

Durham Community Climate Adaptation Plan Update: Natural Environment

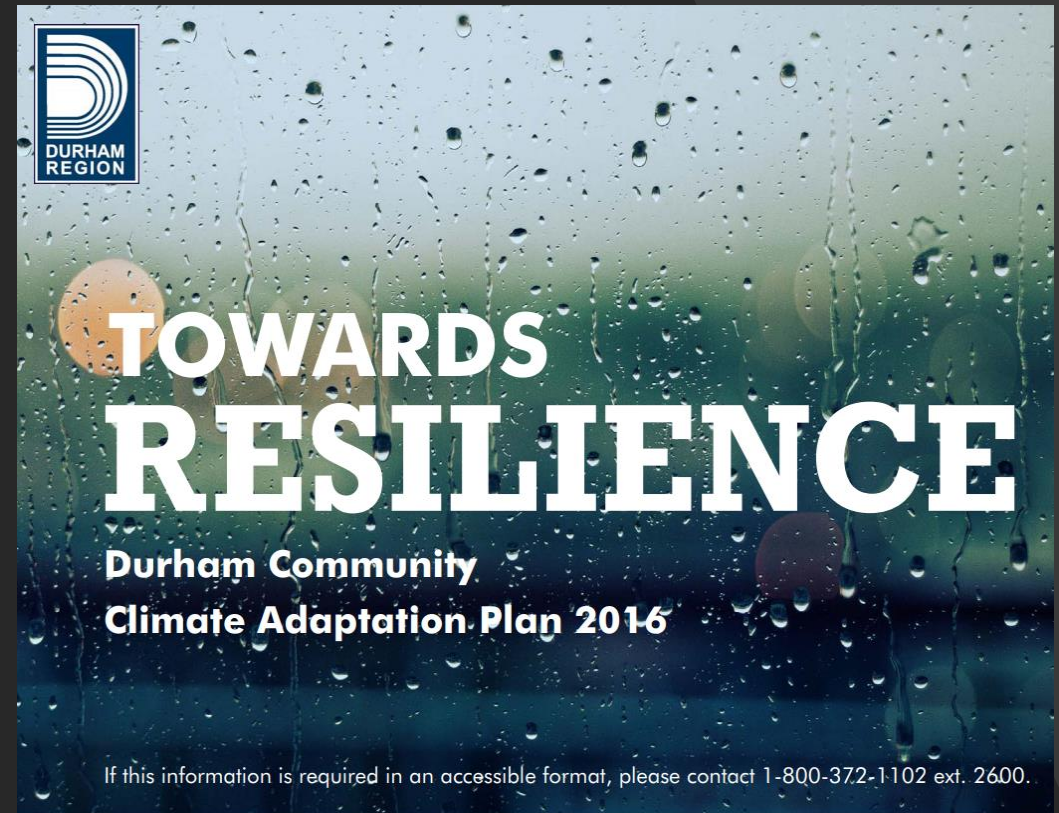
Durham Climate Change Adaptation Working Group Webinar
February 18, 2021

Presented by:

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On behalf of the Natural Environment and Climate Change Collaborative

Outline

- Climate risks to the Natural Environment
- Natural Environment Programs in DCCAP
- Accomplishments, Challenges, and Next Steps



Recap of Expected Changes to Climate

Warmer

Wetter

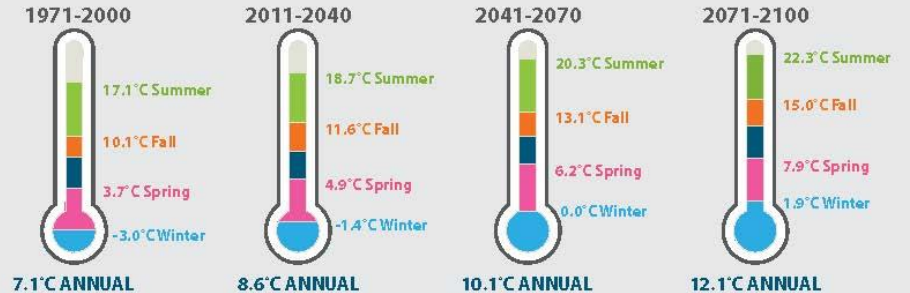
Wilder

CLIMATE TRENDS FOR DURHAM REGION

UNDER THE CURRENT
PACE OF GREENHOUSE
GAS EMISSIONS

MEAN TEMPERATURE

By the end of the century, Durham Region is expected to warm by 5°C, leading to more variable and extreme weather



DAYS ABOVE 30°C



A 6-fold increase in the number of extreme heat days is expected by the end of the century, which will pose significant risks to people's health and well-being

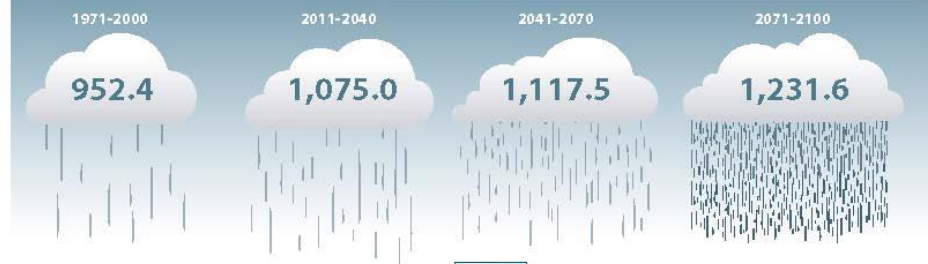
DAYS BELOW -20°C



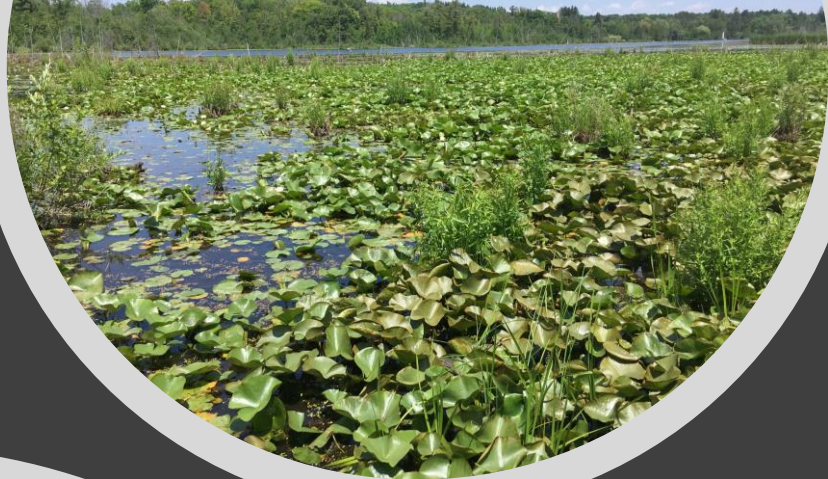
As winters become warmer, less snow and ice conditions are expected with more precipitation falling as rain instead of snow, which increases the risk of flooding among other impacts

ANNUAL PRECIPITATION

Measured in millimetres (mm)



Storms are expected to become more frequent and intense, including the number of extreme precipitation days which increases the risk of hazardous conditions and property damage



What are the risks to the
natural environment?





Natural Environment Programs in DCCAP

Objective: To enhance natural capital and build climate resilience in the natural environment

Recommended Actions:

- Collaboration
- Adaptive management of Plans and Policies
- Stewardship, Education, and Outreach



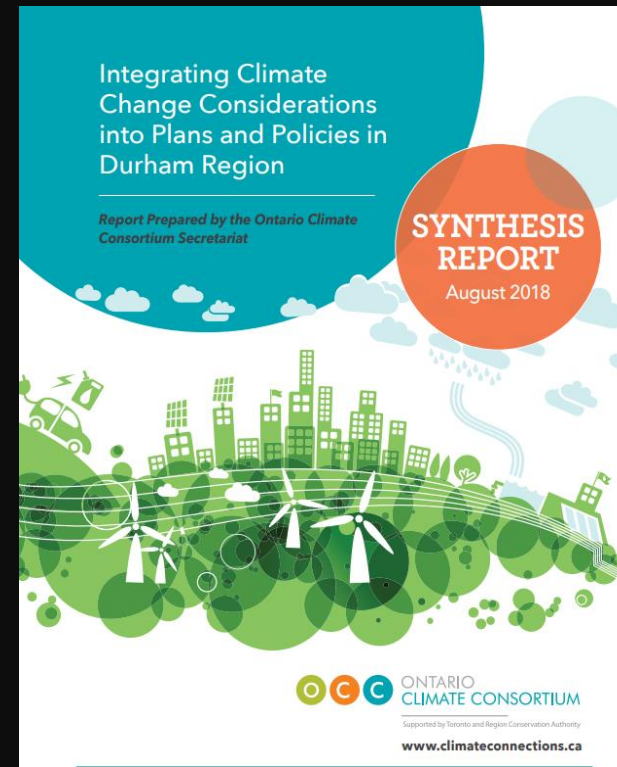
Accomplishments: Collaboration

- Creation of the NECCC
- Increased collaboration

Accomplishments – Adaptive Plans & Policies

Policies

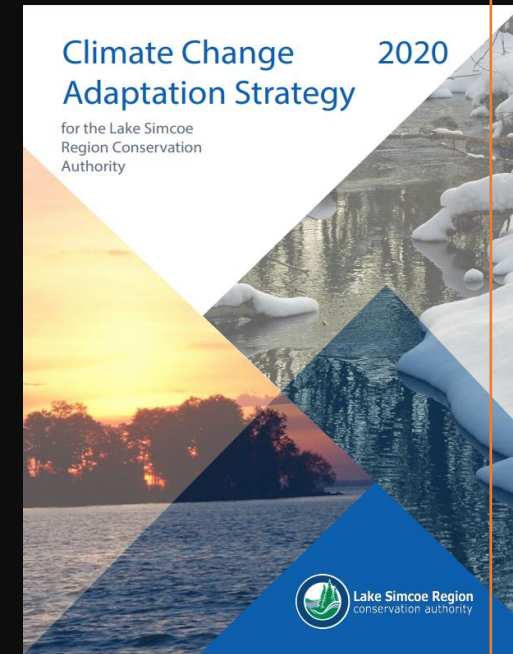
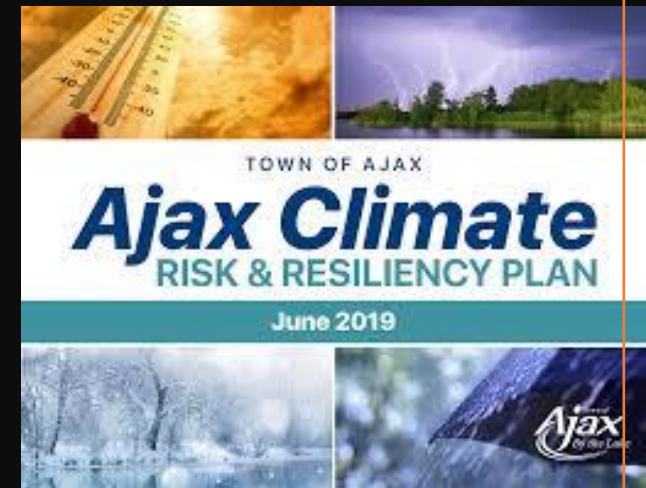
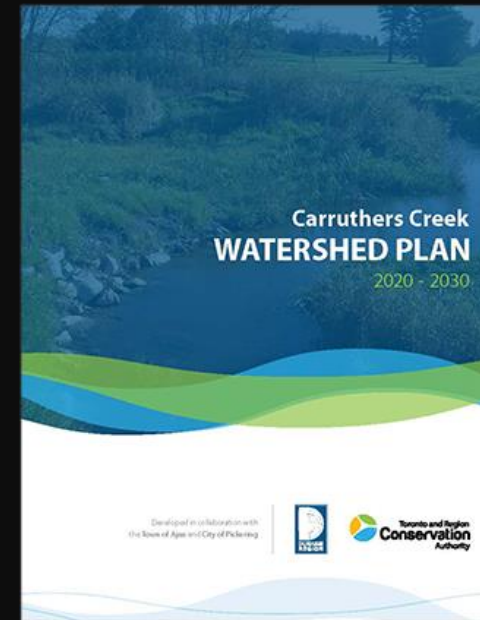
- Policy Integration Report
- Collaboration on Durham MCR input
- Whitby Green Standard



Accomplishments – Adaptive Plans & Policies

Plans

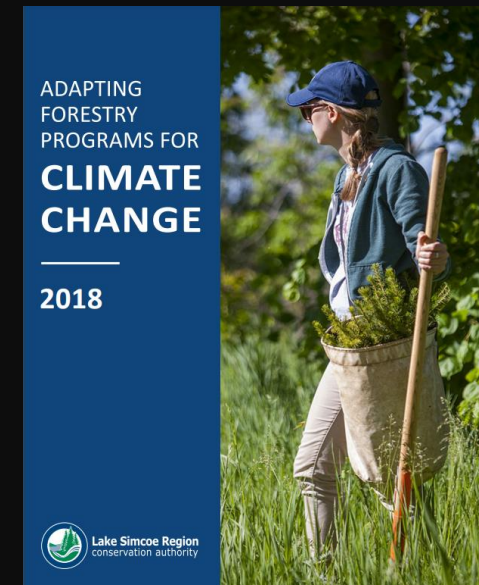
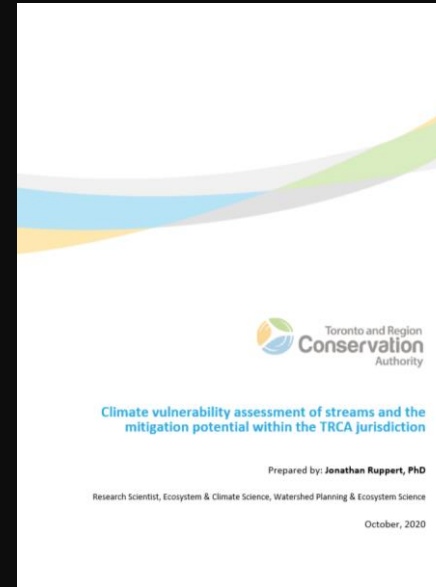
- Ajax Climate Risk & Resiliency Plan
- Updated watershed plans (CLOCA and TRCA)
- LSRCA Adaptation and Mitigation Strategies



Accomplishments – Adaptive Plans & Policies

Programs/Activities

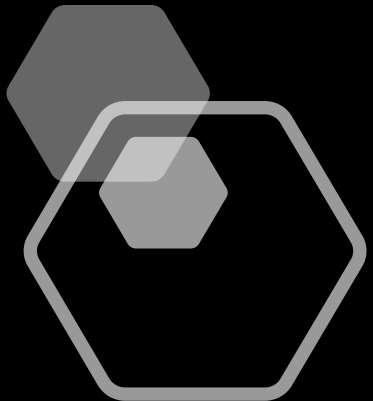
- Oshawa Municipal Natural Assets Initiative
- LSRCA Adapting forestry programs
- TRCA Aquatic Climate Vulnerabilities



Accomplishments – Stewardship & Outreach

- LEAF Backyard Tree Planting Program
- Trees for Rural Roads Planting Program
- Joint-CA Tree Planting Program: Supporting Climate Action Through Nature Based Solutions
- COVID Resilience funding for wetland creation in Ajax
- Enhanced Invasive Species Awareness Campaigns
- Management projects in partnership with Municipalities and private landowners





Challenges for Implementation



Funding to further advance incorporating climate change in the Region's watershed plans.



Challenges in aligning priorities across the region given the broad sectors, resources, and mandates.



Anticipating directions from and integrating with Durham's ROP update.



Next steps

1

**Durham-wide identification
natural heritage system
vulnerabilities.**

2

**Continue incorporating
climate change into plans
and strategies.**

3

**Work towards re-
establishing a
stewardship/education
collaborative working
group.**