

## 2013 Interim Performance Report

**Project Title:** EBTJV Connectivity Improvement: Removal of two dams in the Wetmore Run Watershed, Potter County, PA

**Date Prepared:** January 8, 2014

**Submitted By:** Pennsylvania Fish and Boat Commission

Ben Lorson, Fish Passage Coordinator  
Division of Habitat Management  
450 Robinson Lane  
Bellefonte, PA 16823  
814-359-5106  
[belorson@pa.gov](mailto:belorson@pa.gov)

**Project Location:** Wetmore Run and Right Branch Wetmore Run, Potter County, PA  
Left Branch Dam (Wetmore Run): 41.716233° N, 077.714196° W  
Right Branch Dam (Rt Br Wetmore Run): 41.719728° N, 077.708009° W

### Project Overview:

As part of a plan to upgrade their public water supply to a non-dam alternative, the Borough of Galeton agreed to remove two dams and their associated impoundments. The dams were located on Wetmore Run and Right Branch of Wetmore Run, Potter County, PA. Both streams are classified as High Quality – Coldwater Fishery (HQ – CWF) by the Pennsylvania Department of Environmental Protection (PA DEP) and drain a predominantly forested watershed comprised of ~60% public land. The barriers block upstream brook trout passage to approximately 8.5 miles of headwater habitat, contribute to the elevation of instream temperatures, interrupt the natural flow regime, and negatively impact ecosystem function. As a result of the dam removals, almost 8.5 miles of headwater habitat will be reconnected to the rest of the upper Pine Creek Watershed, which contains several intact eastern brook trout populations. Galeton Borough owns the lands where the project will take place, has funded the design of the project, and hired the contractor to complete the construction phase. PFBC staff will provide technical guidance throughout the life of the project, provide pre- and post-dam removal monitoring and design and implement post-removal instream habitat enhancement, if deemed necessary.

### Accomplishments to date:

EBTJV funds were made available via signed agreement between PFBC and USFWS. A cooperative agreement was developed between PFBC and Galeton Borough Authority (GBA) to implement the dam removal projects. GBA secured all necessary permits and bid and contracted the construction for the entire water supply upgrade (infiltration gallery installation and dam removal). Construction was completed in September, 2013.

PFBC discussed the possibility of utilizing onsite felled logs to implement habitat enhancement structures in Wetmore Run. GBA's contractor, Harger Utility Co, agreed to install several log and stone habitat structures in the vicinity of the former impoundments. PFBC Habitat staff met the construction crew onsite to discuss placement of the structures and sequencing of placing those structures.

PFBC has two main concerns after the construction phase of the project. First, the flow through the infiltration galleries appears to be subsurface in some locations. The large rip rap used to armor the bottom of the stream channel creates large interstitial spaces. Through time these spaces should be "plugged" with stream bed material from upstream and the flow should be more surface oriented. Second, weirs were installed to monitor pass-by flows that will protect aquatic life by insuring that a

minimum flow is maintained under low flow conditions. However, the weirs are more intrusive than anticipated. PFBC attempted to work with the Project Manager to limit the impact of the weirs, but few of the suggestions were taken into account. As a way to limit the drop coming out of the weirs, the PFBC requested that rock and log cross vanes be placed downstream of the weirs to step the grade up more gradually and minimize the jump at the weirs.

This project will serve as a pilot project and provide a learning experience when considering non-dam water supply upgrades in the future. The concept shows promise, and with a few minor adjustments fish passage could be completely unrestricted by utilizing this construction method. The Wetmore Run sites will pass more brook trout than they did previously, but early life stage salmonids and weaker swimming fishes may be blocked from passage at certain times of the year. Overall, connectivity of the brook trout population in Wetmore Run should be greatly improved through this project.

**2012 EBTJV expenditures:**

GBA invoiced PFBC \$50,000 towards the removal of the two dams (EBTJV funds). The overall project cost for construction was approximately \$472,000.

**Photo documentation:**



Photo 1 – looking upstream towards Right Branch Dam. credit: PFBC



Photo 2 – looking downstream towards Right Branch Dam. credit: PFBC



Photo 3 – looking upstream towards Left Branch Dam. credit: PFBC



Photo 4 – looking downstream towards Left Branch Dam. credit: PFBC



Photo 5 – Completed construction on Wetmore Run. credit: PFBC



Photo 6 – Completed construction on Rt Br Wetmore Run. credit: PFBC



Photo 7 – Completed infiltration gallery. Note flow through interstitial spaces. Through time these should fill in with natural bed material. credit: PFBC



Photo 8 – Log vanes constructed to decrease pressure on the banks. credit: PFBC