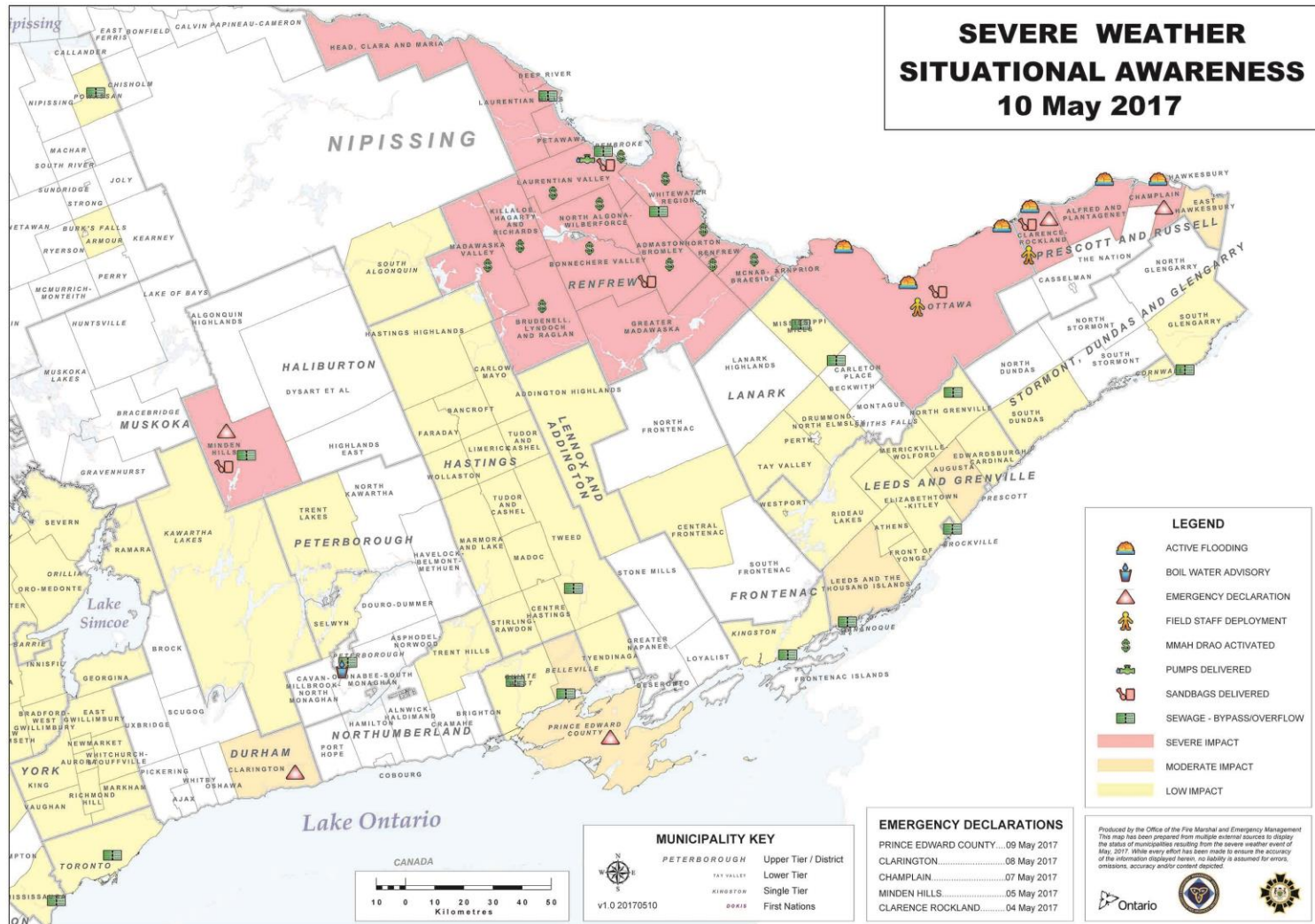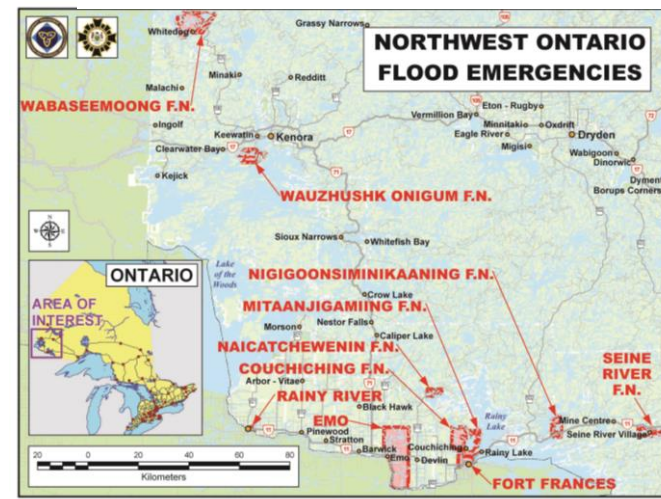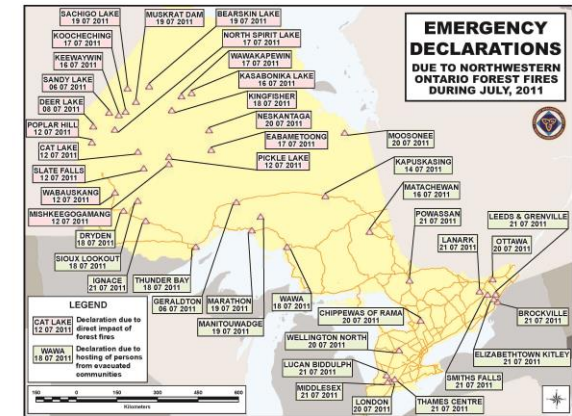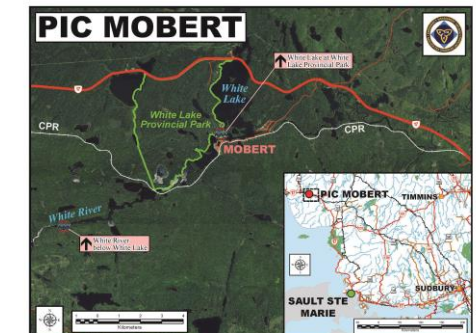- Specialized output
- Public information
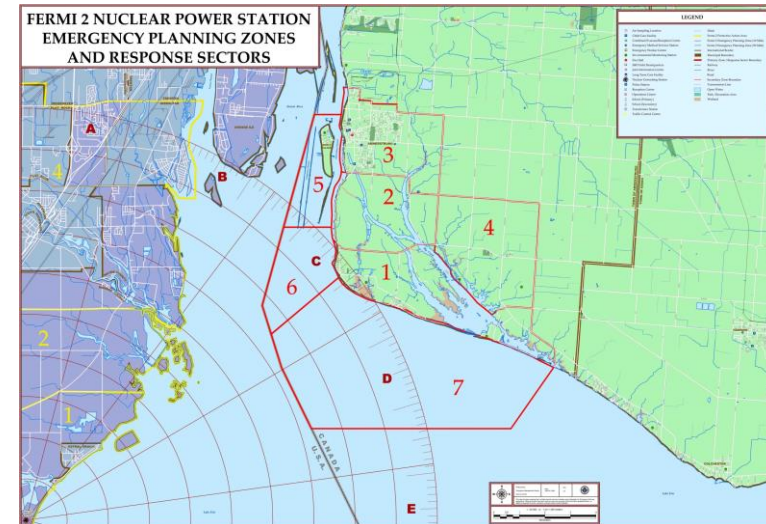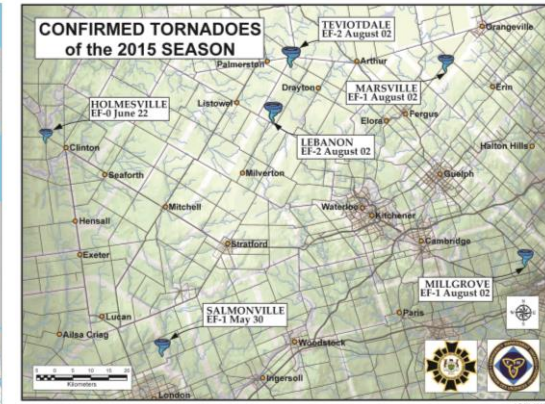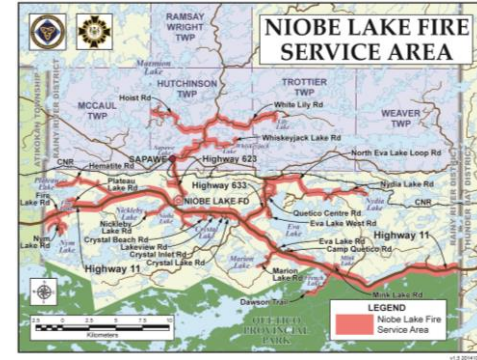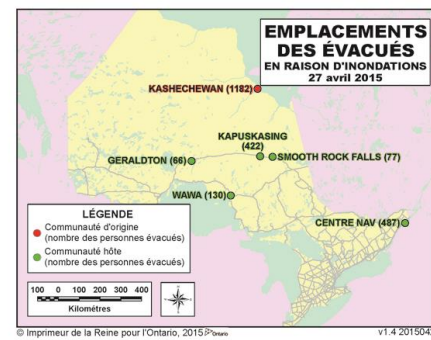
Examples

Examples

Examples

Examples

Examples
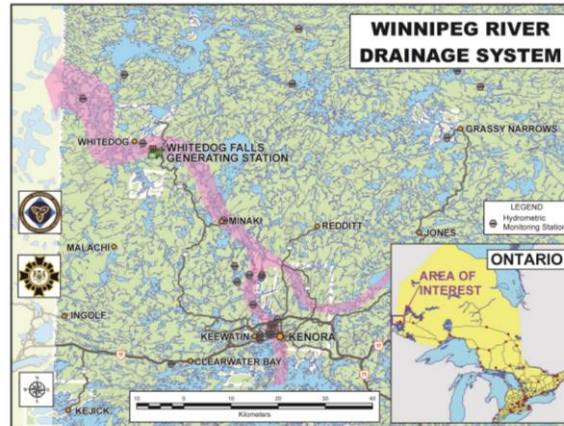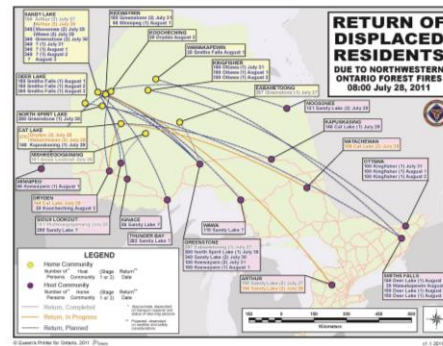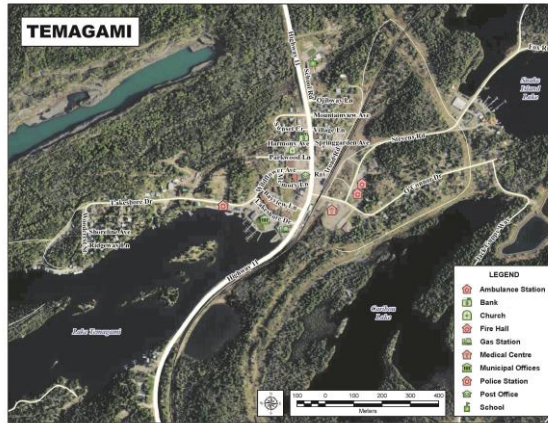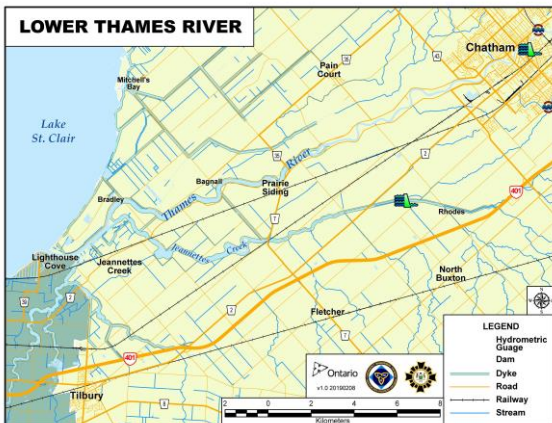
Long Term

Best practices before, during and after events

- Documentation!
- BC/DR capability
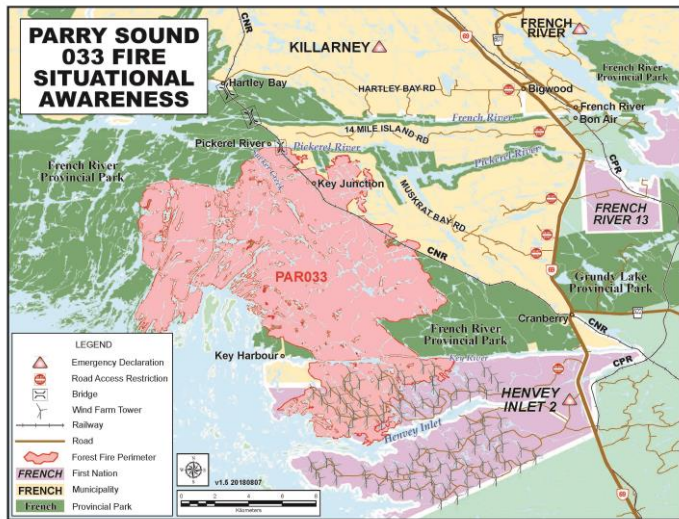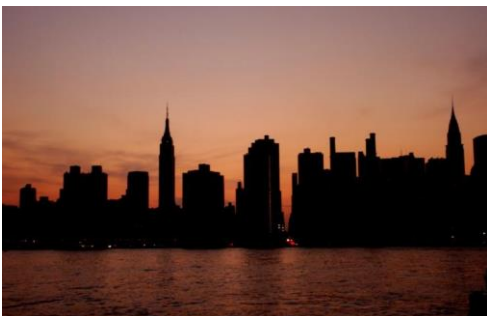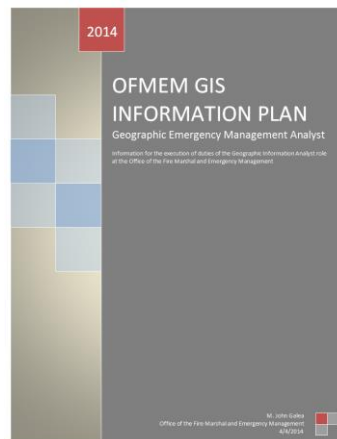- Archive/audit trail/CYA
- Templates
- Exercise/practise
- Networking
- Training

2014

OFMEM GIS
INFORMATION PLAN
Geographic Emergency Management Analyst

Information for the execution of duties of the Geographic Information Analyst role at the Office of the Fire Marshal and Emergency Management

M. John Galea
Office of the Fire Marshal and Emergency Management
4/4/2014

Future

ONTARIO EMERGENCY MANAGEMENT NETWORK
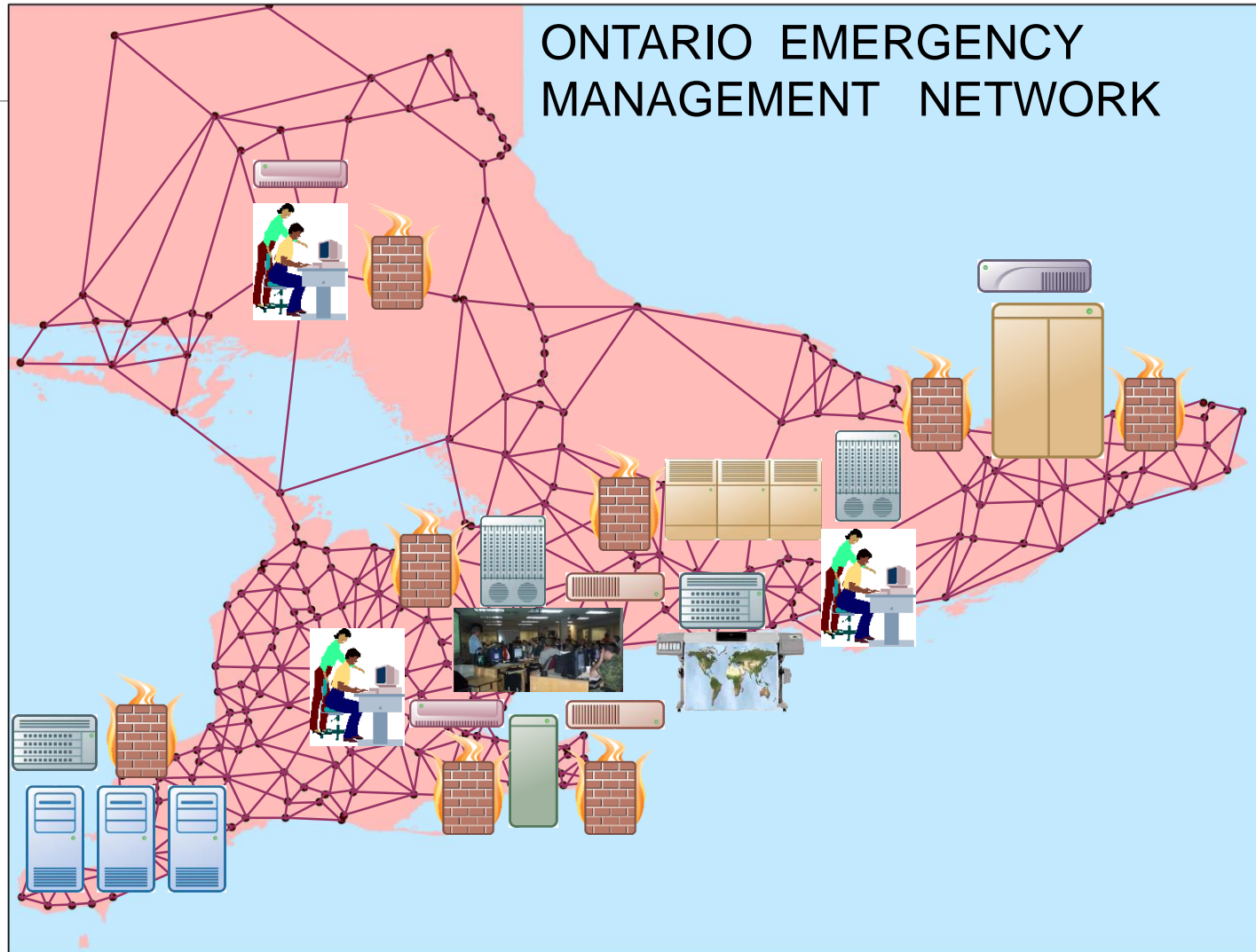
Questions

Contact

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