TCF - Quinnipiac River Fund Final Report

Instructions

QUINNIPIAC RIVER FUND GRANT AWARD - FINAL REPORT QUESTIONS

This form is to be completed by all nonprofit organizations that received a grant through the Quinnipiac River Fund.

Grant Details

Grant Details

Organization Name

Southwest Conservation District, Inc.

Grant Description

to support reclaiming a floodplain habitat of Wharton Brook from invasive plant species, in partnership with a science class at Lyman Hall High School in Wallingford.

Total Grant Amount

3,000.00

Report Questions

1. List the specific objectives/outcomes of the project and tell how they were met during the grant period. Also, provide an update on any special conditions of the grant (if applicable).

Our objective was to partner with a teacher and students from Lyman Hall Agri-Sci program to reclaim floodplain habitat from invasive plant species along Wharton Brook. We worked with Emily Picard to mark out two stands of japanese knotweed on the banks of Wharton Brook. The students cut down and hauled off the knotweed in trash bags (so as not to spread by plant fragment). We solarized one stand of knotweed by placing a tarp over the cut plant stems and anchoring with landscape stakes. The second stand was simply targeted for repeated cutting events.
The student team also worked on removing other invasive plants in the area including bittersweet vines and burning bush shrubs. These plant materials were placed in brush piles as there were no seeds at the time of removal and these plants do not spread by fragment.
The areas that were cleared by the students are creating more available habitat for native plant species to return to the floodplain. The Japanese Knotweed will take multiple years to completely eliminate from the site, but the team is committed to repeat visits to the site, which is on school property. The students now have the knowledge, skills and access to tools to continue the removal efforts of the knotweed on site.

2. Please share your successes, challenges and any lessons learned through the implementation of your project. Were there any unintended consequences or lessons learned that may affect how you operate your program moving forward?

The design of this project was partially to determine which removal approach was more effective for Japanese Knotweed. The cutting and covering with a tarp or the repeated cutting events over the course

of the growing season. While both approaches appeared to be effective at reducing the growth of Knotweed, the repeated cuttings is significantly more labor and resource intensive. The students had to re-cut the new growth on multiple trips, which also required more trash bag consumption and time of cutting. The tarped stand had limited growth and only at the edges of the anchored tarp. So the lesson learned is that while both approaches are effective controls, one is significantly more labor intensive. We actually ended up purchasing an additional tarp to place on the repeat cutting stand of knotweed to free up student labor for other areas of the floodplain during return trips this spring (2022). For any and all future sites where there are concerns about knotweed, we will be focusing efforts on cutting and tarping the area.

One challenge that occurred was a flooding event washed away our tarp, causing the need to purchase a replacement for the project. We were more careful with staking / anchoring the tarp on the side facing potential flood waters and also added some large stones to provide additional weight and protection.

An additional challenge was decisions on stream bank erosion potential. In some areas only invasive burning bush is on the stream bank. Pulling these plants out would destabilize even the shallow roots of this plant and potentially cause slippage. Since we didnt budget for purchase of native plant replacements we will wait to remove these plants until we have replacements ready and on site for replanting.

One other challenge was getting press coverage for the work party events. We did create press releases and distribute to local outlets (Record Journal), but were only successful in getting one wetlands Commissioner to visit the site. We did get a piece printed in the Farm Service Agency newsletter for New Haven County. We mentioned and thanked CFGNH in the piece. This can be FWD to CFGNH if a copy is desired.

One of the biggest successes for the project is the level of interest and investment by the student partners for the project. They worked very diligently and effectively during work party events and also learned quite a lot about cataloguing and identification of plants. The students created journals of plants they encountered on the property (see attached image).

Relatedly, there are two students who are now being trained on how to organize a work party and the planning that goes into such an event. These intern students will coordinate the schedule, select areas for removal, conduct recruiting of additional students to the work party, and coordinate a presentation to either the SWCD Board, or the municipal Conservation Commission in Wallingford. They are currently preparing a presentation of their plan to SWCD staff and their teacher for next week.

3. What are the opportunities and needs of your organization as it continues to move forward with its work to positively impact the Quinnipiac River?

The largest opportunity is having established this partnership with Lyman Hall Agri-Sci program. We will continue working with the program to work on the site and remove and control invasives. With the purchase of durable tools, we will only have minimal consumable expenses moving forward (trash bags, etc). We have also started to do work with schools in other towns to investigate and catalogue invasive plant populations and plan control work. It is likely that the team from Lyman Hall will be able to work on additional sites as the current work area moves towards completion.
As the site moves towards completion of removal, we will be looking to purchase appropriate native floodplain plants to fully restore and enhance this habitat. We will also purchase soil amendments as needed to help insure the success of this native replanting effort.

We will also be working with Emily Picard to come up with additional water quality projects that she and her students can get involved in along Wharton Brook.

Attachments

Financial information (required): Please provide a detailed accounting of how the specific grant dollars were spent based on the budget submitted in the grant application.

Detailed Accounting

Tracked Expenditures.xlsx

Pictures (optional): Please attach 1 to 3 pictures of activities that have occurred throughout the grant period (with a description for each) as a result of grant funding. All pictures should be submitted in JPEG format and may be uploaded to www.thequinnipiacriver.com and used in Foundation publications.

Picture 1

Students removing Burning Bush 10.JPG

Description

This a photo of students from Lyman Hall and their teacher Emily Picard using the weed wrench to remove burning bush from the floodplain habitat of Wharton Brook.

Picture 2

Knotweed removal.jpeg

Description

A photo of a student cutting knotweed on one bank of Wharton Brook. The background shows a student near the brown tarped area of knotweed on the opposite bank.

Picture 3

Knotweed journal binder page.jpg

Description

This image shows an excerpt of a student journal that they created as part of the learning for knotweed identification and removal on the floodplain of Wharton Brook.