SOUTH NATION CONSERVATION
DE LA NATION SUD

Moose Creek Bioengineering Project

Water quality in Moose Creek has been impacted due to loss of wetland habitat by agricultural and residential developments. The Moose Creek experiences flashy conditions after heavy rain falls, likely a result of extensive tile drainage in the upper watershed. The flashy nature of this system has caused bank slumping and erosion in many areas along the shoreline of the Moose Creek. South Nation Conservation (SNC) staff identified bank erosion on property owned by North Stormont Township within Lot 22, Concession 7, former Roxborough Township and designed a wooden crib technique that stabilizes stream banks using natural materials. Improving the water quality directly improves the health of the creek and will increase its use by local fish populations and will improve recreational fishery opportunities for local residents.

The excavation began at the north end of the site and proceeded in a southerly direction. Once the excavated hole was large enough to be fitted with a crib, the heavy machinery operator would place the crib and then back-fill with Gabion stone and then top with soil. The soils were compacted and smoothed by the contractor and SNC staff placed coir geo-textile mats over top of the excavated soils to protect against wind and water erosion. The coir mats also helped to prevent any shifting of soils; although soils will continue to settle for quite some time afterwards. In total, 19 cribs were installed to complete the bank stabilization project. Volunteers including, local high school students and landowners helped plant the native trees and shrubs.

Tree Planting

Newly constructed crib wall

Support was provided through Laflèche Environmental Inc. and the Department of Fisheries and Oceans Canada's grant program entitled Recreational Fisheries Conservation Partnership Program.