

- Information about the public meeting held after receiving the grant and prior to beginning the project
 - a. Date and location of meeting(s) All meetings were held at Patriots Cove Activity center. Meetings were held the 1st Tuesday of each month on 2019 and 2020.
 - b. Organizations represented by attendees (You do not need to share names or emails in order to protect privacy.) Patriots Cove volunteer staff and Volunteers, Students from Misericordia University, Wilkes University and Kings College. Citizens from local community and property owners.
- Before and after photos of the project site(s) taken from the same vantage point.













- Project summary
 - a. What did you do and when? Patriots Cove Team and Volunteers have cleaned and restored more than 2 miles of the Beaver Run waterway with hopes of completing the 4.5 miles by the end of 2022.
 - b. How did you do it? We followed the PA Trout habitat guidelines with minor adjustments for sight specific requirements. We have also introduced new features and improvements that were not specifically outlined in the guide. Hemlock logs were both locally sourced and many came from logging operations in NEPA.
 - c. Who was involved? Patriots Cove volunteer staff and Volunteers, Students from Misericordia University, Wilkes University and Kings College. Citizens from local community and property owners.
 - d. Where did it take place? The project took place on the Beaver Run waterway.
- Project outcomes
 - a. Were all project objectives met? Yes, and exceeded.
 - b. If not, which ones and why not? N/A
 - c. Is project considered complete? If not, what remains to be accomplished? We estimate there is an additional 2.5 miles of waterway still needing to be restored.

PC has already gotten DEP(GP-1) approval for the next phase of work to beginning spring 2021.

- Project sustainability/next steps
 - a. Discuss the long-term sustainability of the project. What are potential threats to sustainability? There is two primary threat to the overall project.... The proximity of homes to the waterway that may have nonfunctional or failing septic systems. The proximity of home petrochemicals and pesticides stored near the waterway at risk to High water events.
 - b. Describe monitoring, operation and maintenance plans for the project. PC is dedicated to the continued monitoring of this waterway and measuring long term stability.
 - c. Describe any future efforts that would increase the benefits of the current project. We estimate there is an additional 2.5 miles of waterway still needing to be restored. Continued monitoring of water conditions by the Wyoming County Conservation District.
- List partners and volunteers and describe their involvement in the project including number of people, number of donated or in-kind hours, etc.

The Current work has taken more than 280 volunteer hours

Patriots Cove volunteer staff and Volunteers, Students from Misericordia University, Wilkes University and Kings College. Citizens from local community and property owners Wyoming County Conservation District, Local business Owners.

- Accomplishments and outputs
 - a. Observed or measured improvement to overall condition of the stream or watershed.
Initial Dissolved Oxygen levels we recorded as low as 1.9 ppm and were increased an average of 8.25 ppl. Levels of Nitrogen and Phosphates were also reduced by landowner replacing cesspool with functional septic system. Brook trout population is returning to strong numbers.
 - b. Riparian buffer projects and natural stream channel projects:
 - i. Number of linear feet/acres improved (Remember to account for both stream banks if applicable.)
There are more than 27 Habitat features over a 2 mile stretch of Beaver Run. This includes a Mud Sill, Bank stabilization features and erosion control features.
 - ii. Number of trees planted, if applicable 35
 - iii. Number of structures placed, if applicable
 - c. Barrier removal 3 Log Jams causing bank overrun and erosion.

- i. Number of stream miles reconnected or opened up
2 Miles

d. Preservation projects:

- i. Number of linear feet of stream and/or acres preserved
3960 feet of stream is being directly protected by PC. The additional 1.25 miles of restored waterway is privately owned by local landowners who have provided access to the PC staff for stream cleanup and restoration activities.