

## Jaycox Creek Watershed Agricultural BMPs March 2021 Update

**PROJECT TITLE:** Jaycox Creek Watershed Agricultural BMPs – Livingston County

**FUNDED BY:** Great Lakes Commission, Great Lakes Sediment and Nutrient Reduction Program, 2020

### PROJECT DESCRIPTION

This project will focus in the Jaycox Creek-Genesee River Watershed to work with landowners to define and implement projects that incorporate agricultural best management practices (Ag BMPs) to reduce nutrient loads from agricultural watersheds. The Genesee RiverWatch plan described below identified 32 significant gullies on the main stem of the Genesee River in the Jaycox Creek-Genesee River Watershed in 2018. Some of the projects will be selected from that plan with others from Livingston County's plans and outreach to landowners. We anticipate that terraces, underground outlest, WASCOS, and grassed waterways will be the primary BMPs implemented. This mix of BMPs when fully implemented will result in reductions of phosphorus of 1,784 pounds per year and sediment of 3,324 tons per year.

### CURRENT SITE CONDITIONS

The state-approved watershed plan that includes our project area (Livingston County) was published in August 2014 by NYSDEC entitled *Addressing Phosphorus and Sediment in the Genesee River Basin: A Synopsis of Existing Reports to Meet EPA's Nine Elements of a Watershed Plan*. This document outlines the work done and further actions necessary to reduce the sediment and phosphorus loadings in the Genesee River Basin in order to meet water quality goals in the Genesee River and nearshore areas of Lake Ontario. The Livingston County Soil and Water Conservation District (S&WCD) has further identified the Jaycox Creek-Genesee River Watershed a one of their priority watersheds in terms of need for agricultural BMPs to mitigate the formation of gullies and subsequent loss of valuable soil which contribute to excess nutrient and sediment loads in the river.

### PROPOSED SITE CHANGES

Genesee RiverWatch will work with the Livingston County Soil and Water Conservation District (LCS&WCD) to identify farm fields in this watershed that are candidates for the application of Ag BMPs to reduce erosion and soil loss. The primary practices that will likely be considered are described below.

Terraces: Earthen structures that intercept runoff on moderate to steep slopes by transforming long slopes into a series of shorter slopes. Terraces reduce the rate of runoff and allow soil particles to settle out resulting in cleaner water being carried off the field in a non-erosive manner.

Grasses Waterways: Graded channels constructed where gullies have formed to protect the soil from concentrated flows. These channels are seeded with grass or other suitable vegetation.

WASCOBs (Water and Sediment Control Basins): A system of one or more storage basins constructed across concentrated flow paths for the purpose of gully erosion control.

Underground Outlets: A conduit installed beneath the surface of the ground to convey runoff to a suitable outlet.

## UPDATE

The first project implemented under this project was identified by the LCS&WCD involves an 85-acre field east of Geneseo, NY. It involves the installation of 5 WASCOBs, 2,400 feet of underground outlet, and 1,400 feet of grassed waterways. Construction was started in October 2020.



**Figure 1:** These pictures show the erosion at the site of the first project. This 85 acre field is currently being excavated to install grassed waterways, WASCOBs, and underground outlets.

## WORK PLANNED FOR 2021

**Construction:** Construction on the first project described above is expected to be completed before the 2021 growing season starts.

Next Project: Genesee RiverWatch will continue to work with LCS&WCD to identify the next project using GIS tools developed in 2018 and LC's extensive on-the-ground knowledge.