

Making Room For Wetlands: St. Croix Edition

Image: Belcher Street Marsh Managed Dyke
Realignment and Tidal Wetland Restoration Site

Credit: CBWES Inc.

Project Overview:

The *Making Room for Wetlands: St. Croix Edition* will apply the successful *Making Room for Wetlands (MRFW)* managed dyke realignment and tidal wetland restoration framework to a stretch of the St. Croix River Estuary in the Upper Bay of Fundy, Nova Scotia. The project will restore sections of tidal wetlands by improving drainage and/or removing or realigning dyke and aboiteau infrastructure from dykeland parcels.

This project will provide critical habitat to support populations of Atlantic Salmon (plamu), Atlantic Tomcod (punamu) and American Eel (ka't) among other fish species. The restored tidal wetlands will help to reduce the risk of flooding in surrounding communities by accommodating increased tide levels and river discharge. The project will also provide climate change mitigation and adaptation effects by increasing carbon sequestration and reducing Greenhouse Gas (GHG) emissions. The project has 4 main goals:



Credit: CBWES Inc.


Belcher Street Marsh Managed Dyke Realignment and Tidal Wetland Restoration Site (Year 4 post-restoration, July 2021)

1. Restore tidal wetland habitat through managed dyke realignment;
2. Weave in a Two-Eyed Seeing approach and celebrate the cultural and historical significance of the St. Croix River to the Mi'kmaq;
3. Restore natural coastal processes to sequester carbon and reduce GHG emissions; and
4. Increase educational employment opportunities for youth, women and Black, Indigenous, and people of color (BIPOC).

Location: Hants County, NS

Project Funding: Aquatic Ecosystems Restoration Fund (Department of Fisheries and Oceans Canada)

Funding Years: 2022-2027

 Fisheries and Oceans Canada / Pêches et Océans Canada



Credit: TCA

Converse Marsh Managed Dyke Realignment and Tidal Wetland Restoration Site (Year 5 post-restoration, July 2023)

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Rationale:

Approximately 80% of the tidal wetlands in the Bay of Fundy have been lost. This has resulted in loss of biodiversity and critical habitat, increased GHG emissions, and loss of other ecosystem services provided by tidal wetlands.

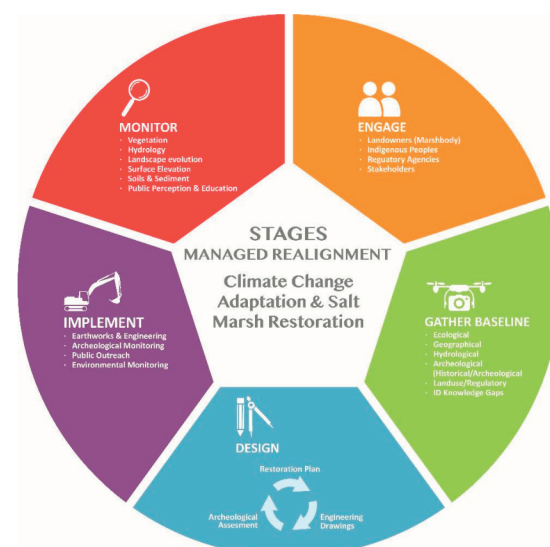
The dykeland system in Nova Scotia is currently undergoing upgrades through the Nova Scotia Department of Agriculture (NSDA) led Dykeland System Upgrade Project (DSUP) to address failing infrastructure in the face of climate change. The *Making Room for Wetlands* project works on sites identified by NSDA, but that are not able to be addressed through DSUP, to both protect dykeland communities and restore tidal wetlands and their associated benefits and ecosystem services.

What to Expect:

All sites were identified in consultation with NSDA. Preliminary baseline data collection is currently underway at some sites. Field data being collected includes biological and physical processes, existing ecosystem conditions, and archaeological assessments.

There are currently **no approved designs for any sites**. Baseline data and analysis will support the decision-making process to design the most appropriate management option for each site, maximizing benefits and minimizing disturbance.

Once baseline data has been collected and designs appropriate to a site have been approved, the design can be applied, and the tidal wetland restoration process can begin (on applicable sites). The sites will then be monitored in the initial years post-restoration to make sure that the design is working as planned, introduce adaptive management to address unforeseen issues, and determine how the site is contributing to the overall project goals.



MRFW Framework for Managed Dyke Realignment and Tidal Wetland Restoration

Interested in learning more about the project and successful *Making Room for Wetlands* case studies?

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