Coldwater Heritage Partnership Final Report

Year: 2022

Organization: Perkiomen Valley Trout Unlimited Chapter 322

Stream Name: West Branch Perkiomen Creek

Project Title: Longacre Farm Phase 1

1. Project summary

Section 1: Creek Bank Restoration & Enhancement of Instream Habitat
The overall length of this project site is 880 feet long. The project site consists of a
severely-eroded right bank in the vicinity of a riffle-pool-glide bed feature sequence. The
channel has developed a substantially-deep pool feature adjacent to the eroding bank;
the high-quality habitat value of this pool feature was preserved. As with many other
portions of the evaluated stream segment, availability and quality of instream habitat is
significantly improved in this area.

A 30 foot modified mud sill structure (#1 St.0+50) incorporating an upstream rock deflector (st.0+65) was installed in the lower end of the treatment area where the existing riffle/run feature transitions to the downstream pool. Further upstream, R6 rock choked with R4 backfill with soil and seed applied (St.3 +80) was used to reduce bank erosion along the left bank which used to be cattle crossing and now is opposite a cattle water access on the right bank. Above this another 20-foot mudsill (St.4 +80) along the left bank was installed. Live stake installations along the length of the treated left banks enhances bank protection and overhead shading.

Section 3: New fence and tree planting

Section 3 added 500 feet of 3 wire high tinsel steel fence that will electrified and include a 12-foot gate section for maintenance of the area. Over 100 tree seedlings were planted. Four species are involved: Sycamore, White Swamp Oak, River Birch and Black Gum. Tree Tubes and stakes for protection were installed. TU and community volunteers will be used to maintain the trees.

2. Project outcomes

- a. Were all project objectives met? YES
- b. If not, which ones and why not? N/A
- c. Is project considered complete? YES

All in stream work, tree planting, and fencing for phase 1 is complete as planned and on budget. . We held our public unveiling during our first annual picnic on June 18, 2021 at the Longacre Farm.

The main hurdle that we ran into for the project, that was unexpected, was the Department of Environmental Protections requirement for a Bog Turtle assessment report, and then getting the US Fish and Wildlife department to review and give us the green light to start work.

3. Project sustainability/next steps

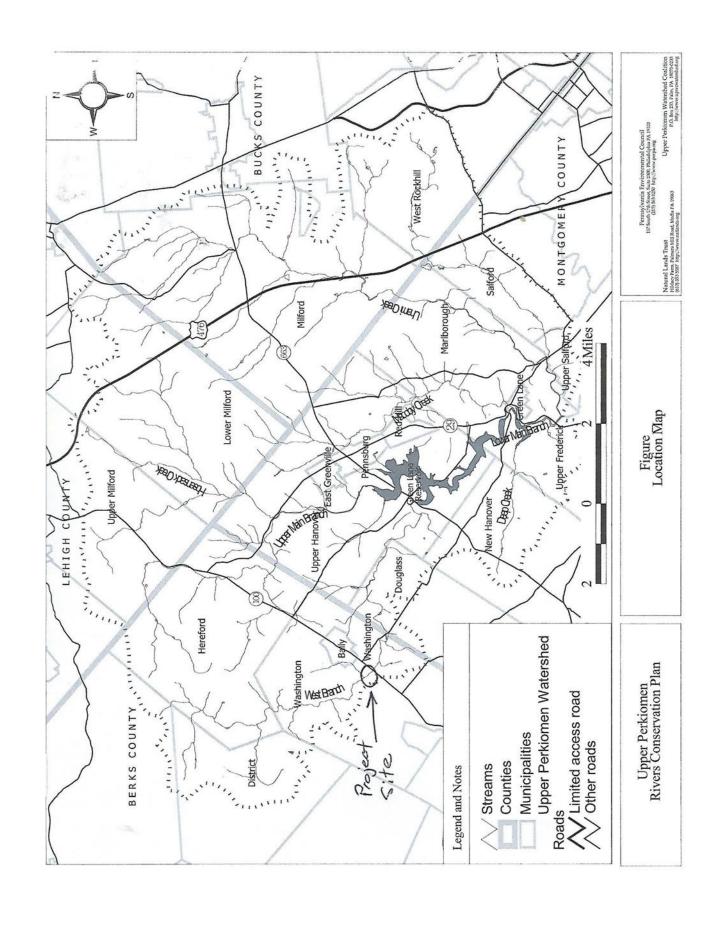
The project is a long-term solution and will require minimal monitoring. The remediation techniques used are proven long-term strategies. The project's natural wood habitat installations will over time continue to retain additional woody substrate that enters the creek and thus will expand the diversity of in-stream habitat required by the wild trout population. Because the creek is open to fishing, monitoring of the viability of the live stake plantings and overall effective-ness of the restoration work will naturally occur via the PVTU, landowner, and the Berks County Conservation Department.

We plan to design Phase 2 of the project in 2023 and implement the following year. This will Be our 2023 project; we anticipate a third project phase which will finish all of the stream located on Longacre farm and will help preserve the work of phase 1 which is downstream of phase 2.

- 4. List partners and volunteers and describe their involvement in the project including number of people, number of donated or in-kind hours, etc.
 - a. Kent Himmelright of the Berks County Conservation District was a huge help in making this project happen. He donated over 116 hours of his time.
 - b. PVTU Board had over 187 hours on the project.
 - c. PVTU volunteer hours 96.
 - d. Martin stone Quarry gave us a 50% donation on stone and delivery.
 - e. B. Scott Fiegel of Ecological Associates, LLC did the Bog Turtle Survey for Free.
 - f. Longacre Family was completely supportive and very helpful.
 - g. Dwight Gehman cash donation made up all the \$9,471 in kind cash.
 - h. Cold Water Heritage Partnership \$8000 grant
 - i. Berks County Cold Water Conservation Grant \$5000.

5. Accomplishments and outputs

- a. Observed or measured improvement to overall condition of the stream or watershed. All parties are extremely happy with the outcome of this project. Especially the trout that have moved in nicely and increased in numbers.
- b. Riparian buffer projects and natural stream channel projects:
 - i. Number of linear feet/acres improved 880 feet
 - ii. Number of trees planted, 100+
 - iii. Number of structures placed, 3
- c. Barrier removal
 - i. Number of stream miles reconnected or opened up N/A
- d. Preservation projects:
 - i. Number of linear feet of stream and/or acres preserved. 880 feet



	Perkiomen Valley Trout						
Organization:	Unlimited chapter 332			Project:	LongAcre Farm Phase 1		
Grant Amount: Items	\$8000 in March 2021			Contract Dates:		Aug - Oct 2	
		Estimated Expenses original approved		(from	after project is complete)		(input
	Description						
		CHP Grant		Match	CHP Grant	Match	
D 6		Cost	Cash	In-Kind	Cost	Cash	In-Kind
Professional	TU Management			\$4,000.00			\$4,675.00
Services/Labor	Volunteer Hours			\$3,250.00			\$2,400.00
	BCCD K. Himmelright			\$2,400.00			\$2,920.0
Travel							
Equipment and Supplies	Logs, Rocks, Rebar	\$3,000.00	\$3,730.00	\$2,000.00	\$1,524.50		\$1,475.5
	Fence		\$2,115.00			\$2,676.00	
	Grass and Seed stabilization		\$80.00			\$162.50	
	ECB Netting		\$100.00				
	Livestakes		\$150.00			\$251.00	
	Tree/shelter/stakes			\$2,000.00		\$1,607.50	
Contractual/	Operator/machine time	\$5,000.00			\$6,475.50	\$3,224.50	
Construction	manual labor*1		\$960.00				
	sediment boom*1		\$150.00				
Administrative	Permit Fee		\$100.00			\$650.00	
	Attorney Fees for contract assist					\$525.00	
Meeting Space /Rental							
Other	Contingency		\$1,564.00				
	Project sign catch and release					\$ 375.00	
Total		\$8,000.00	\$8,949.00	\$13,650.00	\$8,000.00	\$9,471.50	\$11,470.50
		Gr	and Total	\$30,599.00			\$28,942.00