

Stewiacke River - Otter Brook Fish Habitat Restoration

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To offset the environment habitat loss associated with the twinning of Highway 103 between Ingramport and Hubbards, Nova Scotia, Transportation and Infrastructure Renewal DFO required 0.267 Ha of fish habitat restoration. Following an initial survey of potential offsetting sites conducted by Thaumas Environmental Consultants, Otter Brook was chosen. Otter Brook is a tributary to the Stewiacke River that has both good water quality and is an appropriate size for restoration techniques that can be achieved by hand. The habitat within Otter Brook has become degraded due to debris jams that have caused bank erosion, changes in stream pattern, and channel location. To restore the habitat within the stream, Coastal Action, has been tasked with 1) removing debris jams that are deflecting flows causing erosion or are blocking juvenile and spawner fish passage and 2) remove the sand and silt less than 2.5mm in diameter through the use of a Sandwand system. To assess the quality of restoration, we have performed habitat suitability index assessments, collected substrate samples, conducted fish surveys, measured, and recorded all riffle run pool sequences, and continuously monitored water quality. Initial restoration has been promising with our first project season ending, we plan to present our progress following 1 year of restoration and speak to our plans to complete restoration in 2023.