

Jacks Brook Stream Embankment and Riparian Restoration



Interim Report – USFWS Natural Resource Damages - P-06b

November 15, 2015

Dates covered by this report: 01/01/2015 – 11/15/2015

Grantee

Trout Unlimited, Inc. – Naugatuck Chapter of CT

PROJECT SUMMARY

The TU Naugatuck Chapter of CT began planning for the Jacks Brook Project in early spring 2015. Several site visits were conducted to determine the best location for improvement work. A proposal from the chapter was submitted in 2007 and approved by the CT Trustees for the GE Natural Resource Damages Fund. The previous proposal outlines several large wood installation projects. Since personnel and resources have changed within the Chapter, it was determined that the best way to improve habitat in Jacks Brook was to relocate the existing preserve trail away from the steep banks and to plant the area with native shrubs and trees. Two volunteer work days were organized to complete the invasive species control and prepare the planting area. On October 16th, 2015 twelve 5th graders from the local elementary school and their teachers joined thirteen TU volunteers to plant 82 native trees and shrubs at the site. In addition to the planting activities, TU volunteers led the students in a macroinvertebrate study. TU is also working with the Preserve to design and install new outreach material for the Preserve entrance kiosk. The information will highlight the restoration work and native brook trout and other ecological details of the Preserve.



Local 5th graders from the Roxbury Booth Free Elementary School after planting 82 plants along Jacks Brook at the Brian Tierney Preserve in Roxbury, CT (2015 Photo TU).

PROJECT GOALS

- To improve habitat for coldwater fisheries in the Jacks Brook watershed by improving riparian conditions on Brian Tierney Preserve
- Relocate Preserve walking trail and remove invasive plants to prepare site for improvement
- Plant native trees and shrubs to help stabilize the banks, replace invasive species and to provide cover and organic materials to the brook
- Engage the community in our work



Photo Monitoring Station 1: Looking upstream at Preserve trail that was constructed on the top of the stream bank (Summer 2015 Photo TU).



Photo Monitoring Station 2: Looking upstream at Preserve trail that was constructed on the top of the stream bank. The stream bank is steep and eroding in this location (Summer 2015 Photo TU).

TASK SUMMARY

Task 1: Site assessment, Planning and Monitoring

- Several site visits were conducted to determine with best location for restoration
- Preserve personnel were contacted to determine the needs of the Preserve
- Local schools were contacted to determine availability and interest
- Planting and trail relocation was determined to be the best strategy
- Site survey was conducted to determine new trail location and to flag invasive species for removal
- 6 photo monitoring stations were installed to track project effectiveness

Task 2: Trail relocation and invasive species removal

- 2 volunteer events were held to complete invasive species removal and relation of new trail included

Task 3: Project implementation and planting activities

- 12 students participate in planting activities
- 13 TU volunteers participate in planting activities for a total of 65 volunteer hours



- 82 plants installed and watered

Task 4: Project outreach

- TU is working on the design and construction of outreach material for the Preserve kiosk
- The project will be featured in the Chapter newsletter and on the TU blog.

<http://www.tu.org/blog-posts/volunteer-efforts-spur-progress-on-jacks-brook>

PROJECT BUDGET

Expense	Cost
Earth Tones Native Plant Nursery – native plant stock	\$2,097
Porta Loo	\$165
Total Cost to Date	\$2,264
Total Budget Remaining (\$7,500 Grant Amount)	\$5,238

**To date Trout Unlimited has generated approximately \$3,800 in match towards the project through the dedication of our grassroots volunteers.*

FINAL DELIVERABLES

Task	Timeline	Estimated Cost
Preserve entrance kiosk complete	March 2016	\$800
Planting on Preserve	May 2016	\$625
Planting upstream of Preserve on private property	May 2016; October 2016	\$3,847
Monitoring and maintenance	May 2016; October 2016	\$0
Total Cost to Finish Project		\$5,238

PHOTO HISTORY



TU members demonstrate macroinvertebrate sampling during



Students from the Booth Elementary school in Roxbury, CT identify macroinvertebrates collected during the Jacks Brook

the Jacks Brook planting event (2015 Photo TU)



event (2015 Photo TU).



TU volunteers clear invasive barberry and multiflora rose along stream bank in preparation for planting with local students (2015 Photo TU).

Students helped install plants from Earth Tones Native plant nursery in Woodbury, CT (2015 Photo TU).



TU volunteers and students work together to revegetate areas along the old trail that followed the top of the stream (2015 Photo TU).



Working closely with Preserve manager several areas were cleared of invasive species and the old trail was located away from the steep stream bank (2015 Photo TU).



TU volunteers after a morning of invasive species removal (2015 Photo TU).