

HALIFAX

**Sustainability
Initiatives &
Environmental
Management**

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Sustainability Starts with Council

- RMPS/ICSP
 - Goal: to achieve a shared vision of the future of Halifax – **healthy, vibrant and sustainable communities** – without compromising the character that makes Halifax a distinct & attractive place to live
- MCCAP
- Highlights across the organization include:
 - Urban Forest Master Plan
 - Halifax Green Network Plan
 - Hazards, Risks & Vulnerabilities Assessment
 - Solid Waste – Clear bags program
 - Stormwater Management – bylaw development
 - Centre Plan – under development
 - Community Energy Plan – update underway
 - AT Strategy, bike lanes, roundabouts

Energy & Environment

- Corporate lead on policy, performance measurement, project development, and issues management as they relate to energy and the environment.
- Services include:
 - Sustainability Projects - Corporate
 - Sustainability Projects - Community
 - Energy and Environmental Advisory Services
 - Policy and Plan Development and Management
 - Performance Measurements

Energy Efficiency

- Building Energy Assessments
- Lighting Projects
 - Building retrofits, streetlights, traffic lights
- Natural Gas Conversions
- Sustainability Funding Mechanism for Energy Efficiency
 - Calculate estimated savings from efficiency projects
 - Savings funneled to a reserve for future efficiency initiatives

Renewable Energy – Solar City

- Residential rooftop solar panels for domestic hot water heating
- Innovative financing system through LICs
- 2 year pilot program complete
- Implemented through HRM to provide less risk, financing
 - 372 systems installed, 227 have monitoring
 - Total eCO₂ displaced **660,596 kg/year**
 - Total energy displaced **1,274,411 ekWh/year**
- Council approved new 3-year program considering solar air, PV and hot water, under development
- Monitoring data proving very valuable
 - Academic research
 - Upcoming Hackathon by Innovacorp using Solar City data





BLUE FLAG

Water Management

- Water quality monitoring & reporting
 - lifeguarded beaches in HRM
 - lakes and rivers associated with impacts from change in land use through municipally regulated developments
- Watershed studies for proposed future developments
- Blue Flag Beach certification program
 - 1st beach in NS & east of ON: Birch Cove Beach
- Lake/watershed and flood management
- Environmental policy development & implementation

HALIFAX

Mitigating Risk - Contamination

- Manage response and cleanup of contamination events
- Draft policy for the Management of Contaminated Sites under review
- Developing information management
 - to share contamination information across the organization and externally when necessary
- Work with Real Estate, Facilities Management, Facility Development, Planning, Risk and Insurance and others
- Creating a detailed fuel tank inventory for HRM-owned tanks

Mitigating Environmental Risk

- Drafting an approach to developing an Environmental Protection Framework for HRM
 - recommended by the municipal Auditor General's Office as a result of their investigation into a fuel spill at the Burnside Transit depot in 2014
- Draft Corporate Risk Management Strategy for HRM completed and submitted to Council for review
- Work with Corporate Health & Safety re: Asbestos, PCBs, mould etc.
 - Management plans, Health & Safety plans

Climate Change Mitigation

- HRM became a member in 1997 of the FCM's Partners for Climate Protection Program
- Commitment to track and reduce greenhouse gas emissions
- Corporate GHG Reduction target adopted by Council is **30% below 2008 levels by 2020**
- Next inventory planned this winter for fiscal 2013/14 data to assess progress towards target
- Measures GHGs from buildings, fleet and lighting
- Report this to FCM and CDP
- Community inventory last done with 2009 data, need to continue work at the community level

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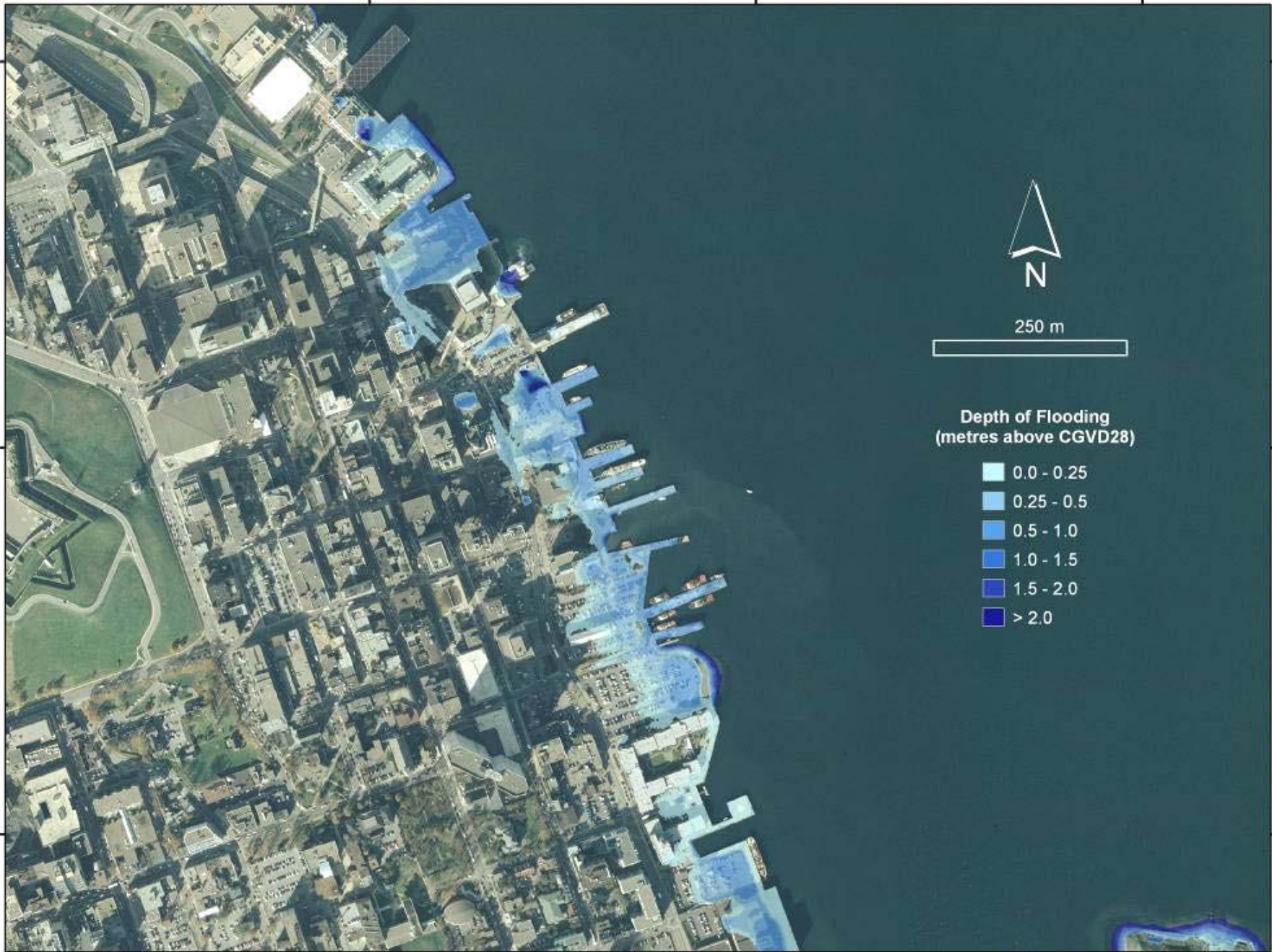
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Natural Environment + Built Environment + Flooding = VULNERABILITY

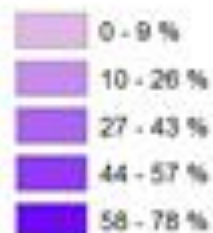
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Downtown
Dartmouth

Halifax Harbour

Downtown
Halifax

Overall Vulnerability in 2100



Planning for Sea Level Rise

- Municipal Planning Strategy and Land Use By-law for downtown Halifax waterfront area
- Ground floor elevation must be minimum 2.5 m above the ordinary high-water mark
- HRM uses Development Agreements on waterfront properties to encourage appropriate development
- Bilateral contracts between HRM and landowner
 - E.g. King's Wharf, Dartmouth waterfront
- Establishing funding for re-flying LIDAR next year and extending coverage
- Dalhousie University's School of Planning doing interesting flooding and visualization research

Improving City Resiliency

- Rockefeller Foundation 100 Resilient Cities competition
- Emergency preparedness
- Many studies, programs & projects underway

Floodplain	Watershed	Shoreline erosion
Water Quality Monitoring	Stormwater	Climate Adaptation
Housing affordability	Coastal flooding	Food security

- Partnerships with government departments, NGOs, academic institutions, industry, public
- Strive to consider resiliency in every project
 - Point Pleasant Park, Seawall along Northwest Arm

Thank You

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