

## ETF Final Report

### To be submitted by March 1, 2015

Project No. \_\_140205\_\_

Project Name: Education, Outreach, and Riparian Reforestation, in the Nashwaak Watershed

Estimated percentage of project completed: 85%

Estimated percentage of ETF award spent: 83.5% (\$25051.81)

Anticipated date of project completion: March 2015

### Project Status (brief summary of things accomplished so far):

- 1) **Nursery reorientation to production for reforestation is 100% complete.**
- 2) Three year old Silver maples have been bagged and transplanted into a holding bed. The bags are used in order to restrict their root growth, making moving them to the planting site easier. These trees are now between four and seven feet in height, and therefore can only be moved under cover and on cool moist days to avoid dehydration. This means they must be ready to go when the conditions allow and then quickly. The main goal when putting them to bed for the winter was ensuring the ability to move them quickly, when circumstances permit. As planned, we were able to make use of a member's tractor, Bush Hog, finish mower, and zero turn mower (about thirty thousand dollars in equipment) which greatly reduced the hand work and weed controls necessary at the nursery. This, in turn, allowed us to switch the manpower to do the necessary transplanting thinning and bagging mentioned above.
- 3) **Restarting bank stabilization is 100%:**
- 4) As mentioned in our interim report, we hosted three separate planting events. Each event involves selecting that is digging and preparing plant stock for transport to the planting sites prior to the events site prior to the events. In preparing for planting with inexperienced people we have found it is best to mow the grass (using a tractor and bush hog) and then lay out locations and drill the holes for trees to go. The final step is placing compost material in the bottom of each hole. When done in this manner control of the spacing of the trees is maintained while from the perspective of the families, students (and lawyers), the day always ends with the satisfaction of seeing that their efforts have planted hundreds of trees and made a visible difference to the landscape. The ease of plenty and therefore being able to plant a lot of trees in a very short time has helped raise planting

from a somewhat onerous task to a social event, with snacks and beverages adding to the positive atmosphere. Using this method has resulted in the NWA building a higher profile and has gained for us the support of corporate sponsors such as Remsoft who have donated \$3000, McInnes-Cooper, who donated \$500, and \$500 donated from NaTech Environmental Services. Dillon Consulting has approached us with an interest in working on both of our experiential education program and in design help on the Greenway project. The tree nursery idea, begun with ETF funding four years ago, was in part conceived as a community building device as well as a source of native stock of a type and size we could use. The establishment of this nursery has provided us with a means of building that sense of community. We feel very proud of the successes. As to the number of trees planted when asked, the city's director for trees and parks, suggested we restrict our plantings to two areas immediately adjacent to the river, and located so as to connect to already established silver maple stands. Partly because of this restriction in area we did not have space for the 500 trees we had planned. However, in the lower Nashwaak (within the city of Fredericton) we have over the past few years planted close to 700 trees with a 90% survival rate. This year the numbers planted bring the total on the two sites, that is, the Neil farm floodplain and the Marysville Heritage Centre floodplain to more than 1000 all in the- 3 to 5 foot whip sizes. Species used include Silver and Red maples, Yellow Birch, Red Spruce, Hemlock, Eastern White Cedar, Elm, Ash and White Birch. We set up a booth at the Northside Market, again to increase visibility as planned, and were well received by the shoppers, many of whom took home tree stock from the materials on display.

- 5) **Slide presentations and outdoor walks.** This part of our project, while the most exciting, has proven the most difficult to coordinate. We are in meetings next week with teachers from the Neil-Gibson Memorial School to finalize the details of implementing the project. We have acquired the services of a photographer, who will manage the visual elements of the lecture and walk series, including producing as many coffee table books as we can afford. The books will be offered for sale to the children's families as well. In addition to photography, the plan also calls for map reading, tree identification and writing skills to be developed. The teachers involved are very excited. This project, which has been interrupted by the March break, will be completed by the end of March.
- 6) **Develop and implement a nursery maintenance program:** as of the end of the season last fall the nursery has a program for maintaining beds, with regularly scheduled tasks allotted according to skill levels that will reduce supervision to maintain an active successful nursery. A fourth bed is under construction and informal discussions have been begun with other organizations who may use our tree stock for their own projects. These include St. Mary's first Nations and the Fredericton Area Watersheds Association.
- 7) As planned, in support of reforesting the Greenway floodplain we begun and a nursery area specifically for Silver maple propagation and growing.

**Difficulties/Issues encountered:**

The most difficult issue encountered this year (excepting rain) has been coordinating and scheduling with the elementary schools involved in the experiential learning program. Funding for public schools has made it difficult for individual teachers to arrange extra class time and for transportation to and from outside locations. Because many students travel back and forth on buses, there are only so many hours in each day available for field trips. The teachers would have preferred to arrange for these field trips to take place in warmer weather. It is our hope that this year's program will lay the foundation upon which we can build longer-term plans to accomplish this (eventually through the schools themselves with NWA as a facilitator). We will continue to refine our experiential learning program aligning it as closely as possible with elementary school objectives. It is hoped that the final product will be an accepted addition to the standard curriculum, and one which helps children to see their world as an integrated system, while encouraging learning in the several disciplines required to understand life within it.

**Signature:**

Paul McLaughlin

**Date :** March 2 , 2015**Reimbursement for future financial claims is contingent upon the completion of this form.****Belo**

## Goals and objectives sheet.

Activity	Outcome	Measurement	Results
<b>Bank Stabilization</b>	More Native trees on private lands	No of participants, no of trees Areas planted	80 Participants this year, planted over 500 trees this season on about about ten acres (two locations )
<b>Plant 500 trees on former Neil Farm</b>	Begin a long term relationship with the City, stewardship of the greenway	No trees planted Establishment of an agreement with the City Stewardship of the greenway	Over 300 trees planted (space / weather restrictions) Discussions are on going regarding long term arrangements Short film being produced in support of application for stewardship (see attached .mov file)
<b>Conduct a series of talks and slide presentations/ expand the scope of the experiential learning program</b>	Students experience an ancient forest, develop research abilities, complete environmental showcase	Publishing photo book and note on field trips . Development of interactive map with Google earth for the classroom	Photographer engaged, Final meetings on logistics taking place. Equipment acquired.
<b>Tree Nursery</b>	Maintenance and improvements on nursery Facility Ensure an adequate supply of plant stock for next year's schedule	Workflows established - reseeding to replace planted stock - interns trained Building of covered shelter for outdoor classroom	Shelter purchased for outdoor classroom Fourth bed established for silver maples Seedlings started Older beds thinned and transplanted as required Workflows established Discussions scheduled with other organizations regarding use of nursery stock in their projects