



Mahone Bay Living Shoreline Flood Protection and Shoreline Stabilization Project

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Land Acknowledgement

Coastal Action acknowledges that we live and work on Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq. This territory is covered by the “Treaties of Peace and Friendship” which Mi'kmaq and Wolastoqiyik (Maliseet) People first signed with the British Crown in 1725.



Who We Are

Coastal Action is a charitable organization based on the south shore of Nova Scotia, Canada, that believes in safeguarding a healthy environment for future generations. For over 30 years, our goal has been to promote the restoration and conservation of our environment through research, education, community engagement, and action.

We work in five core areas: **Species at Risk & Biodiversity, Coastal & Marine, Watersheds & Water Quality, Climate Change, and Environmental Education.**

OUR VISION

A healthy environment for future generations.

OUR MISSION

To restore and protect the environment through research, education, and action.

Partners



TransCoastal
 Adaptations
Centre for Nature-Based Solutions



Funders



Mahone Bay Living Shoreline



Project overview:

- 60-m demonstration site
- 100-m expansion planned for 2025
- Nature-based solution

Project elements:

- Planning
- Construction
- Community Engagement
- Research

Our Living Shoreline Components



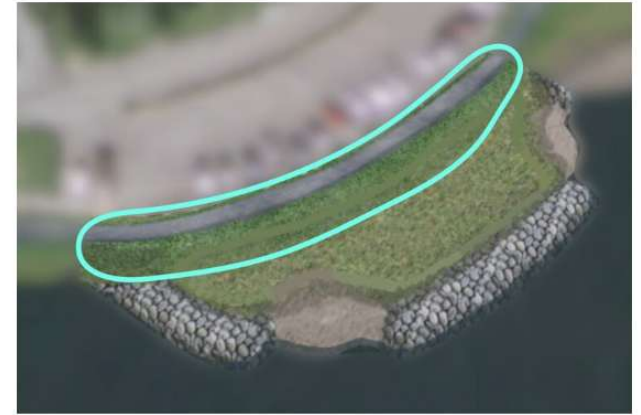
Rock Sills

A hard engineering structure that runs parallel to the shoreline. Rock sills help reduce wave energy and storm surge impact.



Tidal Wetland

Fills the area between the rock sill and the shoreline with planted native species. Tidal wetlands naturally filter stormwater runoff, and reduce storm surge and wave energy. They additionally create valuable coastal habitat for fish and bird species.

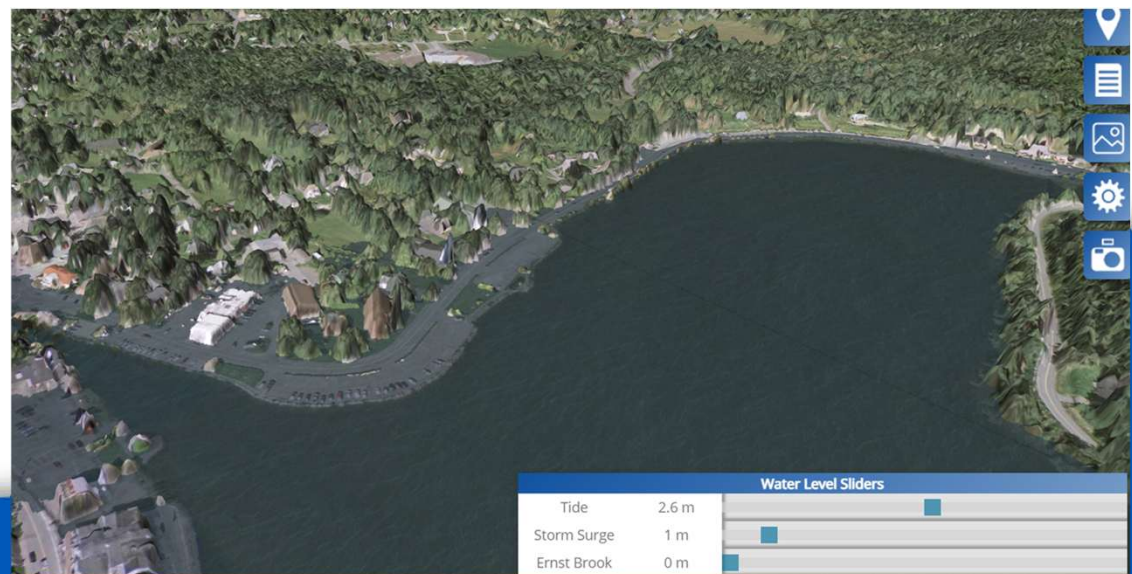


Vegetated Bank

Graded areas planted with native shrubs and herbaceous perennials. Vegetated banks help to stabilize the soil.

Community Engagement

- Visualization tools
- Community planting days
- Presentations
- Showcases
- Workshops



Research & Monitoring

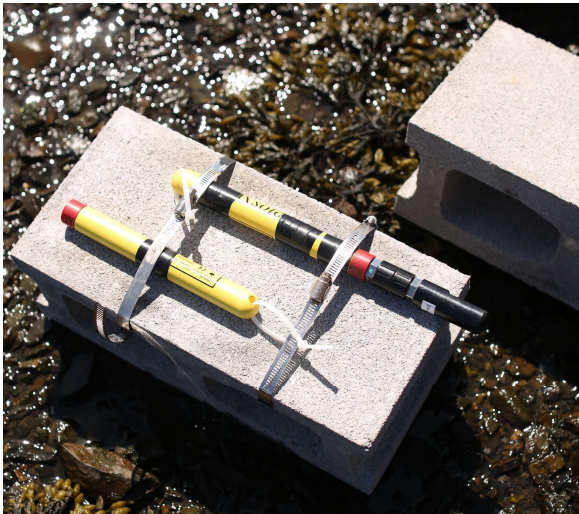


Research to investigate the effect on:

- Climate change impacts
 - Erosion, flooding, and contaminated runoff

The Monitoring Program includes:

- Hydrological monitoring
- Geospatial monitoring and bathymetry
- Storm incident monitoring
- Fish habitat, vegetation, and ecological monitoring

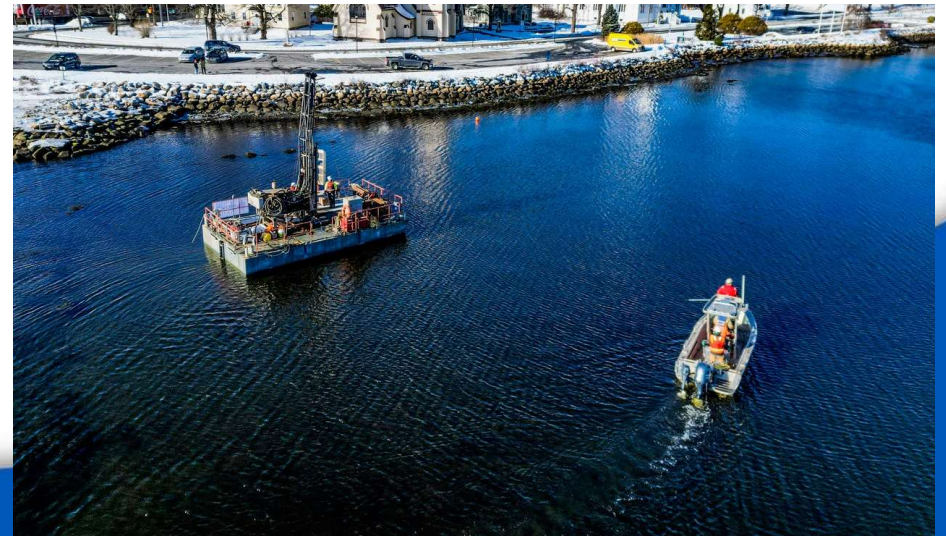
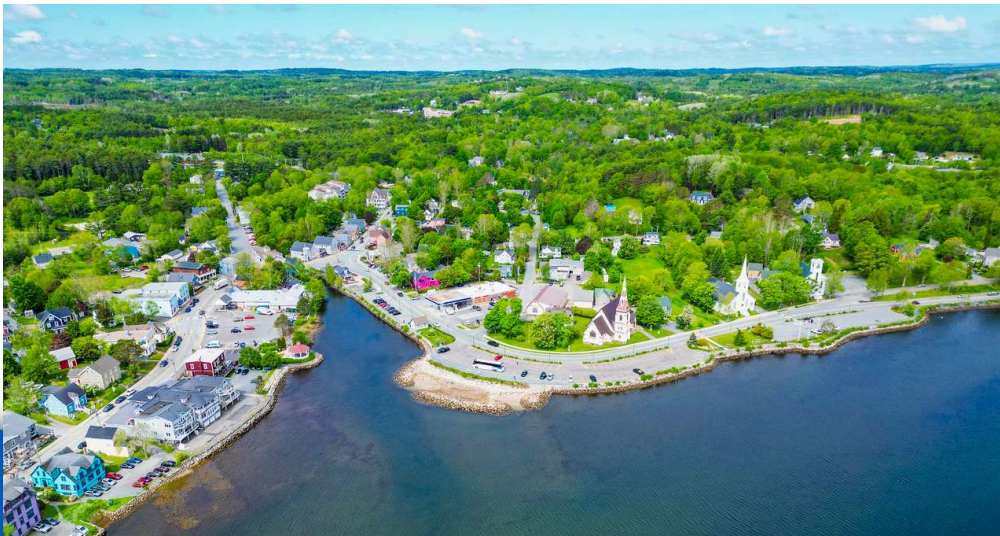


Find the publicly available monitoring report

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

Studies of Site Conditions

- Habitat Assessment
- Geotechnical Investigation
- Archeological Resource Impact Assessment (ARIA)



Challenges



- **Permitting** process challenges and delays
- Adjustments to the project **schedule**
- Adapting to inflated **costs** as timelines were pushed
- Acquiring more **funding** to meet the change in cost

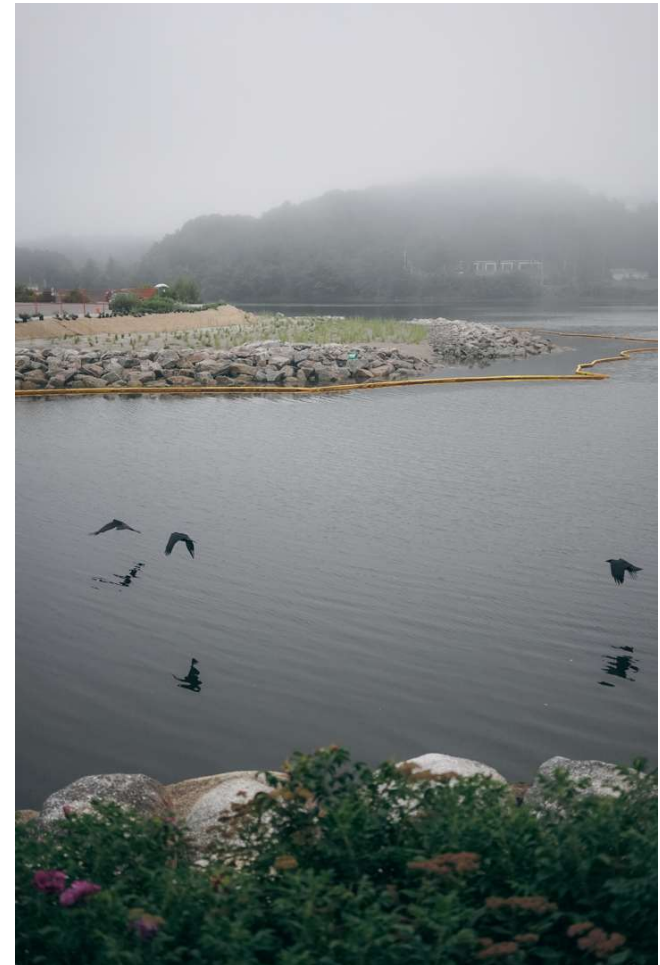
Key Successes

- Cross-sector **collaboration** between academia, industry, local government, and a community-based environmental organization
- Obtaining locally sourced and adapted tidal **wetland plant** stock
- Positive involvement and support from the **community**
- Acquiring the additional **funding** necessary to see the project implemented



Next Steps

- Research & monitoring continues
- 100-m expansion expected to start in 2025
- More community engagement
- Adaptive management



Thank You



To stay up to date with the Mahone Bay Living Shoreline project, visit our website at:

www.mahonebaylivingshoreline.com



You can also follow along with Coastal Action's other projects on our website www.coastalaction.org, our social media [@coastalaction](#), or sign up for our newsletter, **the Coastal Chronicle**!