Johns Run Fish Passage and Habitat Improvement Project PA Coldwater Heritage Partnership FINAL REPORT

Project Description

Callen Run, including its major tributary Johns Run, is a High-Quality (HQ) Coldwater Fishery in Jefferson County that supports naturally-reproducing trout populations. The mainstem of Callen Run is also stocked with trout by the PA Fish and Boat Commission (PFBC) and the Heath Township Sportsmen's Club (HTSC) cooperative fish hatchery. Three dams located throughout this watershed were identified as obstructing fish passage in the *Coldwater Conservation Plan for Clear Creek, Callen, Leeper, and Pine Runs.* One dam is located on Callen Run approximately 0.1 miles from its mouth on the Clarion River and is owned by National Fuel Gas (NFG), another is located on Callen Run further upstream in Clear Creek State Forest, and the third was on Johns Run, also owned by NFG. This project focused on the removal of the Johns Run dam. WPC facilitated a partnership between NFG, PA Department of Conservation and Natural Resources (DCNR), HTSC, PFBC, PA Department of Environmental Protection (DEP), Jefferson County Conservation District (JCCD), and the Allegheny Mountain and Iron Furnace chapters of Trout Unlimited (TU). Partner efforts are underway to coordinate the eventual removal of all three dams and to complete other stream habitat restoration projects identified in coldwater conservation plan.

The Johns Run dam was the smallest of the three dams in the watershed and initial site review revealed that the dam could be removed and stream habitat restored with portable, small equipment and hand tools. The dam was constructed of stream boulders mortared together and topped with two logs. The dam was removed over the course of a day, by sequencing the removal of the top logs and then using a jack hammer to break up the mortar holding the boulders together. The project partners and a team of volunteers repositioned the boulders in the stream channel and along the banks using a GripHoist (manpowered winch) to stabilize the stream banks and provide aquatic habitat for fish, macroinvertebrates and other wildlife. WPC served as the lead project coordinator with volunteer labor assistance from HTSC and the local chapters of TU.

Project Outcomes

This project resulted in the removal of one dam on Johns Run, an HQ tributary to Callen Run, which restored fish and aquatic organism passage to 4.76 miles of upstream wild trout habitat in this headwaters stream. Boulders that were used in construction of the dam were reclaimed and repositioned in the stream to improve habitat within the project reach following the dam's removal and deconstruction. This project was the first step in a multi-phased approach to removing all the dams in the Callen Run watershed that will ultimately restore 12.09 miles of prime trout habitat connectivity with the Wild and Scenic Clarion River.



Johns Run before (left) and after (right) dam removal to restore passage to 4.75 miles of stream