

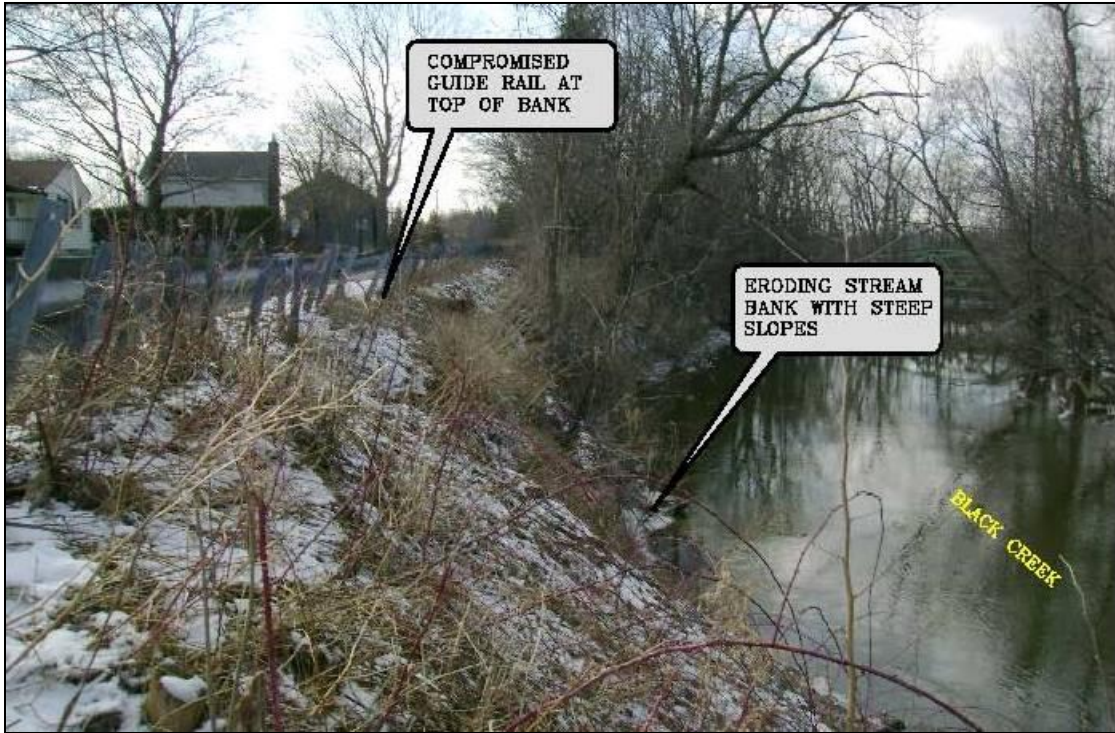
Genesee River Watershed Erosion Control Project



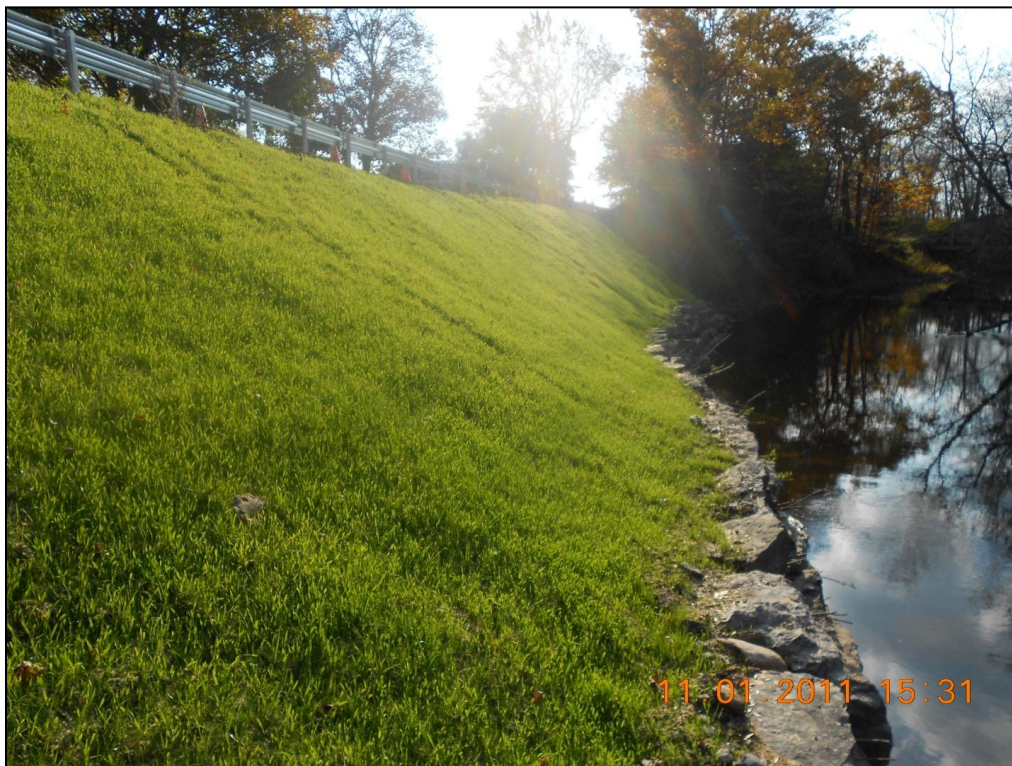
The Monroe County Soil and Water Conservation District (MCSWCD), in partnership with the Town of Chili, completed a bank stabilization project on Black Creek off of Old Scottsville Chili Road in the Town of Chili, Monroe County. Partial funding for this project was provided by grant funding obtained by the Soil and Water Conservation District through the Great Lakes Basin Program for Soil Erosion and Sediment Control. The project was selected due to a 125 foot long by 16 feet high section of the southern bank of Black Creek that was eroding, threatening the integrity of the roadway and posing a significant danger to passing motorists. Additionally, Black Creek at the project location is known to be impaired for aquatic life, and stressed for recreational activities and aesthetics from pollutants of silt and sediment as reported by the NYS Department of Environmental Conservation's Genesee River Basin Priority Waterbodies List <http://www.dec.ny.gov/chemical/36744.html>. This pollutant imbalance of silt and sediment to aquatic systems is considered one of the greatest causes of water quality impairment in the United States. Added silt and sediment originating from within the watershed, causes an increase in turbidity or "cloudiness" in the water which leads to stress on aquatic life, specifically fish populations. Studies conducted by the Environmental Protection Agency (EPA) have shown that as the turbidity in a stream system increases over time, fish feeding, growth, and hatching rates decrease and ultimately leads to death. By implementing best management practices within the watershed, such as this project, the sediment loads to Black Creek can be reduced.

To develop a remedial plan for the site, field data was collected and analyzed to understand the variables which shape the dimension, pattern, and profile of the creek; a process known as a Geomorphic Assessment. Based on this assessment, a design was completed utilizing rock rip rap stacked 6 feet high with native water-loving vegetation planted in the crevices between the rocks. The 200 native shrubs planted between the rocks will anchor the streambank in place with their roots, and once fully grown, the plants will provide shade in this section of Black Creek which will decrease water temperatures in the creek suitable for aquatic life and improve overall water quality. In addition, these plantings will remove moisture from the bank strengthening the structural integrity of the slope.

The stabilization of this section of bank on Black Creek reduced an estimated 42.5 tons of sediment from entering this impaired waterbody every year. The project was completed in the fall of 2011 with a total project cost of \$70,906 dollars, \$30,000 of which was funded through the Great Lakes Basin Program for Soil Erosion and Sediment Control. For more information regarding this project, please contact the MCSWCD office at 585-473-2120 x3.



Picture of the eroding southern streambank.
Picture taken facing west.



Final stabilization of the project
Picture taken facing west.