

## 2024 St. Mary's River Association Stakeholder Report - AERF

On July 25<sup>th</sup>, 2024, SMRA Project Coordinator Bruce Wheadon and Field Technician Emma Purdy hosted a one day in-person Habitat Suitability Index (HSI) survey training day with 5 employees from the Confederacy of Mainland Mi'kmaw. The training session took place in the Ohio River, Antigonish County.



*Figure 1: Bruce Wheadon (centre) and Emma Purdy (far right) with CMM staff.*

On August 13<sup>th</sup> and 14<sup>th</sup>, 2024, the SMRA hosted a two-day workshop in partnership with the Nova Scotia Salmon Association (NSSA) regarding the usages HSI surveys can have toward assessing and planning restoration projects. The first day consisted of an in-class session in the morning outlining HSI techniques and how to properly plan where HSI surveys will be carried out. The afternoon of the first day consisted of heading out in the field to conduct HSI surveys in Barneys River. The second day started with a morning classroom session going over how to properly interpret the data collected the afternoon prior, and how this data can inform future restoration of a site. The afternoon of day two was spent in the field revisiting the studied site, and two structures were laid out and installed. This course was instructed by NSSA Habitat Biologist Nicholas MacInnis and SMRA Project Manager Bruce Wheadon. In total, there were 28 attendees representing 6 conservation groups from across the province.

Groups represented were:

- St. Mary's River Association
- Confederacy of Mainland Mi'kmaw: Mi'kmaw Conservation Group
- Maritime Aboriginals Peoples Council
- Nova Scotia Salmon Association
- Antigonish Rivers Association
- Pictou County Rivers Association



Figure 2: Trainees on site in Barney's River learning HSI protocol.



Figure 3: Measuring wetted depths across a transect.



*Figure 4: Bruce Wheadon (centre) helps trainees identify substrate.*

On November 20<sup>th</sup> and 21<sup>st</sup>, 2024, SMRA Project Manager Bruce Wheadon, in collaboration with NSSA Habitat Biologist Nicholas MacInnis, carried out a two-day training course for DFO employees in Antigonish, Nova Scotia. The morning of the first day consisted of a classroom session detailing the description of the entirety of an instream restoration project; where to begin, site selection, structure selection, installation, and monitoring a projects success. The afternoon of day one was spent in the field. The group went on site to James River to look at bank stabilization and spawning gravel replenishment projects, and the Brierly Brook to look at digger log and deflector projects and to acquire a visual representation of how instream restoration projects can successfully result in the narrowing of the channel. The morning of the second day was also spent in the classroom going over monitoring protocol that conservation groups have put in place to track and ensure the success of instream restoration projects and going over different types of restoration; large scale bank stabilization, floodplain connectivity, and habitat connectivity. The afternoon of day two was spent in the field in the St. Mary's Watershed. The group visited two 2024 project sites: Black Brook to see a large-scale bank stabilization and tree planting project, and then visited Garden River, where instream structures were installed, and two undersized culverts were replaced with a bridge.