

## **Lake Iroquois Hillside Restoration Project**

The Lake Iroquois Association, is pleased to report that phase two of the hillside/stream restoration project between Pond Road and Lake Iroquois was completed last month. This work will reduce the depositing of considerable amounts of dirt, stone and sediment into the lake which has resulted in creating a delta at the shoreline.

Fortunately, four knowledgeable individuals came together to develop a plan of action: Karen Bates, Basin Planner at the Department of Environmental Conservation (DEC); Gretchen Alexander, River Scientist, DEC; Chris Brunelle, River Program Stream Engineer, DEC and Keegan Tierney, Operations Director, Vermont Youth Conservation Corp. When a group like this gets together good things happen.

They concluded that instability of the stream bed bottom and increased water velocity from newly installed culverts created multiple nickpoints along the upper stream channel resulting in increased sediment discharge to Lake Iroquois. Nickpoints are locations in the stream where there are shape changes in the terrain due to different rates of erosion. Nickpoints create waterfalls which exacerbates erosion.

To eliminate nickpoints and recreate the natural slope of the stream channel, careful placement of rock fill was required. This work created multiple stone steps carefully shaped in the stream bed. The skilled work of the Vermont Youth Conservation Corp was invaluable in transporting and carefully placing a substantial amount of stone along the long steep hillside.

In the lower section of the stream, the banks were graded into wide shallow slopes and planted with fast rooting willow, dogwood, elderberry as well as silver maple and black walnut trees.. These shallow slopes provided access to a large grass floodplain during heavy rainfall and will mitigate sediment entering the lake.

The construction of the wide slopes destroyed a pictorial path. A new path was constructed to the south of the stream, giving the land owner access to his lake shore property.

### **Grateful thanks**

The Town of Hinesburg's appropriation of \$5,000 to the Conservation Committee was the cornerstone to this vital project. All who enjoy our lake are most grateful to the Select Board and Hinesburg residents for this vital support to improve the health of our lake.

The Department of Environmental Conservation in partnership with the Vermont Youth Conservation Corp provided \$20,000 in grant funds for the workforce and materials need to complete this work. This partnership and their commitment to improve Lake Iroquois will be long lasting.

The Vermont Youth Conservation Corp (VYCC) made completion of phase two possible. Two teams participated in this work under the direction of Keegan Tierney, VYCC Director of Operations. This organization is indeed a prized resource for our State in fostering leaders for our future.

Charlie Proutt, Principal Landscape Architect of Distinctive Landscaping based at Horsford Nursery served as a consultant in planning the second phase of the project.