

**East Branch Saucon Creek Stream Restoration**  
**Wildlands Conservancy Inc.**  
**Coldwater Heritage Partnership Grant 2016**  
**Northampton County**

## 1. Photos of Project Area

### Before Pictures:



Image 1: Looking downstream at the dam



Image 2: Looking across dam, left to right



Image 3: Looking across dam, right to left



**After Pictures:**



Image 2: Looking upstream from below where the dam was located



Image 3: Looking downstream from above where dam was located



Image 1: Looking across the stream where the dam was located, right to left

## **2. Summary of Project**

In 2009 the Lehigh County Conservation District completed the Saucon Creek Watershed Conservation Management Plan, which contained recommendations and improvements to the Saucon Creek Watershed and its tributaries. In the assessment, this dam on the East Branch of Saucon Creek was identified as causing habitat and water quality degradation. This dam was creating a slow moving, sediment laden pool that lacked habitat for fish and macroinvertebrates. The dam was also creating a barrier for fish and macroinvertebrates to move upstream and downstream. With help from Coldwater Heritage Partnership funds, Wildlands Conservancy was able to implement these recommendations to remove the dam that was impacting the East Branch of Saucon Creek and Saucon Creek.

Wildlands completed the design and permitting necessary for dam removal through DEP. We also completed permitting for the Pennsylvania Historical Museum Commission and Pennsylvania National Diversity Inventory. Once all of the approvals came through, Wildlands was able to hire a contractor to begin the construction on the project. The dam was removed and the natural condition of the stream was restored. All of the concrete and rebar was removed from the stream and shipped off site by the City of Bethlehem. Wildlands utilized large boulders that were already on site to stabilize the streambank and fill in the scour pool. After the dam removal and boulder placement was complete, the contractor spread native grass seed and straw in the disturbed areas to provide immediate cover and stabilize the banks.

Immediately after the dam was removed, the East Branch of Saucon Creek began to look more like a healthy, free flowing, natural stream. The stream at the project site began to narrow and carve a deeper channel. The stabilization and grading of the streambanks will prevent erosion during high flow events and will allow the water to spread naturally into its floodplain.

## **3. Did the Project turn out differently than originally intended?**

The project turned out as intended with the dam being removed and the streambanks being stabilized and graded.

## **4. Is your project complete?**

Yes, the project is complete.

## **5. Sustainability of project**

### **a. Monitoring Plan**

Wildlands will periodically check the site to make sure there are no issues. We may also do macroinvertebrate sampling and water quality testing at the site.

### **b. Next step or phase**

There may be a riparian buffer planting at the site in the future, but overall the riparian buffer at the site is in good condition

### **c. Operation and maintenance plan**

No further maintenance is required at the site.

## **6. List of partners and their involvement in the project**

Wildlands Conservancy- Applied for permits, hired contractor, provided construction oversight.

City of Bethlehem- The dam was located on their property. They removed knotweed and mowed to create an access path to the dam. The city hauled away the concrete and metal after it was removed from the stream.

Bethlehem EAC- The EAC supported the project.

Saucon Creek Watershed Association- Supported the dam removal.

## **7. Accomplishments**

The East Branch of Saucon Creek benefited greatly from this project. The dam was located where the East Branch Saucon Creek flows into the Saucon Creek. Without this dam on the creek, migrating fish can swim freely from the Saucon Creek into one of its cold-water tributaries. The main branch of Saucon Creek also benefits from this dam removal. Now there is cleaner, colder water flowing into the creek. This creates better conditions for cold-water fish species and allows them to migrate up the East Branch Saucon Creek. The removal of this dam also helps to control flooding. The water can now spread freely into the floodplain and not erode the streambanks during periods of high flow.