Fish habitat restoration and enhancement in the Fales River sub-watershed

Grace R. Bowen-MacLean 1

¹Clean Annapolis River Project, Annapolis Royal, NS

Degradation of freshwater habitats remains a major threat to fish populations, with much of this loss attributed to human-induced modifications of the physical environment. In the early 1990s, the Clean Annapolis River Project (CARP) surveyed several tributaries of the Annapolis River, and in 2012, identified seven priority sub-watersheds for fish habitat restoration, with a focus on conserving native species such as Atlantic salmon. The Fales River, historically known for its Atlantic salmon population, was designated as a priority sub-watershed due to historical water quality data, past restoration efforts, and community observations. The Fales River has been significantly impacted by human activities and land-use changes, leading to the loss of ideal in-stream fish habitat through channel modification, sedimentation, and deteriorating water quality.

In 2024, targeted assessment and remediation actions were implemented, including electrofishing, habitat suitability assessments (HSI), and the construction of in-stream restoration structures. Pre- and post-restoration electrofishing and HSI surveys were conducted to evaluate the impact of these efforts. This year, three in-stream structures and a 16-meter log crib were installed, restoring approximately 7,150 m² of habitat. These structures promote natural stream processes, thereby enhancing aquatic habitat for species such as Atlantic salmon and brook trout.

Keywords: fish habitat, restoration, freshwater, salmonids