

## **Implementation and Preliminary Monitoring of the Truro-Onslow Dyke Realignment and Tidal Wetland Restoration Project.**

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Globally, the practice of re-introducing tidal flow, where feasible, to former dykelands and restoring tidal wetland habitat, has been identified as a viable adaptation method to current and future risks associated with climate change. Located at the confluence of the North and Salmon Rivers near the town of Truro, the Onslow-North River Marshland provides an important opportunity to demonstrate the environmental and social benefits of a large-scale strategic dyke realignment project, as well as the benefits of a multidisciplinary and multi-stakeholder approach to tidal wetland restoration. Carried out in collaboration with the NS Department of Agriculture (NSDA), NS Transportation and Infrastructure Renewal, and the Onslow-North River Marsh Body, this project included the construction of two sections of new dyke, a new aboiteau and the restructuring of the agricultural ditch network to create a foundation for a new hybrid tidal creek network, and the hydrodynamic modeling of dyke breach scenarios. Decommission of the old dyke and the re-introduction of tidal flow to the site occurred in the fall of 2021, and the first year of post-construction monitoring was carried out in the summer of 2022. This poster will focus on the project design, implementation, and preliminary findings of the first year of restoration monitoring.