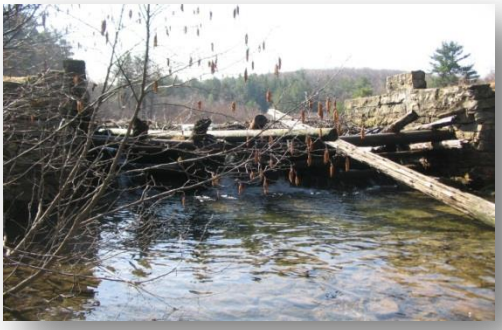
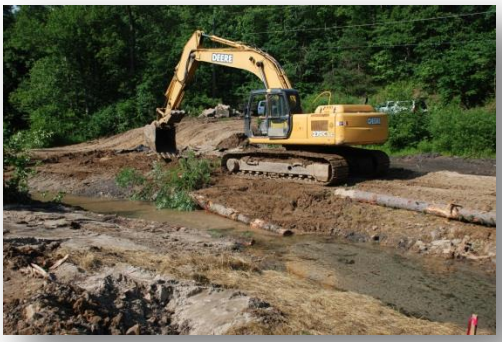
DAYTON DAM REMOVAL PROJECT
RUSH TOWNSHIP, CENTRE COUNTY, PA

This dam removal design was completed through a grant received by Clearwater Conservancy and the Pennsylvania Fish and Boat Commission. Additional funding was contributed by the Pennsylvania Department of Transportation (PennDOT) for habitat improvements for the section of stream to be reconstruction after the dam was removed. The habitat improvement was used for compensatory mitigation for a road project. WHM Consulting, Inc. (WHM) was retained to complete the design, permitting, and construction.



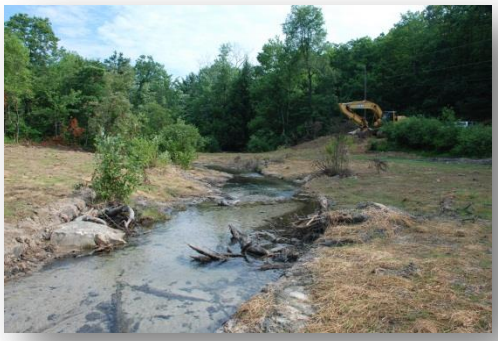
BEFORE

Mapping was performed by WHM. The design included a drawdown permit, sediment analyses and an erosion control Plan. The primary objective of this design was to re-establish the historic floodplain to pre-dam conditions. In addition the design also will restore stream habitat and ecosystem functions and improve water quality. The stream channel design incorporates cross log vanes and other natural channel design installations. The hydrology and hydraulics for the project was performed in conjunction with BAI Group Inc. (formerly Blazosky Associates, Inc.)



DURING

WHM and Aquatic Resource Restoration Company (ARRC) completed the construction of the project in a two weeks time frame. The equipment used for the project was a John Deere 750 wide track dozer and John Deere 270LC excavator with a progressive link hydraulic thumb. The initial phase of the project consisted of drawing the dam down so that the sediments behind the dam could drain. The site was then allowed to drain for 3 days. The dam embankment was then removed. The dry soils from the dam embankment were placed over the wet backwater sediments. The dry material was critical for the access of the equipment to shape the channel without becoming stuck. Once the channel was shaped cross log vanes were installed for grade control and in stream habitat.



AFTER

Post construction planting included vegetation which mimicked the surrounding area of the Moshannon State Forest. Native species were targeted for their ability to survive within the valley in addition to matching the natural habitat.