Gallagher Run Habitat Improvement Project
Jim Zwald Chapter of Trout Unlimited
PA Coldwater Habitat Partnership (CHP) Implementation Project

Public Meeting

The Jim Zwald Trout Unlimited invited the public to attend our May 25, 2021 meeting held at the Elk County Conservation District at 7:00 p.m. The meeting was attended by eight individuals. A presentation of the Gallagher Run project overview was given by Kylie Maland was broadcast live and recorded for public viewing virtually via WebEx.

Project Summary

The overall goal of this project was to de-channelize a 200-ft. section of Gallagher Run and demonstrate natural stream channel restoration methods to restore water quality and improve aquatic and riparian habitat. Gallagher Run is largely channelized as it flows through Ridgway, Elk County, on its way toward Elk Creek and the larger Clarion River watershed. Approximately 200 feet of this channelized reach was contained by failing gabion baskets through a section of St. Leo Magnus Catholic Church yard. Flooding and high-water events had compromised the stability of the structures, creating a hazard for people and the environment. As part of a joint effort by St. Leo Church, Jim Zwald chapter of Trout Unlimited, and the Western Pennsylvania Conservancy, this project proposed to remove the failing gabion baskets, slope the banks to a more-natural gradient, install fish habitat structures, and plant native riparian wildflowers and shrubs to stabilize the stream banks. By taking these actions, the channelization was eliminated in this stretch of Gallagher Run. Sloping the banks and replanting with native species will give the channel more capacity, reducing flooding downstream and allowing floodwaters to more easily infiltrate into the groundwater table. The stream gradient was controlled through this section by installing a series of stone cross-vanes across the channel. These vanes sustain self-flushing pools to improve fish holding capacity and habitat value through the reach. With its highly-visible location in Ridgway Borough, immediately adjacent to Rt. 120, this project will also serve as an education and demonstration project and will be studied by students who attend St. Leo Catholic School (grades K-8).

Project Outcomes

Many local partners worked together to outreach and promote implementation of conservation projects, such as the Gallagher Run restoration project, recommended in the Elk Creek Coldwater Conservation Plan. This collaborative effort also helped diversify funding and distribute tasks among all the partners. This project will serve as a high-visibility project demonstrating effective natural stream channel restoration, aquatic habitat improvements and riparian buffer establishment to the public to encourage implementation of other similar improvement projects.

Project sustainability/next steps

Please see the included operation, maintenance, and repair plan, with responsibilities assigned and an inspection schedule to monitor the project over the next 20 years. The partners involved in this project will continue to collaborate to implement other recommended projects of the *Elk Creek Coldwater Conservation Plan*, including two additional restoration projects that are currently being designed on Gallagher Run in Ridgway, Pa.

Partners

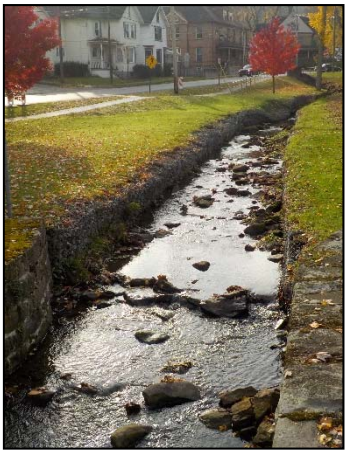
Jim Zwald chapter of Trout Unlimited worked closely with the Western Pennsylvania Conservancy, Elk County Conservation District and St. Leo Magnus Catholic Church and

School to implement this project. The PA Coldwater Heritage Partnership and PA Department of Environmental Protection contributed cash grants to fund this project and volunteers contributed in-kind match to plant shrubs and trees.

Accomplishments and outputs

A total of 400 feet of eroding stream banks were stabilized to prevent erosion and sedimentation impairments to water quality, nine rock cross-vanes were embedded across the stream channel to control the streambed's gradient and improve aquatic habitat in Gallagher Run, and 4,000 square feet of native riparian wildflowers were planted along the stream. In the spring of 2022, 35 students and teachers from St. Leo Catholic School assisted project partners with planting 60 potted trees and shrubs, including native blueberry, steeplebush, winterberry, redbud, and buttonbush along the restored creek.

Pictures



Before 2020

After - August 2021

October 2021

May (left) and August (above) 2022

Coldwater Heritage Partnership Final Budget Report

Organization: Jim Zwald chapter of Trout Unlimited **Project:** Gallagher Run Habitat Restoration

Grant Amount: $4,177 **Contract Dates: 04/01/2021-09/30/2022**

		Estimated Expenses (from original approved budget)			Actual Expenses (input after project is complete)		
Items	**Description**	**CHP Grant Cost**	**Match**		**CHP Grant Cost**	**Match**	
			Cash	**In-Kind**		**Cash**	**In-Kind**
Professional Services/Labor	WPC staff					$11,245.67	
	volunteers (35 * 8 hrs. * $29.95 [2022 rate])						$8,386.00
Travel						$45.92	
Equipment and Supplies	Planting tools and supplies				$177.00		
Contractual/ Construction	Stone & soil	$4,177.00	$2,800.00		$4,000.00	$5,309.47	
	Plants & seeds		$3,350.00			$1,201.27	
	Erosion & Sediment control supplies		$2,150.00				
	Heavy equipment contractor		$12,500.00			$13,040.00	
Administrative							
Meeting Space /Rental							
Other							
Total		**$4,177.00**	**$20,800.00**	**$0.00**	**$4,177.00**	**$30,842.33**	**$8,386.00**

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OPERATION, MAINTENANCE AND REPAIR PLAN

Proper operation and maintenance of Best Management Practices "(BMPs)" is critical for their success and longevity. The goal of this project is the establishment of A stabilized streambank and enhanced riparian area.

(List BMPs)

for improvement of water quality.

1) Components of the Project (List all practices being installed within this project):

Bank Stabilization structures	Riparian plantings	

2) Parties agree to perform all Maintenance Tasks as described in the chart at the end of this document.

3) Allowed activities:

- readjustment of downed tree tubes
- replacement of netting atop tree tubes to prevent bird entry
- mowing around tree tubes and weed control mats
- control and eradication of noxious weeds in the planting area
- pruning of trees once they've reached a height greater than that of the protective tree tube
- removal of netting atop tree tubes after the tree has grown to a height greater than the top of the tree tube
- removal of dead trees and shrubs that do not survive due to natural causes
- annual inspection of the riparian buffer and streambank stabilization structures

Prohibited activities:

- removal or displacement of live plants, tree tubes, or weed control mats
- excavation of any kind within the areas of bank stabilizaiton after installation
- tampering with or modification of bank stabilization structures once implemented, except for allowable maintenance activities as described in the plan

4) The ☒ Landowner(s) ☒ Grantee shall be considered to be in breach of this Agreement if he/she does not maintain and repair the project in compliance with this plan or willfully neglects any other terms of this agreement.

5) The ☒ Landowner(s) ☒ Grantee agrees to comply with all Federal, State, local laws, rules and regulations. This would include noxious weed control.

6) The ☒ Landowner(s) ☐ Grantee shall be responsible for all normal, routine maintenance and normal, routine repair of the site and project.

7) Other Special Conditions:

- Not to shape or shear trees for future use as Christmas trees. The participant may conduct pruning, thinning, stand improvement or other activities consistent with sustainable forestry practices.
- Not to disturb the acreage under this agreement during the primary nesting and brood rearing season for wildlife.
- To control all weeds, insects, pests and other undesirable species to the extent necessary to ensure establishment and maintenance of the practice is not adversely impacted.

- To perform certain periodic management activities to maintain the project such as monitoring after high water events and flooding.

Maintenance Tasks

Practice	streambank stabilization structures
Maintenance required	periodic inspection for compromised structural integrity
Schedule	at least once per year and after severe weather conditions, such as high flows, ice scour, and prolonged saturated ground conditions
Responsible Party	landowner(s) will conduct visual assessment and report concerns to Western Pennsylvania Conservancy (grantee) for further evaluation and maintenance needs
Practice	native riparian planting
Maintenance required	visual inspection and routine maintenance (pruning, weed control, watering)
Schedule	visual inspection at least once per year, pruning and weed control when necessary, throughout the first year after planting, watering of trees should be applied after periods of drought lasting more than 14 days
Responsible Party	landowner(s)
Practice	
Maintenance required	
Schedule	
Responsible Party	