

**Environment & Sustainability Standing Committee  
September 5, 2013**

**TO:** Chair and Members of Environment & Sustainability Standing Committee

Original Signed

**SUBMITTED BY:**

Jane Fraser, Director, Planning & Infrastructure

**DATE:** August 6, 2013

**SUBJECT:** Municipal Climate Change Action Plan Submission

**INFORMATION REPORT**

**ORIGIN**

As a requirement for the 2010-2014 Federal Gas Tax Extension Agreement and the Municipal Funding Agreements (MFAs), municipalities will be required to prepare and submit to Service Nova Scotia and Municipal Relations (SNSMR) a Municipal Climate Change Action Plan (MCCAP) by December 31, 2013.

**LEGISLATIVE AUTHORITY**

2010-2014 Federal Gas Tax Extension Agreement and the Municipal Funding Agreement.

**BACKGROUND**

The April 4, 2013, report to Environment & Sustainability Standing Committee: *Gas Tax Requirement: Municipal Climate Change Action Plan* outlined the background and origin of the required submission to Service Nova Scotia and Municipal Relations (SNSMR).

**DISCUSSION**

**Attachment One: HRM's MCCAP Submission Approach Letter**

This attachment summarizes the MCCAP submission approach adopted by the Halifax Regional Municipality (HRM), which includes:

1. An overview of how existing policy, planning, and administrative activities have met the MCCAP requirements;
2. An overview of how Climate Change is embedded in the Regional Plan;
3. An overview of the operationalized work related to climate change adaptation; and
4. Demonstration of how adaptation is engrained in municipal activities.

This approach allows HRM to continue to move forward as a leader in the mitigation of pollutants to the environment and adaptation to climate change, by focusing on the operationalization of adaptation and maturation of effective policy in lieu of working retroactively to deconstruct and reassemble past work.

**Attachment Two: Municipal Climate Change Action Planning Report (Draft)**

This report represents the most current version of HRM's MCCAP submission and summarizes how the municipality has complied with SNSMR's requirements, based on the approach outlined in Attachment One.

Key findings highlighted in the report include:

***Climate Change Adaptation:***

<b>Recent/Current Operational CCA Initiatives</b>
<b><i>Innovative and Responsive Funding</i></b>
HRM has capitalized on a number of Provincial and Federal funding opportunities including the <i>Atlantic Climate Adaptation Solutions</i> funding as well as the Province of Nova Scotia's <i>Climate Change Adaptation Fund</i> .
<b><i>Enhance Community Outreach</i></b>
HRM has employed the use of various public art initiatives to increase public awareness regarding the local implications of climate change.
HRM staff has collaborated to present content and completed pilot projects associated with the <i>Climate SMART Community Action Guide to Climate Change and Emergency Preparedness</i> in rural areas of HRM (including Eastern Passage). ♦
HRFE's " <i>Fire SMART</i> " presentations provide fire prevention and preparedness information through public education.
HRM is currently acting as a program sponsor for Clean Nova Scotia's RainYards initiative, which is working to improve residential stormwater management in the Oakhill Lake Community.
HRM staff is developing a two (2) year project to revise the Community Energy Plan (CEP). ♦

<b>Recent/Current Operational CCA Initiatives</b>
In 2007, HRM released the <i>Climate Change: Developers Risk Management Guide</i> as a voluntary climate change and best management practices guide.
HRM websites have historically been used to communicate information regarding climate change to the public (including the E&E homepage, select Naturally Green Newsletters, and the HRFE website dedicated to wildfire safety awareness).
HRM Emergency Management Office's (EMO) relationship with the Amateur Radio Community represents an expanded emergency communication ability for HRM to employ during climate related emergencies (when internet access is not available).
<b><i>Improve HRM Inreach</i></b>
The HRM EMO led Business Continuity Planning (BCP) initiative includes a framework for the coordination and collaboration between HRM BUs related to emergency responses associated with CCA.
HRFE currently collaborates with the Community Planning department of HRM regarding discretionary approval development agreements as well as large scale by-right subdivision developments.
<b><i>Hazard and Risk Mapping</i></b>
HRM EMO's planned update to the Master Emergency plan will include revisions to the Regional Fire, Sector Profile Mapping, Critical Infrastructure, as well as Hazard Risk and Vulnerability Assessment components.
The 2007 acquisition of LiDAR (Light Detection and Ranging data) for 1400 square kilometres of HRM, including Halifax Harbour and the East Petpeswick Peninsula (located within Musquodoboit Harbour) has been used to conduct a vulnerability matrix analyses and associated map for harbourfront properties.
Floodplain delineations (such as those completed for Bedford and Sackville) are reviewed by HRM staff, as directed by the Halifax Charter and the 5 (five) Statements of Provincial Interest Regarding Flood Risk Areas.
<b><i>Consideration of Climate Change in Business Planning</i></b>
CCA content was reflected in the 2013/14 business plans reviewed in this report (including: TPW; P&I; C&RS; HRFE; Finance and Information, Communication and Technology; Halifax Regional Police; Legal, Insurance and Risk Management Services; Metro Transit; etc.).
CCA business planning content was also highlighted by the 25 capital projects outlined in Section 3.3.5.
<b><i>Life Cycle Assessment</i></b>
HRM's commitment to including life cycle costing is currently reflected in the business plans developed for the following capital projects that relate to both CCA and CCM: ♦ <ul style="list-style-type: none"><li>• Consulting Buildings (Project No. CBX01268)</li><li>• Mechanical – Category 6 (Project No. CBX01269)</li></ul>

<b>Recent/Current Operational CCA Initiatives</b>
<b><i>Intergovernmental Collaboration</i></b>
<p>HRM has worked with the Provincial government through a variety of funding programs and through the submission of comments/involvement with the development of new policies and strategies, including:</p> <ul style="list-style-type: none"> <li>• The Union of Nova Scotia Municipalities and Province of Nova Scotia’s Memorandum of Understanding on Climate Change;</li> <li>• The Environmental Goals and Sustainable Prosperity Act (EGSPA) and the Provincial Climate Change Action Plan;</li> <li>• The Regional Adaptation Collaborative – Atlantic Canada Adaptation Solutions (RAC-ACAS); and</li> <li>• The Emergency Response Intergovernmental Collaboration and the Canadian Institute of Planners.</li> </ul>
<p>To date, municipal, provincial and federal government agencies have collaborated and agreed to the proposed HRM EMO Incident Command System (ICS).</p>
<p>HRFE’s “<i>Fire SMART</i>” presentations represent a collaborative partnership between HRM and the Provincial government.</p>
<b><i>Updating Design Criteria</i></b>
<p>TPW Design &amp; Construction staff is actively involved with the Transportation Association of Canada (TAC).</p>
<p>The recapitalization of the Northwest Arm Seawalls and Cole Harbour Salt Marsh Trail used best available science to inform project specifications including climate change considerations.</p>
<p>HRM has developed voluntary Sustainability Guidelines in the Downtown Halifax Land Use By-Law to mirror LEED silver certification including potential CCA responses (such as installing grey water systems that recover non-sewage waste water or uses roof, or ground storm water collection systems, or recover ground water from sump pumps).</p>
<b><i>Other</i></b>
<p>TPW incorporates the use of a Surface Distress Index (SDI) to rate the condition of road surfaces. Cold and hot asphalt patching methods allow for HRM to respond to impacted road conditions all year round.</p>
<p>HRM applies liquid brine (a mixture of salt and water) to roads up to 48 hours before an expected snowfall or freezing rain event.</p>
<p>HRM fleets are serviced prior to the onset of each season and HRM is investing in more multipurpose fleets which are operational all year round (as opposed to vehicles which are confined to only winter or summer use).</p>

◆ Denotes correlation with CCM operational initiative.

Recent/Current Policy Related CCA Initiatives
Draft 2 of the HRM Regional Municipal Planning Strategy (RMPS) includes a chapter (2.5.1 Climate Change) and associated policy statements (Policy E-26) dedicated to climate change.
HRM has developed voluntary Sustainability Guidelines in the Downtown Halifax Land Use By-Law to mirror LEED silver certification including potential CCA responses (such as installing grey water systems that recover non-sewage waste water, or uses roof or ground storm water collection systems, or recover ground water from sump pumps).
HRM has created policies related to climate change based on floodplain mapping, riparian buffers and sea level rise (i.e. such as, the Community Plans for Bedford and Sackville, Schedule W of the Downtown Halifax Land Use By-Law, and Policy E-16 of Draft 2 of the RMPS).
A hydrogeological assessment requirement has been added to Chapter 3 (the Settlement and Housing Section) of Draft 2 of the RMPS.
The Point Pleasant Park Master Plan considers a mix of plant cover considering species selection based on potential climate change impacts.
HRM is currently conducting a planned five-year review of the Active Transportation (AT) Priority Plan. ≈
Policy recommendations are provided by the Urban Forest Master plan (UFMP) related to tree species selection under a changing climate.
Chapter 2 of Draft 2 of the RMPS includes the CEP and associated policy statements related to climate change. ≈
Watershed studies conducted in association with the Watershed Planning section (Chapter 2.4) of Draft 2 of the RMPS includes climate change considerations.
Chapter 8.7.1 (Electrical and Telecommunications Lines) of Draft 2 of the RMPS notes that <i>HRM has commissioned various studies to examine the benefits of underground utilities in terms of cost, reliability, and aesthetics</i> , as well as the requisite policy statements.

≈ Denotes correlation with CCM policy related initiative.

***Climate Change Mitigation:***

Recent/Current Operational CCM Initiatives
Halifax Regional Municipality Corporate Plan to Reduce Greenhouse Gas Emissions 2012-2020.
HRM staff has collaborated to present content and completed pilot projects associated with the <i>Climate SMART Community Action Guide to Climate Change and Emergency Preparedness</i> in rural areas of HRM (including Eastern Passage). ♦
CCM was reflected in the 2013/14 HRM business plans reviewed in this report (including: TPW; P&I; and Finance and Information, Communication and Technology).
HRM staff is developing a two (2) year project to revise the CEP. ♦
CCM business planning content was also highlighted by the 18 capital projects outlined in Section 4.1.

♦ Denotes correlation with CCA operational initiative.

**Recent/Current Policy Related CCM Initiatives**

HRM is currently conducting a planned five-year review of the Active Transportation (AT) Priority Plan. ≈

HRM has developed voluntary Sustainability Guidelines in the Downtown Halifax Land Use By-Law to mirror LEED silver certification including CCM content (including: transportation, water conservation, construction waste management, atmosphere, materials, indoor air quality, building materials, and energy conservation considerations, etc.) ≈

Chapter 2 of Draft 2 of the RMPS includes the CEP and associated policy statements related to climate change. ≈

Chapter 2 of Draft 2 of the RMPS includes policy statements associated with Wind Energy.

≈ Denotes correlation with CCA policy related initiative.

Based on the information collected and reviewed during the study, it was determined that HRM has complied with the MCCAP Guidebook requirements for both CCA and CCM.

**FINANCIAL IMPLICATIONS**

This report does not create any implications to the 2013/14 operating or project budgets.

**COMMUNITY ENGAGEMENT**

There was not a community engagement component of this report.

**ATTACHMENTS**

Attachment 1: *MCCAP Submission Approach Letter*  
(Available at: <http://www.halifax.ca/environment/documents/1-MCCAPSubmissionApproachLetter.pdf>)

Attachment 2: *Municipal Climate Change Action Planning Report*  
(Available at: <http://www.halifax.ca/environment/documents/2-MunicipalClimateChangeActionPlanReport.pdf>)

Attachment 2a: *Appendix A – Adaptation Team/Committee References*  
(Available at: <http://www.halifax.ca/environment/documents/2a-MunicipalClimateChangeActionPlanReport-AppendixA-AdaptationTeamCommitteeReferences.pdf>)

Attachment 2b: *Appendix B – Applicable Climate Change Adaptation References*  
(Available at: <http://www.halifax.ca/environment/documents/2b-MunicipalClimateChangeActionPlanReport-AppendixB-ApplicableClimateChangeAdaptationReferen.pdf>)

Attachment 2c: *Appendix C – 2013 Corporate Consultation Summaries*  
(Available at: <http://www.halifax.ca/environment/documents/2c-MunicipalClimateChangeActionPlanReport-AppendixC-2013CorporateConsultationSummaries.pdf>)

Attachment 2d: *Appendix D – Applicable Climate Change Mitigation References*  
(Available at: <http://www.halifax.ca/environment/documents/2d-MunicipalClimateChangeActionPlanReport-AppendixD-ApplicableClimateChangeMitigationReferen.pdf>)

Attachment 2e: *Appendix E – MCCAP Overall Compliance Summary*  
(Available at: <http://www.halifax.ca/environment/documents/2e-MunicipalClimateChangeActionPlanReport-AppendixE-MCCAPOverallComplianceSummary.pdf>)

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A copy of this report can be obtained online at <http://www.halifax.ca/commcoun/cc.html> then choose the appropriate Community Council and meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

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