



Climate Change Funding for Municipalities and/or Conservation Authorities



NOW WHAT?!

- What do we do with all these learnings?
- Incorporate them into Planning and Action.
- Make peace with it, there will never be enough funding to advance this effort.
- We have to be creative with building our business cases.
- We have to work with and support each other.
- We have to mainstream this.



Resources

- World Bank Climate Change Knowledge Portal
- weADAPT
- NRCan's Climate Change Adaptation Platform
- Canadian Centre for Climate Services
- OCCIAR Adaptation Platform Products
- Climate Atlas of Canada
- ICLEI BARC Program





Durham Resources

- Durham Region Adaptation Plan
- <u>Durham Region Future Climate Study</u>
- <u>Urban Heat Island Work</u>
- Resilient House Standard
- Expert Tables (Flooding, Natural Environment, Buildings, Electrical Sector, Health, Roads, Food Security)





National Disaster Mitigation Program (NDMP)

- Cost shared between feds, province, municipality/conservation authority
- Risk Assessments
- Flood Mapping
- Mitigation Planning
- Investments in Non-Structural and Small Scale Projects
- Last round for proposals was the fall of 2018





Disaster Mitigation and Adaptation Fund

- Big Projects minimum of \$20 million.
- Eligible expenditures include design and planning, capital cost, as well as costs related to meeting specific program requirements.
- Land acquisition is also eligible for natural infrastructure projects and under some conditions (can't be the only approach)
- Cost shared





Smart Cities Challenge

- Pan-Canadian competition open to communities of all sizes
- Encourages communities to adopt a smart cities approach to improve the lives of their residents through innovation, data and connected technology.
- At the Finalists stage
- Winners to be announced in Spring of 2019





Ontario Community Infrastructure Fund

- 200 million in 2019
- Formula-based component
- Communities don't need to apply for the funding but will need to <u>provide planning and reporting</u> <u>documents</u> to the government to receive the grants.
- Less than 100K population municipalities are eligible
- Activities that improve the performance or increase the capacity of existing water and wastewater infrastructure are eligible.





- Asset Management
- Permanent source of funding for municipal infrastructure
- Used for road building far too often
- Really would benefit from diversity in application of projects





Municipal Natural Assets Initiative (MNAI)

- Seeking Expressions of Interest in Watershed-level Project in Ontario's Greenbelt
- Up to 7 smaller/rural local governments
- Help participating local governments identify, prioritize, value and manage key natural assets.
- More info on project considerations

What is Natural Capital?





Climate Lens

- Requirement for Canada Infrastructure Program, DMAF, Smart Cities Challenge
- Assessing the greenhouse gas emissions and climate resilience of proposed infrastructure projects
- Thresholds for Climate Lens Requirement





Green Municipal Funds

- Brownfields
- Energy
- Transportation
- Waste
- Water
- Can take a collaborative approach (more than one municipality and work with other stakeholders but municipality needs to apply)





Municipal Funding Tools

- Water Pricing
- Stormwater Fee
- Local Improvement Charges
- Development Fees
- Density Bonusing
- Natural Capital Valuation
- Land Acquisition Trust/Fund
- Tax Relief for Natural Capital
- Green/Cool Roof by-laws





Climate Adaptation Partners Projects

- Municipal Natural Assets Initiative
- Edmonton Regional Resilience Exchange
- Nova Scotia Municipal Climate Action Initiative
- BC NE Climate Risk Network (NECRN)
- CC Adaptation in Grand River Watershed Wastewater Optimization
- Climate and Asset Management Network
- Adaptation Changemakers
- Green Infrastructure for Climate Change Adaptation (Green Infrastructure Foundation)
- Green Infrastructure Coalition
- Green Infrastructure Road Map
- 100 Resilient Cities
- CVC LID Evaluation



Natural Capital Business Cases

- In the 1990's, the City of New York paid landowners in its watershed more than \$1 billion to change their farm management practices to prevent animal waste and fertilizer from washing into the waterways.
- In doing so, the City avoided spending \$6-8 billion on a new water filtration plant and \$300-500 million annually to run it.





Natural Capital Business Cases

- Costa Rica began paying landowners \$42 per hectare per year to preserve forest. At the time, Cost Rica had the highest deforestation rate in the world, now it is among the lowest.
- Norway is paying Indonesia \$1 billion to preserve rainforest for carbon storage and sequestration to limit the impacts of climate change.
- In Vietnam, an investment of \$1.1 million in mangroves that protect coastal regions from flooding, saved the country \$7.3 million annually in dike maintenance.



Natural Capital Integration

- Natural Capital and Why it Matters
- TEEB Approach to Valuing Natural Capital
- ICLEI Best Practice for Biodiversity Data
- Greenbelt Valuation
- Flamborough Burlington Natural Capital
- Rouge National Park Valuation
- Town of Aurora Natural Capital Assets





Climate Change Considerations Transparency

- Need to have a climate lens light (so that a climate lens is not only applied to the big projects)
- Need to be incorporated into council reports
- What are the climate change implications of this report
- How has the climate lens been considered/options available
- Decision that was made and why
- Tracking the outcomes of those decisions over time in an open and transparent manner.





Thank You!

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Durham Region Natural Environment Climate Change Summit

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thank you

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