ΗΛLIFΛΧ

Building Resiliency in HRM

Shannon Miedema, Energy & Environment Barry Manuel, Emergency Management Organization Coordinator

Environment & Sustainability Standing Committee October 1, 2015

Climate Risks

- Key climate risks for the municipality include:
 - Sea level rise
 - Coastal and overland flooding
 - Extreme weather events leading to infrastructure damage, community isolation, power failures etc.
 - Wildfire, especially at the urban/forest interface
 - Invasive species
 - Changes to arable lands/climatic zones
 - Changes in species makeup/biodiversity



Resiliency in HRM

- <u>Urban Resilience</u>: the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what chronic stresses and acute shocks they experience
- Involves emergency management as well as environmental, economic, and social considerations
- HRM considers resiliency primarily as it relates to the Council Priority of Healthy Communities



Improving City Resiliency

• Many studies, programs & projects underway

Floodplain & watershed studies	Stormwater management	Water quality monitoring
Shoreline erosion controls	ICSP/MCCAP	Risk management frameworks
Housing affordability	Coastal flooding/SLR	Food security
Urban Forest Master Plan	LIDAR / Vulnerability mapping	Halifax Green Network Plan
Community Energy Plan	100 Resilient Cities	Solar City 2.0
Greenhouse gas emissions reduction plan & 2020 target	EU Policy Exchange with Estonia	Climate adaptation economic cost- benefit studies



EMO – Joint Emergency Management

- EMO set up Joint Emergency Management (JEM) Teams in 5 of 8 areas
 - mission to promote awareness of local community resources, train local agencies to work together and provide a structure for coordinated local emergency response.
 - JEMs needed in Bedford/Sackville, Halifax & Dartmouth
- To allow communities to prepare for, and respond quickly to, a wide range of emergencies.
- To increase community resiliency in HRM







Benefits of JEM Partnership

- Access to community local knowledge
- Two-way information channel
- Builds relationships in a pre-response environment, can then use these relationships in a response situation
- Builds trust between HRM and residents
- EMO and Energy & Environment have collaborated on climate change preparedness
 - Climate hazard mapping workshops in Eastern Passage/Cow Bay
 - Idea to connect locally on climate adaptation through the JEM structure



HRM Climate SMART Communtiy Action Guide to Climate Change and Emergency Preparedness





Climate Mapping Workshop





Hazard, Risk & Vulnerability Analysis (HRVA)

- Atlantic Security Group updated HRM's HRVA, completed in March 2015
- Important tool for emergency planning



- Typically, the more spent on prevention, the less spent on response
- These 5 pillars of emergency management can be applied to climate adaptation & resiliency



Thank You

Shannon Miedema Acting Manager, Energy & Environment Planning & Development

Barry Manuel Coordinator, Emergency Management Organization



Food Security

- Partnered with Halifax Food Policy Alliance (HFPA)
- Recently published Food Counts: Halifax Food Assessment
 - Reporting on the state of community food security in Halifax.
 - To increase understanding of local food system to develop a food strategy and municipal policies that better support community food security.





Housing

- Accessing affordable, adequate, and suitable housing is a pressing concern for many individuals and families.
- Housing affordability is a critical element in the social wellbeing of all residents of the Halifax region.
- HRM Staff has recently released Halifax Regional Municipality Housing Needs Assessment
- Solar City 2.0 (three-year community solar program) may include a focus on energy affordability and assisting the low to mid-low income demographic.



