

HALIFAX

Moving from Planning to Implementation on Climate Change Adaptation

March 22, 2023





Climate Change Impacts

- Coastal Flooding
- Overland Flooding (rain, rivers)
- Extreme wind
- More frequent and intense hurricanes
- Erosion
- Extreme heat
- Drought
- Wildfires

HALIFAX

HalifACT

Acting on
Climate
Together



Resilient Environment

- Municipal Natural Asset Initiative (MNAI) inventory completed
- MNAI pilot now underway in Nine Mile River Watershed
- Supporting an update to our Urban Forest Master Plan
- Advancing Nature Based Climate Solutions





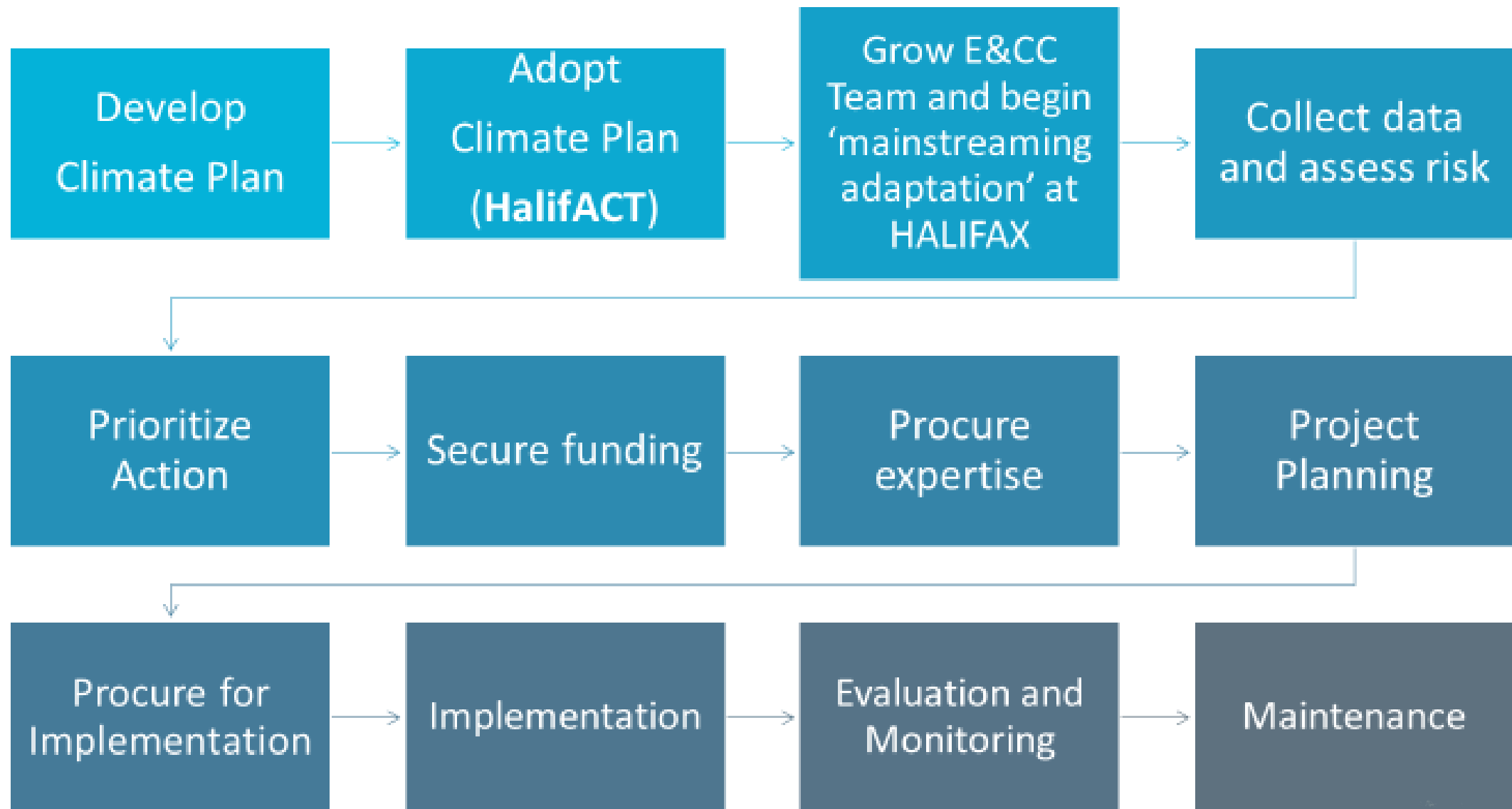
Resilient Communities

- Climate engagement and education
- Food systems resilience and emergency planning
- Hazard Risk Vulnerability Analysis

Resilient Infrastructure

- Extreme Water Level report
- Climate hazard mapping
- Critical infrastructure inventory
- Resilient retrofits
- Climate resilient building standards
- Land-use policy upgrades

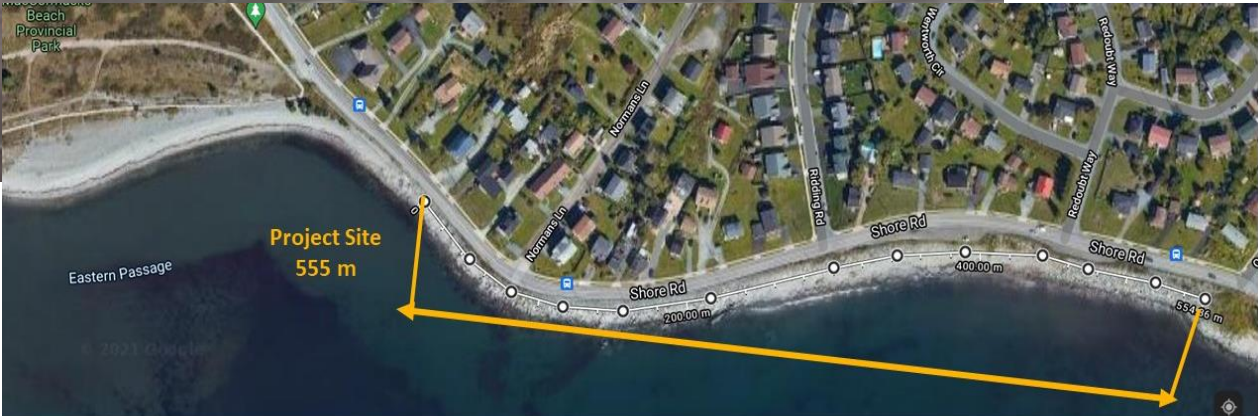


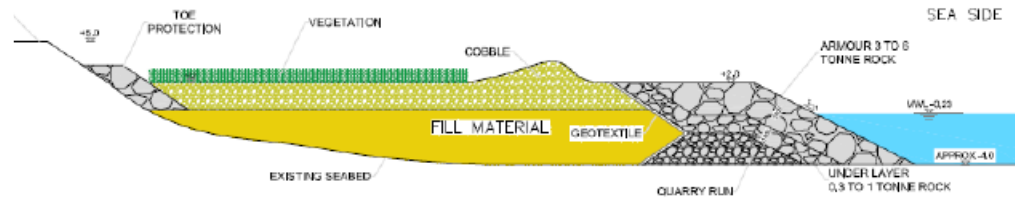


**Moving to
implementation
of adaptation
projects**

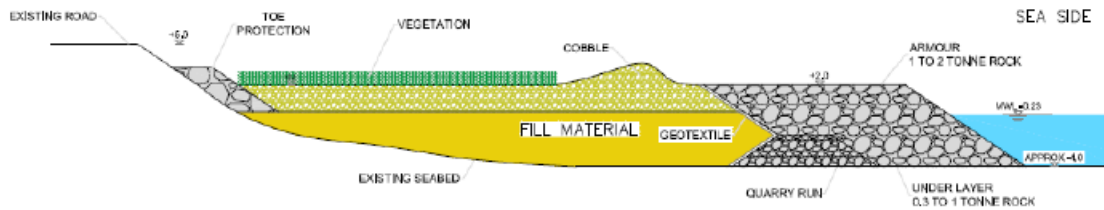


Shore Road, Eastern Passage

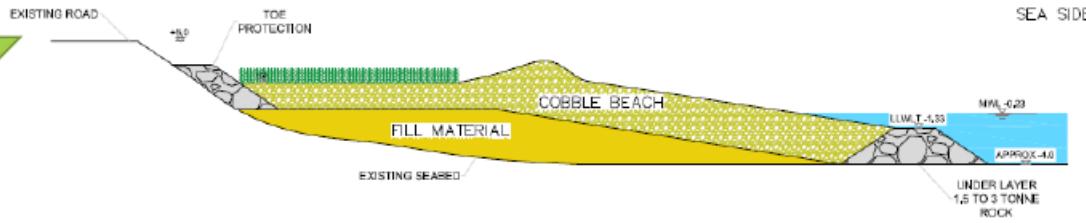




OPTION 1-A: DYNAMIC COBBLE BEACH WITH EDGE PROTECTION (CONVENTIONAL REVETMENT)



OPTION 1-B: DYNAMIC COBBLE BEACH WITH EDGE PROTECTION (DYNAMICALLY STABLE REVETMENT)



OPTION 1-C: DYNAMIC COBBLE BEACH WITH SILL

Option 1-A:

- Stable revetment
- Larger stone size (D50 = 1.2 m)
- Less aesthetic

Option 1-B:

- Dynamic berm revetment
- Reliable however some movement may occur
- Smaller stone size (D50 = 0.8 m)
- More aesthetic & natural

Option 1-C:

- Submerged sill
- Provides some protection for cobble but greater loss is expected
- Smaller stone size (D50 = 0.9 m)
- Higher maintenance
- Most natural & aesthetic sub-option

Best Practices: Implementing Adaptation

- Create demonstration sites – **Shout out to Mahone Bay’s Living Shoreline (Coastal Action)**
- Collaborate with others who are struggling with the same challenges – share lessons learned
- Incorporate Nature Based Climate Solutions into design standards
- Communicate the benefits of adaptation actions
- ‘Mainstream adaptation’ across your organization – build champions, ensure common understanding, provide training to build expertise and familiarity



<https://www.mahonebaylivingshoreline.com/>

Challenges

How do we create space to try innovative approaches?

- NO ROOM TO FAIL
- Lack of funding incentives to innovate and experiment

How to prove the ROI on adaptation?

- Need long time horizon to prove effectiveness
- Complex systems – hard to discern impact

Celebrate successes



2022 FEEDBACK REPORT



This report provides information on your jurisdiction's score on the [2022 Questionnaire](#), how it compares with others and insights on how to improve climate action and transparency.

Request a score feedback call

Your jurisdiction's reported data has been scored against the [CDP Scoring Methodology](#). Scores are private to jurisdictions, though highest scoring jurisdictions are publicly recognized in our annual 'A List'.

Email: citiesna@cdp.net

YOUR SCORE

Halifax Regional Municipality,
NS

Region Canada

Country Canada



Leadership Level

Your jurisdiction has demonstrated best practice standards across adaptation and mitigation, has set ambitious goals and has made progress towards achieving those goals.



Thank You

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