

Final Report - Forbes Trail 2011 CHP Implementation Grant

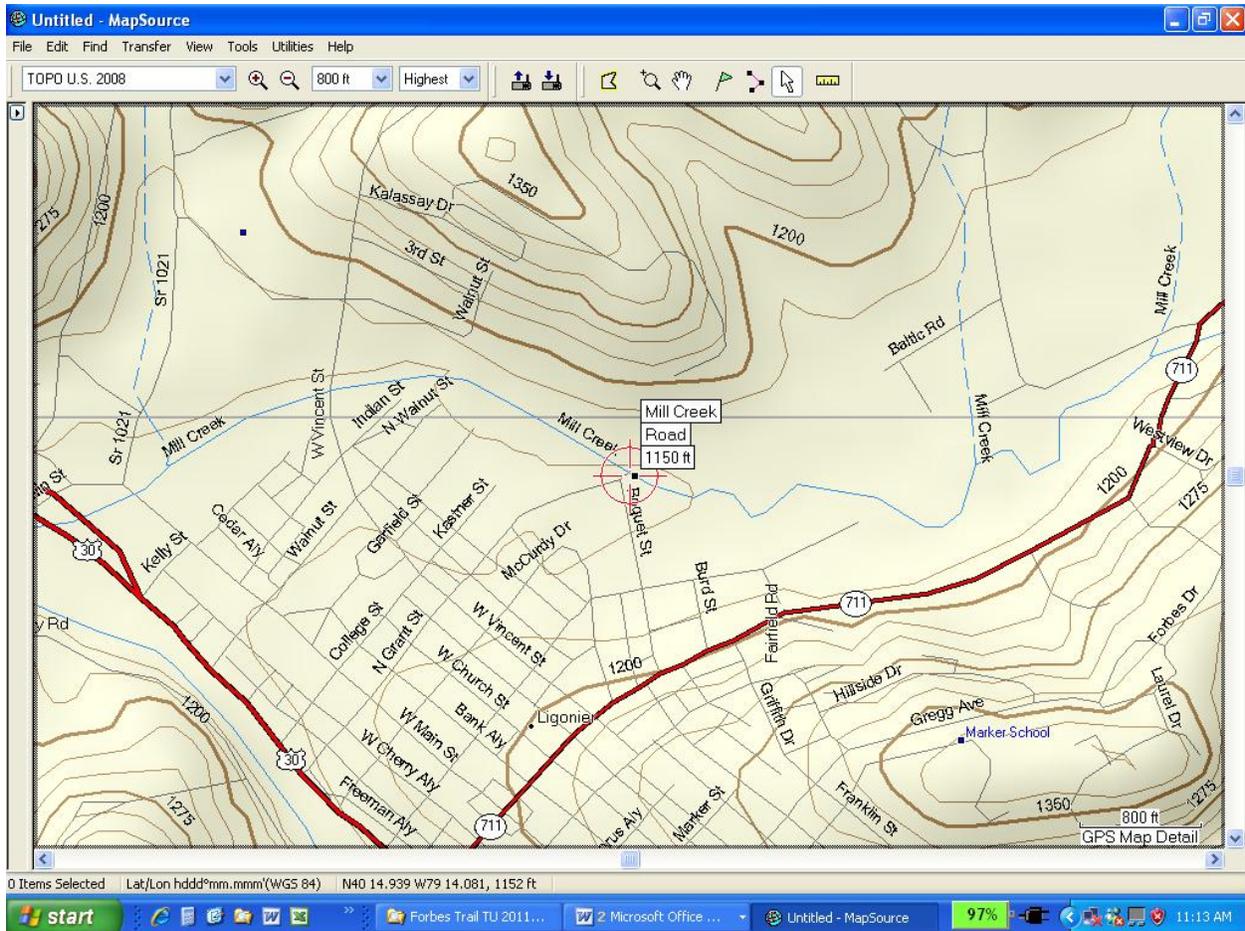
1. Photographs

Before and after project photos submitted separately. As an example, this photograph shows typical conditions of the stream bank before the project was completed. It shows the section of stream bank that was later protected by a 100-foot mud sill structure. In all, this project consists of eight structures.



2. Location of the project

Mill Creek, located in Ligonier Township, Westmoreland County, N40 14939, W79 14.081.



3. Information about the partners involved in the project

In addition to the Forbes Trail Chapter of Trout Unlimited that planned the project, obtained the grant, and provided volunteer labor, the following organizations were involved:

PA Fish & Boat Commission designed the project structures and supervised the contractor operating the heavy equipment and the volunteer labor constructing the structures.

Loyalhanna Watershed Association provided a staff member to manage the day-to-day project such as permitting and ordering materials, contributed professional services such as macroinvertebrate bioassessment, and made their summer interns available during construction. In addition, they provided procurement assistance by soliciting for and selecting the low-bid contractor and contracting (\$6,000) for the heavy equipment, the major cost element of the project.

Westmoreland Conservation District assisted with permitting and provided on-site construction assistance.

Western Pennsylvania Conservancy assisted with procurement of materials and provided tools and on-site construction assistance.

Ligonier Valley School Board facilitated access to site.

Ligonier Township Recreation Board assisted obtaining landowner permissions and approval from the Township of Ligonier.

4. How the project was associated with the conservation plan

The FTTU Mill Creek Watershed Conservation Plan (page 17) identifies the high priority for Mill Creek bank stabilization, and habitat projects for which this project implementation grant was awarded.

5. Information about the work completed through the grant

Eight fish habitat and stream bank stabilization structures were constructed during the three-day period July 16, 17 and 18, 2012 including:

- 1 100 foot modified muddill
- 5 multi-log deflectors
- 1 single log deflector
- 1 40 foot stacked deflector.

Work completed with this grant enhances trout habitat and restores the natural stream channel adjacent to the site of a reconstructed trail bridge of the Ligonier Township Recreation Board Ligonier Valley Trail & Bikeway. The project is in a highly visible area along Mill Creek, near the bikeway and Ligonier Valley School District athletic fields in Ligonier Township, Pennsylvania.

This project reconnects Mill Creek trout habitat to the Loyalhanna Creek, our principal trout stream, and main waterway in our watershed. The Loyalhanna Creek fishery, particularly its FTTU-created Delayed Harvest Artificial Lures Only section, is a significant economic resource of the Ligonier Valley, a tourist economy.

6. Total cost of the project

Total cost of the project, not counting contributed labor was \$15,065.83 (see attached Final Budget Report). \$6,000 or 40% of that was from the 2011 CHP implementation grant. As required by the grant, all CHP funds were used to pay for heavy equipment services (\$2,000 per day for three days).

7. Deliverables met

All planned project deliverables were met including:

- Permit Approvals
- Stream Structure Designs
- Pre-project Stream Baseline Macroinvertebrate Assessment
- Pre-project Stream Baseline Chemical, including Marcellus Shale Baseline Assessment
- Project Execution – ten habitat and stream bank stabilization structures
- Post-project Stream Baseline Macroinvertebrate Assessment
- Post-project Stream Baseline Chemical Assessment
- Grant Funding Closeout

8. Next step and future work

The next step in this project is measuring improvements in water quality, specifically erosion, sedimentation and macroinvertebrates.

Future work will include expansion of the habitat and stream bank stabilization that allow for public access, and construction of a handicap-accessible trout fishing area.

9. Sustainability

This project is a continuation of Forbes Trail's projects in support of its Coldwater Conservation Plan for the Mill Creek watershed. It will be sustained as an obligation of the chapter in its annual budgeting process. In addition, this project has expanded the Chapter's conservation partnerships to include a newly revitalized municipal recreation board that will help fund maintenance and expansion of the project.