

May 8, 2020

To: Richmond Selectboard

cc: Josh Arneson, Ravi Ravi Venkataraman

From: Mary Houle, Ed Wells, Harland Stockwell, Jessie Lawrence, Michalea Stickney, Jon Kart, Caitlin Littlefield

Re **Report from Ad-Hoc Committee Report on Volunteers' Green Enhancements**

Esteemed Members of the Selectboard, I'm writing with an update on the Volunteers' Green protection and enhancement projects that the Selectboard approved last year—the most significant of which is that more than 300-trees will be planted at Volunteers' Green next week.

As you may recall, the Selectboard in 2018, responded to concerns about riverbank erosion occurring along Volunteers' Green downstream of the bandshell by charging an ad-hoc committee with investigating and developing recommendations for protecting and enhancing Volunteers' Green for its users and citizens.

Ad-Hoc Volunteers' Green Committee

Member	Representing
Mary Houle/ Caitlin Littlefield	Conservation Commission
Ed Wells	Trails Committee
Harland Stockwell	Recreation Committee
Jessie Lawrence	Interested Neighbor
Jon Kart	Interested Neighbor
Michaela Stickney	Master Naturalist

Since that time our committee visited the site with state river scientists, biologists and restoration ecologists; interviewed engineers and specialists with river NGOs and for-profit environmental design firms; consulted with stakeholders (e.g., baseball and soccer leagues, farmer's market) and we held an open meeting to solicit input from the public.

Last summer the Selectboard approved the following slate of five enhancement projects:

1. **Widen the forested buffer between the Winooski River and ballfields to approx 75-feet.**

Status: planting begins week of 5/11.

Purpose: Widening the forest buffer to 100' was recommended by all the experts we consulted as the first, best and easiest action to slow the erosion rate. The planned 75' buffer will still reduce erosion rates while minimizing short-term impacts to the ball fields used by the baseball and soccer leagues.

Details: With funding from the U.S. Fish & Wildlife Service (USFWS) and technical assistance from the Friends of the Winooski River (FWR), a plan was developed to plant approximately 475 trees in the portion of the Volunteers' Green shown in fig. 1.

We had 100 school students from three middle school classes ready to start this spring, and to help with monitoring. The Stay Home-Stay Safe Order crushed that plan, but most of the trees (~325 of 475), which were ordered last year and arrived this spring bare-root, need to be planted. With additional USFWS funding, an Intervale Conservation Nursery crew will plant the trees for us. This crew is authorized to work under the 'agricultural exemption' to the Stay Home-Stay Safe' order and will start next Tuesday or Wednesday. Planting will take one to two days.

The remaining trees, including 25 prized disease tolerant elm trees from The Nature Conservancy's elm research facility in MA, will be planted in the fall. We hope to have students perform the fall planting.

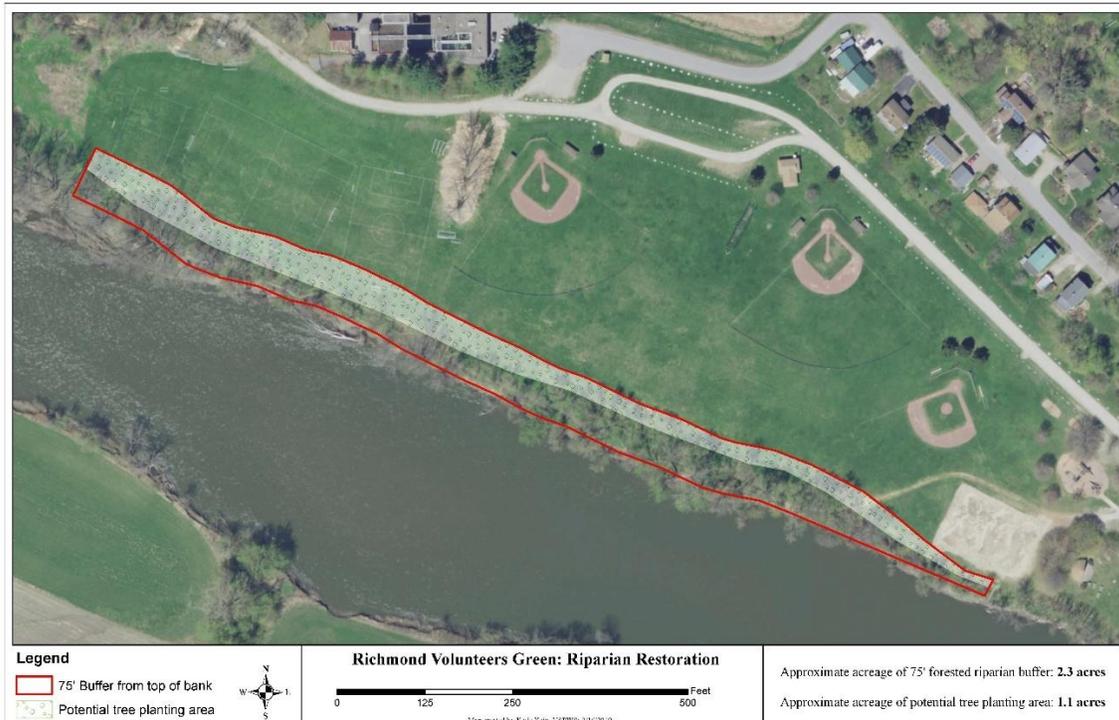


Figure 1. Site plan for widening the forested buffer at Volunteers' Green to approx 75-feet. Species to be planted: Silver maple, Basswood, Chokecherry, Hackberry, Cottonwood, Nannyberry (all native to VT floodplains) and disease tolerant Elm.

2. Conduct a Phase 2 Geomorphic Assessment of the Winooski River in Richmond to identify appropriate streambank stabilization options.

Status: on hold until funds can be secured. We await a request for proposals from the Department of Environmental Conservation's Ecosystem Restoration Program (ERP). The usual ERP grant cycle was disrupted by the quarantine. All indications are that an RFP will be issued in the coming months. The assessment itself may have to wait until 2021.

Purpose: Planting trees will slow the rate of erosion, but it will not stop it. The public encouraged us and the Selectboard to identify strategies to stabilize the riverbank in place. Before specific bank stabilization techniques can be selected an assessment of the forces acting on the riverbank, known as a Phase 2 Stream Geomorphic Assessment, is needed. The results will identify the scale and type of actions needed to stabilize the riverbank at Volunteers' Green and other sections of the river.

3. Install steps at the river access area and flat rocks for sitting/fishing along the rip rap area.

Status: A VYCC crew started preliminary work on this project in fall 2019. Design/construction plans were developed of the past winter. The Fish & Wildlife Department requested that the Town wait until after July 1st, 2020 to submit a request for funds for project materials (~\$3,500). VYCC has secured funds to cover labor costs for its crew to install the stairs at no charge to the town.

Purpose: Installation of rip rap immediately upriver of the river access removed the trees that protected the river access site. This area now silts-in after high water events and the bank slope has become steeper (fig 2). Many similar access areas in the state installed stairs to make access easier (fig 3). In addition, several large flat rocks will be placed on the rip rap to make it easier to sit/stand/enjoy the area.



Figure 2: Steep slope from the river to the Green. People use the rip rap to fish despite the uneven footing.



Figure 3. Example of stairs with boat ramp shortly after installation.

4. Develop landscape design/budget to improve the bandshell and top of rip rap area.

Status: Moving slowly. We are looking for a landscape architect to help develop the plan.

Purpose: The bandshell area of Volunteers' Green needs additional support (figs. 4-5). Trees that were supposed to be planted at the top of the rip rap section of riverbank were never planted. The plantings in the bandshell area are over-grown, full of weeds and in dire need of attention. The design we envision could include new plants, restored benches, signage and a path to the river.

Once drafted we will bring the design to the Selectboard for approval. Funding could come from the Conservation Reserve Fund. Long-term maintenance would likely require a budget allocation to the Recreation Committee.



Figures 4-5. overgrown and weed infested landscaping and dilapidated benches at the bandshell.

5. Authorize the Ad-Hoc Committee to develop language for an access area sign.

Status: Stalled. The committee will regroup soon to draft text for the sign(s).

Purpose: Citizens have many questions. They want to know about boating opportunities, why rip rap was installed, and they are surprised to hear that the Volunteers' Green is in a floodplain. Informational panel(s) placed near the boat access area can answer these and other questions. The Lake Champlain Basin Program will cover design and materials costs if Richmond provides the needed text. Our committee will draft text for the Selectboard's approval.