

Municipal Adaptation and Resiliency Service (MARS) Training Webinar Series

Training Overview

The Municipal Adaptation and Resiliency Service (MARS) training webinar series is a collaborative initiative involving the Clean Air Partnership, the Great Lakes and Saint Lawrence Cities Initiative, as well as the Ontario Centre for Climate Impacts and Adaptation Resources. MARS training sessions are directed toward Ontario municipal government officials working within Great Lakes St Lawrence Cities Initiative member cities. Training participants will represent diverse lines of municipal operations, ranging from Mayors and infrastructural engineers to environmental coordinators, as well as municipalities of diverse sizes.

Eight different webinar training modules will be delivered between January 22nd and March 27th 2014. The introductory training module will be 1.5 hours in length, while the remaining seven training modules will be 1 hour in length. Each module will have a distinct area of focus surrounding municipal climate adaptation.

Training Module Focus Areas

Module 1: Climate Adaptation in the Municipal Context, January 22nd 2014

Module 1 will set the scope of climate adaptation in the Ontario municipal government context. It will open by familiarizing participants with climate adaptation practice and it's the existence in the everyday operations of Ontario Great Lakes municipalities. The module will also provide participants with an overview of observed climate change in the Ontario context through an examination of historical climate trends, as well as an overview of climate models and future climate change projections for the region. This section will be followed with a review of recent municipal experiences with extreme weather events in the Ontario Great Lakes region. The module will conclude with an explanation of sourcing historical climate trends and climate change projections, as well as an overview of the key components of a municipal climate adaptation program.

- Heather Auld, Principle Climate Scientist at Risk Sciences International, and member of the World Meteorological Organization (WMO) and the International Panel on Climate Change expert groups, will provide a presentation on the observed climate change trends in Ontario, as well as future climate change projections for the region. She will also provide an analysis of the implications of observed and future climate change for Ontario municipalities.

Module 2: Financial and Legal Implications of Climate Change, February 6th 2014

Module 2 will focus primarily on the financial and legal implications of climate change in the municipal government context. A review of recent municipal government experiences with extreme weather events in the Ontario Great Lakes Region will be provided, with a particular focus on the costs incurred by municipalities as a result of these events. The non-impact drivers of climate adaption will be explored through an explanation of the current relationship between scientific evidence and climate adaptation actions. An overview the influence of non-governmental advocacy,

peer competition and image, as well as standards and regulation in municipal climate adaptation will be discussed, along with further climate adaptation facilitating factors at the municipal government level. The module will conclude with an overview of the legal implications of climate change in the municipal context.

- Laura Zizzo, J.D., of Zizzo Allan Professional Corporation, will facilitate a presentation detailing the environmental and legal implications of climate change for Ontario municipalities.

Module3: Municipal Transportation Related Infrastructure, February 20th 2014

Module 3 will focus primarily on the distinct risks climate change poses for municipal transportation related infrastructure and practical examples of climate change adaptation in the municipal transportation infrastructure sector will be explored.

- David Macleod, Senior Environmental Specialist at the Toronto Environmental Office, will provide an overview of the City of Toronto's departmental climate change risk assessment tool, with a focus on the key results of an assessment conducted for the city's transportation services.
- Dave Dyer (Tentative), Manager of Transportation in Prince George, British Columbia, will provide an overview of the steps that have been taken in the City of Prince George in order to integrate climate change adaptation into municipal road design, as well as municipal road maintenance.

Module 4: Building Infrastructure and Land Use Planning, February 27th 2014

Module 4 will focus primarily on the distinct risks climate change poses for municipal building infrastructure, as well as city land use planning in the context of climate change. The session will provide practical examples of the integration of climate change adaptation into municipal building infrastructure operations, as well as city land use planning.

- David Lapp(Tentative): FEC, P.Eng, Manager of Professional Practice at Engineers Canada and member of the Public Infrastructure Engineering Vulnerability Committee Secretariat, will provide a presentation detailing climate adaptation strategies municipalities can adopt within their municipal building structure operations.
- Barb Hodgins, MCIP, RPP, Senior Policy Planner for the Town of Ajax, will provide an overview of Ajax's experience with integrating climate change adaptation into the town's Official Plan.

Module 5- Vulnerable Populations, March 6th 2014

Module 4 will focus primarily on the distinct risks climate change poses for vulnerable human populations in municipalities, with a particular emphasis on public health. The session will provide practical examples of climate change adaptation measures that are being adopted by municipalities in response to disproportionate impact of climate change on their most vulnerable residents.

- Stephanie Gower (Tentative), Research Consultant at the Environmental Protection Office of Toronto Public Health, will provide an overview of Toronto's Hot Weather Response Plan
- Jay Storfer (Tentative), Senior Policy Analyst in the Climate Change and Health Office of Health Canada will provide an overview of key strategies municipalities in Ontario can adopt in order to enhance the resiliency of vulnerable city residents in the face of extreme heat events
- Mark Pajot (Tentative), Climate Change Specialist for the Region of Peel will discuss the health and climate change vulnerability assessment recently conducted in the Region of Peel

Module 6- Urban Natural Systems, March 13th 2014

Module 6 will focus specifically on the distinct risks that climate change poses to urban forests and urban natural systems. The session will provide practical examples of climate change adaptation measures that are being adopted by municipalities in order to adapt their urban forests and natural urban systems to a changing climate.

- Stephen Monet (Tentative), Manager of Environmental Planning Initiatives at the City of Sudbury will provide an overview of the Forest Floor Mat Transplant efforts adopted in Sudbury
- Chandra Sharma (Tentative), MCIP, Watershed Specialist and Senior Manager of Climate Programs for the Toronto and Region Conservation authority will discuss climate change adaptation approaches that can enhance the resilience of urban natural systems and watersheds.

Module 7- Water, Wastewater and Storm Water Systems, March 20th 2014

Module 7 will focus specifically on the implications of climate change for municipal water, waste water and storm water infrastructure systems. The session will also provide practical examples of climate change adaptation measures that are being adopted by municipalities in order to enhance the resiliency of their water, wastewater and storm water infrastructure systems in the face of a changing climate.

- John Nemeth, C.E.T., and Program Manager of Business Strategy and Program Planning for the waste water division of the Region of Peel's Public Works Department will facilitate a presentation on the innovative storm water climate adaptation approaches that have been undertaken by the Region of Peel.
- Marvin Ingebrigtsen (Tentative), P.Eng. and Technical Analyst of Infrastructure Programs for the City of Welland will present on the storm water and waste water infrastructure climate change vulnerability assessment that was conducted in the City of Welland.

Module 8- Communication and Collaborating, March 27th 2014

Module 8 will provide an overview of the diverse strategies that municipalities can adopt in order to better communicate and collaborate on climate adaptation initiatives.

- Dr David Pearson (Tentative): Co-Director of the Science Communication Program, Professor in the Department of Earth Sciences and the Living with Lakes Centre at Laurentian University will provide an overview of communication and collaboration approaches municipal governments can adopt in order to advance their climate adaptation initiatives.
- Ewa Jackson (Tentative): Acting Director of ICLEI Canada will provide an overview of the key points detailed in ICLEI Canada's Guidebook on climate communication strategies for local governments