Port Elgin Case Study - 7 steps


Jan 2010, Courtesy of TPDC


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1) Issues
2) Location
3) Facilities & Infrastructure
4) Social
5) Economic
6) Environment
7) Solutions

Tools for Exercise

- MAPS -zoning, current land use, wellfields, municipal infrastructure, coastal area
- Climate Change scenarios
- Storm surge estimates
- Aerial Photos
- Port Elgin's Emergency Measures Plan
- Worksheets
- LOCAL KNOWLEDGE

Photo courtesy of NB DOE

STEP 1: What are the Issues?

- Erosion
- Flood
- Drinking Water
- Storm Surge
- Hurricane
- Others?

Issue Identification

Here we will identify issues that are happening and might happen in the future in this community.

Sample Risk Evaluation Chart

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Serious
Almost Certain	Low	Moderate	High	Extreme	Extreme
Likely	Low	Moderate	Moderate	High	Extreme
Possible	Low	Low	Moderate	High	Extreme
Unlikely	Low	Low	Moderate	Moderate	High
Very unlikely	Low	Low	Low	Moderate	Moderate

Extreme	Immediate control measures required
High	High priority measures required
Moderate	Some controls required
Low	Controls not likely required

STEP 2: What Locations will be Affected?

- Topography
- Land use
- Geology
- Flood risk areas
- Erosion-prone areas
- Historic Events
- Other

→ **Location Assessment**

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Determine where issues may occur and which parts of the community may be at higher risk.

STEP 3: Which facilities and infrastructure will be Affected?

- Fire Station
- School
- Nursing Home
- Sewage and Wastewater
- Community buildings
- Power sources
- Roads, bridges, culverts, trails
- Other?

Facilities and Infrastructure Affected

Determine the location and characteristics of key facilities and infrastructure. This can help determine where to focus adaptation options.

STEP 4: Who will be most affected and who can help?

People in Isolated locations

Seniors

Others?

Emergency Services

Volunteer services

Recreation and cultural activities

Community support

Other?

Social Assessment

Determine who is most likely to be impacted, where they live, and where are the organizations and volunteers that can help?

STEP 5: How will the economy be affected?

- Agriculture
- Fishery
- Forestry
- Tourism
- Food
- Manufacturing
- Transportation
- Retail
- Arts and culture
- Other?

Economic Assessment

Determine where the important economic sectors are in the community and how they may be affected.

STEP 6: How could the environment be impacted?

- Contaminated and toxic sites
- Oil and gas facilities
- Ports
- Landfills
- Contamination
- Pests and diseases
- Fish and wildlife
- Parks and protected areas
- Sensitive habitats
- Other?

Environmental Assessment

Consider where changes in climate can lead to changes in other parts of the natural environment in your community.

STEP 7: What can we do?

- Infrastructure
- Technology
- Financial resources
- Human resources
- Policy and Planning
- Emergency Measures
- Communications
- Education
- Other?

Solutions

What can we do to deal with impacts of climate change issues and take advantage of opportunities?

STEP 7b - Implementing Realistic Solutions

Photo courtesy of NB DOE

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- Who should take the next steps?
- Who should be responsible?
- What do they need?
- What do they need to do?