

## Seneca Bluffs Natural Habitat Park

<b>Site Owner</b>	Erie County
<b>Project Manager</b>	U.S. Army Corps of Engineers
<b>Funder/Source</b>	USEPA/GLRI
<b>Design Consultant</b>	U.S. Army Corps of Engineers
<b>Construction Contractor</b>	Tidewater (prime)/Cardno (sub) / AES (sub)
<b>Date of Completion</b>	2016 (All earthwork) 2020 (All invasive treatments and plantings)
<b>Area Restored</b>	3000 Linear Feet; 4 acres
<b>Coordinates</b>	42.865582, -78.819531

**Work Accomplished:** The Seneca Bluffs Ecosystem Restoration Project addressed severe riverbank erosion along the Buffalo River and creates riverine and riparian fish and wildlife habitat. Habitat restoration measures include bank stabilization with stone toe protection and bank cutbacks. Enhancement measures for in-channel and shallow water habitat include the installation of locked logs and single stone bendway weirs with root wads. Additionally, a backflow wetland approximately 0.2 acre in size was installed to create floodplain wetland habitat.

Invasive plant species were treated using mechanical removal and chemical application during the first three years, and spot chemical treatments in the 4<sup>th</sup> and 5<sup>th</sup> years of the project. Native dominated floodplain and riparian habitats were established through seeding and shrub/tree planting. The project stabilized eroding river banks, created in-channel aquatic habitat, reduced invasive species, and restored native riparian vegetation communities.

Project monitoring began in 2016 after completion of earthwork, initial invasive species removal, and initial planting and was carried out over a period of five years. Monitoring data documented the successful reduction of invasive species (< 5% of total cover) and establishment of native plant communities.



Seneca Bluffs Riverbank  
Pre Construction. 2015



Seneca Bluffs Riverbank  
3<sup>rd</sup> growing season post  
Construction. 2019