

EGU22-12832

<https://doi.org/10.5194/egusphere-egu22-12832>

EGU General Assembly 2022

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Making Room for Wetlands- Considerations for Long Term Resilience

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This presentation will examine factors influencing the restoration trajectory of tidal wetland restoration projects in Nova Scotia, Canada, and considerations for long term resilience. Rates of relative sea level rise in Nova Scotia are projected up to 1.5 m by 2100 (RCP 8.5) and restoration of tidal wetlands are important for climate change adaptation and mitigation. Over the last 15 years, CBWES, Saint Mary's University and the Province have restored close to 400 ha of tidal wetland habitat by enlarging culverts or realigning dyke infrastructure. Comprehensive pre and 5-year post restoration monitoring and insights from the *Making Room for Wetlands* project reveal marked differences in the rate of vegetation recolonization, surface elevation change and overall restoration trajectory between Atlantic and Fundy marshes. Differences are also recorded between sites in the Lower Bay (6 m tidal range) and Upper Bay of Fundy (16 m tidal range). This presentation will focus on the influence of sediment supply, tidal range (inundation frequency and duration), restoration design and seasonal timing of re-introduction of tidal flow on the rate of vegetation recolonization and implications for long term resilience.