

# Port Elgin Case Study - 7 steps



- 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

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# 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**

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

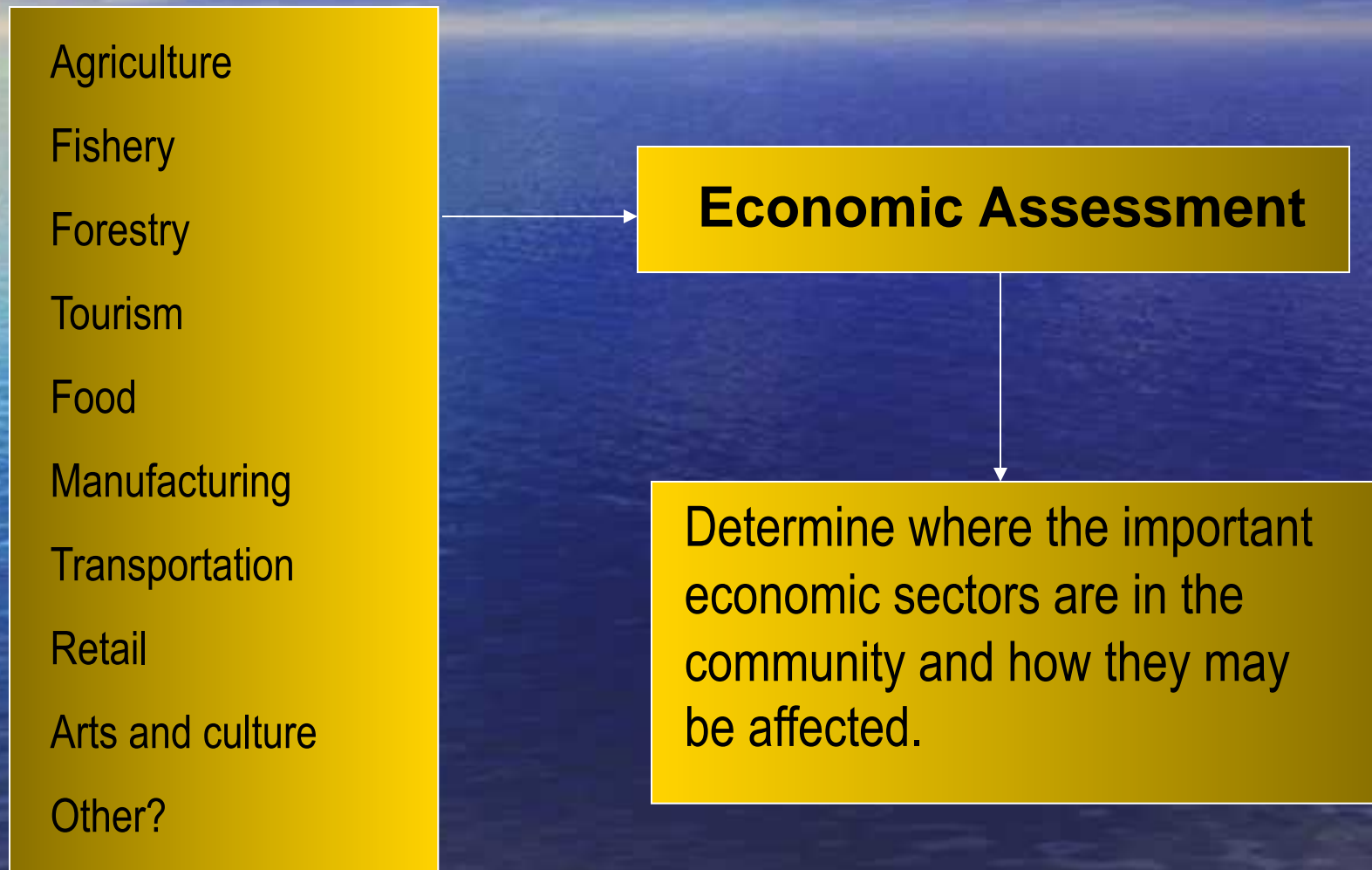
Community support

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?



# 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



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