

Lake Iroquois Stream Remediation & Erosion Control Project

Phase 2:

Road Crowning and Ditch Line Renovation

Report by Shannon Kelly

Project Description

The overall aim of this project is to achieve velocity dissipation, reduce erosion, and decrease sediment carried into Lake Iroquois by the tributary paralleling Pine Shore Drive. In addition, the project seeks to restore a more natural stream bed to reduce channelization and scouring. The project was undertaken in two parts:

- Stream remediation through restoration of the natural streambed and flood plain
 - Reshape and line the ditches paralleling Pine Shore Drive and create proper turnouts and road crowning to reduce runoff velocity and sediment carrying capacity
- The stream remediation and flood plain restoration work was completed on August 17, 2017 and was summarized in an interim report at that time
- The road rehabilitation was completed in October 2018 and is the focus of this report

Road Rehabilitation

- **Reshape ditches and line them with stone**
- **Create road turnouts to divert runoff and reduce erosive capacity and sedimentation**
- **Create a 3-5" crown on the road centerline**

Pine Shore Drive Rehabilitation

The Town of
Hinesburg Road
Crew reshaped
approximately 650
feet of the ditch
line and emplaced
stone on the north
side of Pine Shore
Drive



Pine Shore Drive Rehabilitation



The first 650 feet of rehabilitated ditch line ends with a turnout.



Pine Shore Drive Rehabilitation



**Second run of ditch line rehabilitation
completed by Mitchell Excavating**



Pine Shore Drive Rehabilitation

**Second run of
stone ditch lining
ends in a turnout
similar to the first
run.**



Pine Shore Drive Rehabilitation



Third and final run of ditch line rehabilitation completed by Mitchell Excavating.

Horizontal pipe was removed from the sediment pond. This pipe formerly discharged perpendicular to the ditch line and accelerated erosion. Private owner will fund and tie in a rock-lined overflow.



Restored tributary

View upstream from trail

August 2017



October 2018



Restored tributary

View downstream above trail

August 2017



October 2018



Restored tributary

View downstream above trail

August 2017



Note from the 2017 Interim Report:
“View of the streambed before replanting. The timbers will not be very visible once the plants grow back in but will spread the water thereby reducing erosion and scouring, as well as trapping sediment.”

October 2018



Observe how integrated the timbers for the check dams are with the surrounding landscape. One is moss covered and looks as if it has been there for a long time versus just over a year!

Lake Iroquois Association Garden Tour

On July 28, 2018, the Lake Iroquois Association teamed with the Vermont DEC and Winooski Natural Resource Conservation District to sponsor a Garden Tour to highlight successful ERP project implementation and to showcase private homeowner Lake Wise awardees

LIA Garden Tour Plant Sale & Picnic Saturday, July 28th

Free and open to all



3-5 PM "Garden Stroll down Pineshore Drive"

Lauren Jenness, from the Vermont Dept. of Environmental Conservation, will lead a tour of several properties that are Vermont Lake-friendly. LIA's own Shannon Kelly will discuss the Ecosystem Restoration Project. Meet us to start the tour at 3 PM at the turn on Pine Shore Road. (See red dot on map inside.)

Look for "LIA Garden Tour" signs by road and by shore.

5-7 PM Picnic- 129 Wood Run - (See green dot on map inside.)

Look for "LIA Garden Tour" signs by road and by shore.

Picnic Food - Beer, wine, water, lemonade, hot dogs, hamburgers, veggie burgers, and cake. Feel free to bring sides and salads. They are welcome but not necessary.

Rodney Putnam, singer and guitarist, will be our special entertainment at the picnic

Plant Sale - Preorder native plants to pick up at the picnic and save 10% or select plants at the picnic for purchase. Chris Conant will donate 25% of the proceeds to the LIA. (Order form inside.)

Corrinna Panapay, District Manager, Winooski Natural Resources Conservation District, will discuss the shore erosion projects taking place on Lake Iroquois and grant opportunities or lake residents for projects on their shorelines.



More on next page →

Press Releases

- Mr. Jim Ross, Pine Shore Road Association wrote and submitted a press release highlighting the cooperative, combined efforts of the Vermont Department of Environmental Conservation, Lake Iroquois Association, Town of Hinesburg, Vermont Youth Conservation Corps, and multiple individual volunteers
- A Lake Iroquois Association board member was interviewed stemming from the press release submission. Link to the Shelburne News article may be found here:
- <http://www.thecitizenvt.com/2018/09/13/state-grant-helps-lake-iroquois-watershed/>

Acknowledgements

Vermont Department of Environmental Conservation Ecosystem Restoration Program

Karen Bates

Gretchen Alexander

David Pasco

Town of Hinesburg Road Crew

Tim Mitchell Excavating

Claussen's

Lake Iroquois Association

Pine Shore Road Association

Jim Ross

Rodney Putnam

Lisa Thompson

Winooski Natural Resources Conservation District

Corrina Parnapy

This project was funded by a grant from the Vermont State Department of Environmental Conservation Ecosystem Restoration Program.