

# Environmental Assessment Program Improvements

Ontario Association for Impact Assessment  
October 17, 2017

# Purpose and Overview

- Share actions that the ministry is taking to improve the Environmental Assessment (EA) program

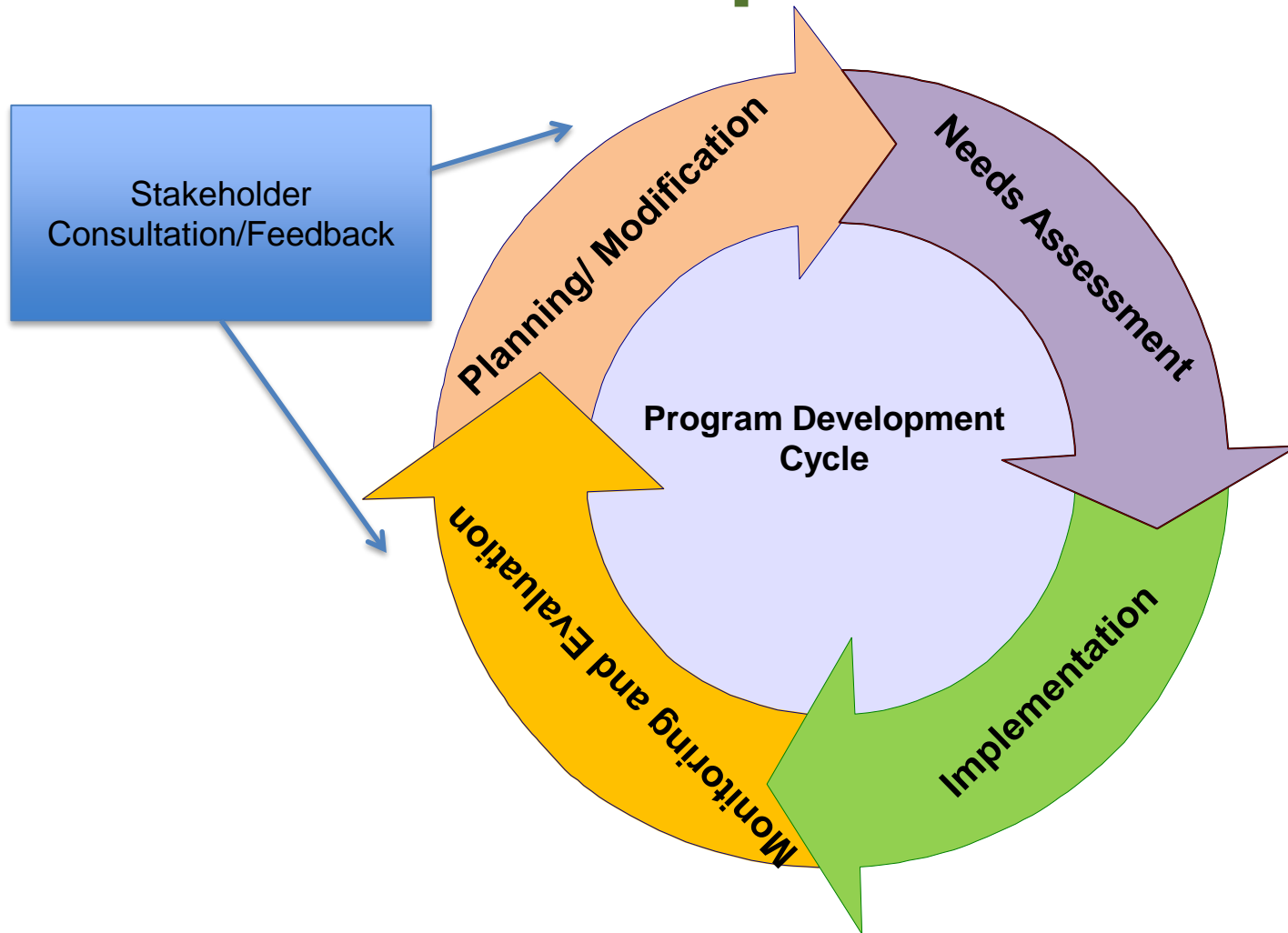
## **Overview:**

- Ontario's EA program
- Program development process
- Emerging challenges
- What we've heard
- Program improvements
- Next steps

# Ontario's Environmental Assessment Program

- Goal: The purpose of the Environmental Assessment Act (EAA) is to provide for “the protection, conservation and wise management in Ontario of the environment”.
  - The EA program supports this goal by guiding proponents through the consideration of alternatives and requiring the assessment of environmental effects before decisions are made
- EA is a proponent-driven process – the proponent is responsible for identifying and defining the undertaking, and completing the necessary studies and consultation requirements.
- Multiple assessment processes and requirements for different types of projects.
  - Regulations for electricity, waste, and transit projects;
  - Class EAs (projects with predictable and manageable environmental effects) setting out prescribed processes with standardized requirements (See Appendix A).
  - Individual – broad government review of large scale, environmentally significant projects (e.g. new landfills, highways, transmission lines).

# Program Development Process – Continuous Improvement



# What We Have Heard

- The ministry receives feedback on the EA program from EA proponents, Class EA holders, Auditor General of Ontario, Environmental Commissioner of Ontario, Indigenous communities and the public.
- Several recurring themes have been raised, including:
  - Reducing time required for Part II Order Request (bump-up) process
  - Ensuring that the ministry has the opportunity to provide input into environmental assessment processes
  - Increasing public access to EA information
  - Providing guidance on emerging issues and those of importance (i.e. climate change, Indigenous Consultation etc.)
  - Considering cumulative effects in EA processes
  - Alignment between federal and provincial EA processes and requirements

# Part II Order Request – Process Improvements

- The ministry is working to reduce the time required to review Part II Order requests submitted to the ministry.
- The ministry noted that there were opportunities to improve the quality of Part II Order Request submissions.
  - Reducing back and forth between the proponent and the ministry to gather information required to review the Part II Order request could help to reduce the time associated with the process.
- The ministry is committed to the following actions:
  - Developing guidance for the public on the information required in a Part II Order request

# Notification of Ministry

- The ministry is working to ensure that they are able to provide input at key stages of environmental assessment processes.
- The ministry worked with Class EA holders to remind them of notification requirements and to identify opportunities to improve the notification process.
- The ministry is considering the following action:
  - Developing regional email addresses to streamline the notification process
    - Upon implementation, the regional email addresses will need to be used ***in addition to existing notification requirements*** to ensure that notifications are being received by the ministry.

# Notification of Ministry – Regional Map

## MOECC Regions with Email Addresses



- CENTRAL REGION  
eanotification.cregion@ontario.ca
- EASTERN REGION  
eanotification.eregion@ontario.ca
- NORTHERN REGION  
eanotification.nregion@ontario.ca
- SOUTHWEST REGION  
eanotification.swregion@ontario.ca
- WEST CENTRAL REGION  
eanotification.wcregion@ontario.ca



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# Public Posting of EA Information

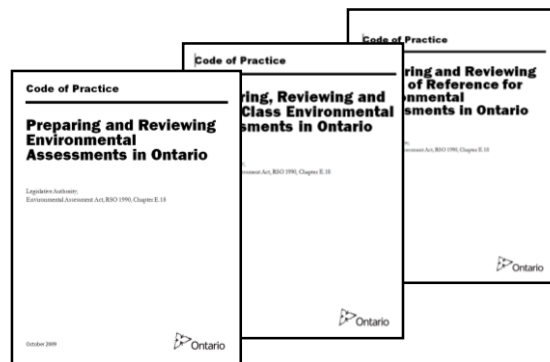
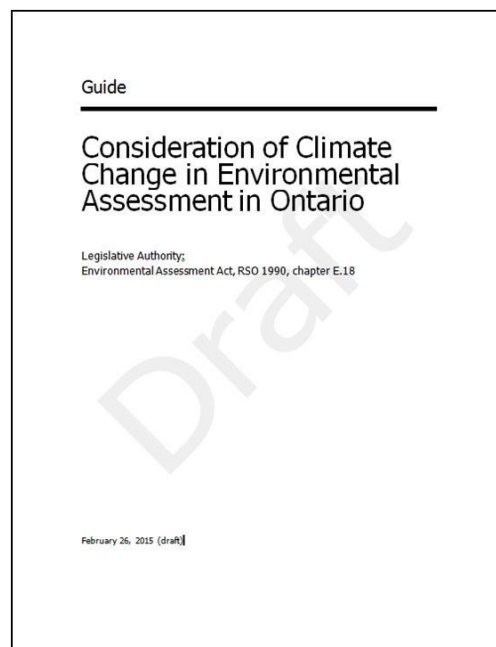
- The ministry is working to increase public access to EA information.
- The ministry recognizes the value of public input into the EA process, and seeks to develop options that can support greater access to EA information.
- The ministry committed to:
  - Working with Class EA holders to identify opportunities to improve online access to EA information.
  - Where opportunity exists, amending or seeking commitment to amend Class EAs to ensure EA project information is posted online.
  - Identifying options for the ministry to post EA information online.

# Providing Guidance for EA Proponents

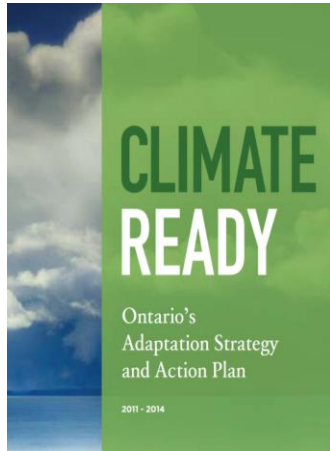
- The ministry is working to ensure that proponents have access to guidance to support them in completing high quality EA submissions, and address emerging challenges.
- Consultation with Class EA proponents and holders indicated that there was a need for additional guidance in three areas, including:
  - Cumulative effects
  - Indigenous consultation
  - Climate change
- The ministry committed to:
  - Reviewing the Codes of Practice to ensure that guidance reflects current practice, and helps to promote meaningful and effective consultation.
  - Finalize\publish climate change guidance for EA proponents.

# New Guidance for Consideration of Climate Change in EA

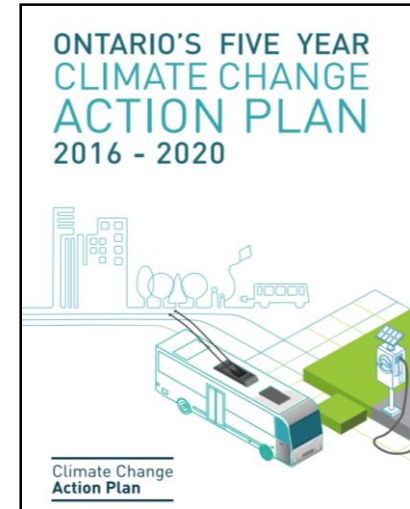
- MOECC has developed a new Guide for the consideration of climate change in EA in Ontario
- The Guide was posted on the Environmental Registry in September 2016 for a 45-day comment period.
- The Guide is intended for EA practitioners and can be used in conjunction with the Codes of Practice and related Guidance of the EA program.



# Basis for New Guide



Developed in response to Climate Ready Action Plan (2011), the MOECC's mandate renewal (2014), and the Climate Change Action Plan (2016).

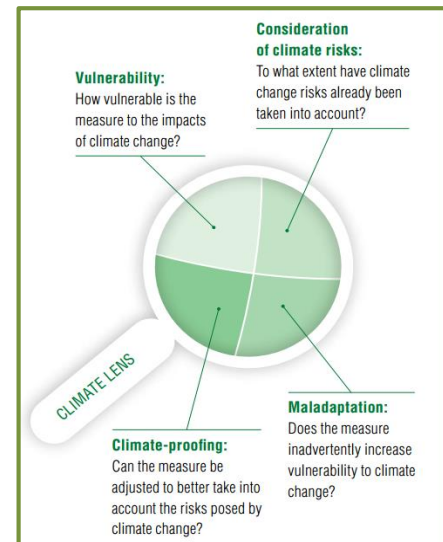


MOECC to...ensure that climate change is taken into account in the government decision-making process. This will include greenhouse gas (GHG) impact analyses for significant policies, legislation and regulations and adaptation considerations for public infrastructure investments.

# Guide – What is it?

## The draft guide *Consideration of Climate Change in Environmental Assessment in Ontario*:

- Is directed at EA practitioners in the public and private sectors.
- Prompts proponents, early in the project planning phase, to consider climate change and resilience.
- Describes the use of self-assessment tools like the vulnerability assessment tool, resilience case studies, and climate modeling information in EA studies.
- Requests that proponents assess the effects of an undertaking on climate change and the effects of climate change on an undertaking.
- Includes information on:
  - climate-related conditions applied to recent EA decisions, and
  - projects in the north and in remote communities.
- Articulates the ministry's expectations so proponents can plan accordingly for climate resilient outcomes.
- Requests that proponents include climate criteria into evaluation process and add a statement about how climate change was considered into study reports.



# How is Climate Change to be Considered?

Mitigation	Adaptation
Guide asks proponents to consider measures to mitigate climate change:	Guide asks proponents to consider measures to adapt to climate change:
<ul style="list-style-type: none"><li>• Does your project generate greenhouse gas emissions or affect the removal of carbon dioxide from the atmosphere?</li><li>• To what extent have greenhouse gas emissions been taken into account in project planning?</li><li>• Can the project be adjusted to reduce adverse contributions to a changing climate?</li><li>• Are there commitments that could be made to assess and improve climate performance during operation?</li></ul>	<ul style="list-style-type: none"><li>• How vulnerable might the project be to a changing climate?</li><li>• To what extent have climate risks already been taken into account in project planning?</li><li>• Can the project be adjusted to take better account of the risks posed by a changing climate?</li><li>• Are Indigenous people or communities affected by any of the project's adaptation measures?</li></ul>


## The Guide:

- ✓ uses a self-assessment approach familiar to proponents
- ✓ provides examples, resources, references to assist proponent with consideration when preparing the EA
- ✓ uses methods similar to Canada (CEAA) and Nova Scotia

# Nature of Consideration

- Qualitative or quantitative in nature
- Scaled to the project's level of environmental effect.

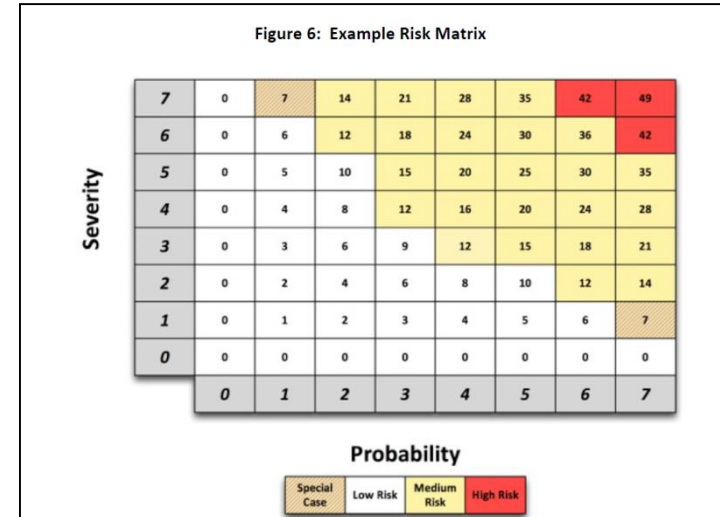
Lower Risk		Higher Risk
<ul style="list-style-type: none"><li>• Construction of sidewalks or bicycle paths within existing rights-of-way</li><li>• Plowing and sanding of transit facilities</li><li>• Installing traffic signal priority for buses</li><li>• Termination of a (mining) licence of occupation where payment of rental is in arrears for 2 years or more.</li><li>• Creation of fuel wood access roads in parks</li><li>• Operation and maintenance of existing fish culture stations</li><li>• Cleaning and shaping roadside ditches</li></ul>	<p><i>EA requirements are scaled to the level of environmental effect</i></p>	<ul style="list-style-type: none"><li>• Major new water and wastewater treatment facilities</li><li>• Establishing significant new transportation corridors, e.g., roads and highways</li><li>• Major new rail station or intermodal transport facility.</li><li>• Large extension high-voltage transmission line</li><li>• Mining proposal with tailings dams and other effects on hydrology</li></ul>



# Major Impact Consideration

**Table 3: Conceptual Approach to Considering Effects of Climate on a Project<sup>1,2</sup>**

COLUMN 1 Climate Variable		COLUMN 2 Generic Project Component
Temperature extremes <ul style="list-style-type: none"> <li>• High</li> <li>• Low</li> <li>• Warmest / coldest period</li> </ul> Precipitation (Rain) <ul style="list-style-type: none"> <li>• Freezing rain</li> <li>• Intensity</li> <li>• Flooding return period</li> <li>• Wettest / driest period</li> <li>• Total annual</li> </ul> Precipitation (Snow) <ul style="list-style-type: none"> <li>• Snow load</li> <li>• Snow water equivalent</li> </ul> Wind Speed <ul style="list-style-type: none"> <li>• Extreme gusts</li> <li>• Gale, hurricane force winds, tornados</li> <li>• Fog, hail, lightning</li> </ul>	<p><i>If the frequency, severity or duration of any of the variables in Column 1 changes, what will be the effect on any component in Column 2?</i></p>	Utilities <ul style="list-style-type: none"> <li>• Air intake</li> <li>• Water intake</li> <li>• Drainage / wastewater</li> <li>• Electrical and gas</li> <li>• Fire and Safety</li> <li>• Communications</li> <li>• Transport (road, rail)</li> </ul> Operations <ul style="list-style-type: none"> <li>• Maintenance</li> <li>• Continuity</li> <li>• Reliability</li> </ul> Administration <ul style="list-style-type: none"> <li>• Personnel</li> <li>• Occupational Safety</li> <li>• Insurance / liability</li> </ul> Buildings <ul style="list-style-type: none"> <li>• Structural integrity</li> <li>• Fatigue / stress / failure</li> </ul>



Applied to major undertakings like large new waste/wastewater projects, mining proposals, individual EAs where climate and hydrology impacts could be significant.

- Toronto and Region Conservation Authority, *Vulnerability Assessment of Key Flood Control Infrastructure*
- Engineers Canada (MOECC-funded) *Climate Risk Assessment and Vulnerability Analysis of a Municipal Water Treatment System in Southwestern Ontario*



# Inputs to Consideration

## Mitigation

- To reduce GHG emissions
- Slow climate change

Energy efficiency measures  
Fuels and building materials  
Transportation demand measures  
Carbon sequestration activities  
Green Energy



## Adaptation

- To enhance climate readiness
- Prevent/address negative effects to the environment

Municipal / Regional Climate plans  
Risk Assessments  
Contingency/Emergency Plans  
Facility / HR Policies  
Backups, redundancies



# Low-Med Risk Generic Project



*Consideration could be thought of as....*

- What energy/resource conservation features exist in your project or could be added?
- What, if any, component of your project could be compromised by severe weather and could this affect a public good?
- What measures does your organization have in place to deal with upsets, extreme events or shutdowns?
- Proponent could make commitments on seeking low carbon and resilience options for implementation:



## **Potential Project Features**

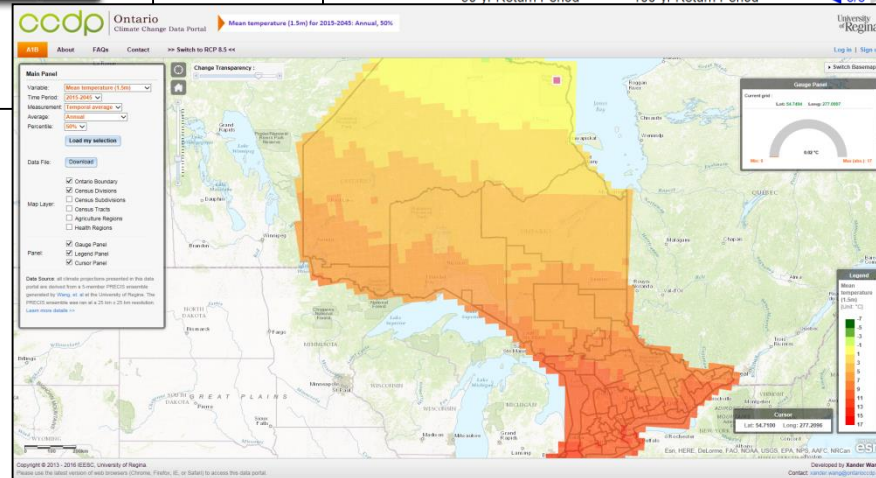
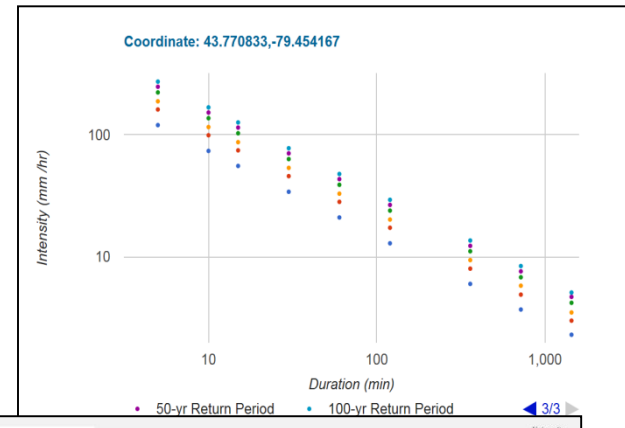
- Recycled steel construction
- Certified sustainable forest products
- Recycled fibre flooring
- Storm water collection system for landscape watering needs
- Energy efficient lighting
- Stone/gravel entrance allows infiltration and surge mitigation
- Possibly onsite solar or compost, shade trees
- Low flow water devices
- Bicycle rack
- Emergency / backup communications

# Climate Tools of the Trade

Figure 6: Example Risk Matrix

7	0	7	14	21	28	35	42	49
6	0	6	12	18	24	30	36	42
5	0	5	10	15	20	25	30	35
4	0	4	8	12	16	20	24	28
3	0	3	6	9	12	15	18	21
2	0	2	4	6	8	10	12	14
1	0	1	2	3	4	5	6	7
0	0	0	0	0	0	0	0	0
	0	1	2	3	4	5	6	7

Probability



[www.pievcc.ca](http://www.pievcc.ca)

[www.mto.gov.on.ca/](http://www.mto.gov.on.ca/)

[www.ontarioccdp.ca/](http://www.ontarioccdp.ca/)

# Guide's Case Studies

- Toronto and Region Conservation Authority, *Vulnerability Assessment of Key Flood Control Infrastructure*
- Ministry of Transportation *Web-based Tool for Generating IDF Curves for use in Road, Highway, Urban Drainage Design*
- Ministry of Transportation *Highway 407 East Extension – Effect of the Environment on the Project*
- Engineers Canada (MOECC-funded) *Climate Risk Assessment and Vulnerability Analysis of a Municipal Water Treatment System in Southwestern Ontario*
- Ministry of Natural Resources and Forestry, *Considering Climate Effects in Natural Resource Project Planning*

# New Climate Tools

- MOECC is establishing a new climate change adaptation organization to serve as a leading edge source of climate information and services.
- Practitioners, once the organization is fully operational in 2018, will be able to seek assistance in applying the new climate change guidance when considering climate impacts in environmental assessments.
- MOECC will be consulting on the new organization, both through the Environmental Registry, as well as webinars and surveys. Please see <https://www.ontario.ca/page/climate-change> for further detail.

# Next Steps

- The ministry will continue to move forward with actions that will improve the EA program and help the ministry to provide for “the protection, conservation and wise management in Ontario of the environment”.
- The ministry will continue to identify new and emerging challenges to ensure that the EA program can address these issues and reduce environmental risk in Ontario.
- As the federal review of the Canadian Environmental Assessment Act, 2012 proceeds, the ministry will continue to participate in the consultation process with the federal government to provide input into the review of CEAA 2012.

# Questions

Thank you!

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