1. Before and After Photos of the Project Site

Additional photos can be provided. These two "match up" the best since the "big" trees and buildings can be seen.



February 25, 2020

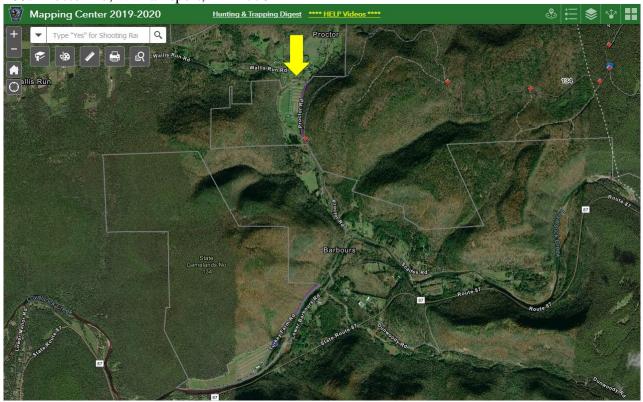


September 30, 2020

The last 2 pages of the report have 2 other sets of before and after. They don't match up as well, but are close.

2. Location of the Project

1607 Proctor Rd, Williamsport, PA 17701



3. Partners Involved in the Project

Pennsylvania Game Commission -

PGC was one of the landowners. They also provided 2 to 3 staff to operate a second excavator and a small, tracked dozer. Additionally they used their hydro-seeder and applied all the hydroseeding for erosion and sedimentation control.

Kevin and Crystal Lewis -

The other landowners involved in the project.

Pennsylvania Fish and Boat Commission -

PFBC designed the project and provided construction oversight. There were 2 to 5 staff on site to direct the private contractor on log placement and then secure the logs in place.

Lycoming County Conservation District -

The Conservation District provided on site support as well as funding to help offset the private contractor.

Loyalsock Creek Watershed Association

The Watershed Association allowed us to present at one of their public membership meetings about the project, included information in their newsletter, and provided funding towards the project.

4. How the Project was Associated with a Conservation Plan

The project was not part of a Conservation Plan, but instead a Hazard Mitigation Plan. This project helped slightly reduce some flooding concerns, but the berm removal scheduled for 2021 will be more effective at reducing flooding concerns.

The new Lycoming County Hazard Mitigation Planner visited the project site to learn more about what we were doing and how the techniques are applied.

5. Information About the Work Completed Through the Grant

A total of 10 devices were installed. They were all log framed deflectors. They ranged in size from a single section to 4 sections for a total of 20 sections. The original plans called for 7 random boulders to be placed, however the stream substrate contained numerous rocks as large if not larger than the random boulders. All the purchased boulders were placed in the channel, but not necessarily where originally planned.

Hopefully this photo gives you an idea of the size of streambed material we were working in:



6. Total Cost of the Project:

LINE ITEM	CHP	Cash	Total Paid	In-kind	Total Cost
SALARY AND BENEFITS					
Pennsylvania Fish and Boat			\$ -	\$ 2,800.00	\$ 2,800.00
Pennsylvania Game Commission			\$ -	\$ 3,065.00	\$ 3,065.00
EQUIPMENT & SUPPLIES					
Gas powered drill and jack hammer			\$ -	\$ 500.00	\$ 500.00
(size) Excavator		\$ 4,818.20	\$ 4,818.20		\$ 4,818.20
(size) Skid Steer		\$ 2,383.75	\$ 2,383.75		\$ 2,383.75
Permits (GP-1)		\$ 50.00	\$ 50.00		\$ 50.00
CONSTRUCTION					
Logs		\$ 1,800.00	\$ 1,800.00		\$ 1,800.00
Rock	\$ 8,000.00	\$ 862.09	\$ 8,862.09		\$ 8,862.09
Rebar		\$ 369.00	\$ 369.00		\$ 369.00
Seed and Mulch		\$ 126.06	\$ 126.06		\$ 126.06
Total	\$ 8,000.00	\$ 10,409.10	\$ 18,409.10	\$ 6,365.00	\$ 24,774.10

7. Deliverables Met.

The deliverable outlined in our application was 850 linear feet of streambank stabilized. We met the deliverable.

Due to COVID we did not have the public outreach we originally intended. We did post photos of the project on our social media channels and share information with the Loyalsock Creek Watershed Association and neighboring landowners.

The post made the first day of the project, August 24, 2020, reached 709 people, had 49 reactions, 6 shares, and 60 clicks.

8. Next Step or Future Work

Originally, this work was going to be completed after an earthen berm was removed from along the stream. Due to a paperwork processing issue, that work is now scheduled for 2021. The berm removal is being done under a NPDES permit.

Once that permit is released, we would look at the next stream section downstream for possible habitat improvement. PGC is also interested and willing to plant trees and shrubs along the stream to add shade and hopefully help keep the water temperature down.

Kevin and Crystal Lewis's property is not involved in the earthen berm removal. They are interested in planting a riparian buffer on their portion of the property. We have a planting contractor developing a planting plan for us to review with Mr. and Mrs. Lewis. Our intent is to plant the site this fall.

9. Sustainability

PGC's staff is checking the project site when they make their normal maintenance visits to the site. Additionally, members of the Loyalsock Creek Watershed Association have been following progress at the site. If there are issues, we feel we will find out about them sooner, not later.



The photo to the left was taken on June 30, 2020 during a fish survey conducted by Susquehanna University's FRI. The vegetation makes it a bit challenging, but you can kind of see the eroded banks

The dead tree is the reference point.

The photo below was taken on September 30, 2020 from a different angle, but includes the dead tree. You can see the sill logs of the structure and the banks sloping back further.





The photo to the left was taken on June 30, 2020 during a fish survey conducted by Susquehanna University's FRI. We are upstream from the dead tree. It's a little easier to see the cut bank (look below the handle of the kicknet).

The photo below was taken on September 30, 2020 from a different angle, but includes several of the same trees. You can see the sill logs of the structure and the banks sloping back further.

