## **FWR 2012 Accomplishments**







**STORMWATER BIORETENTION** at the Essex Elementary School shown before, during construction and 2 weeks after planting. Attractive water loving plants such as black-eyed susan, cardinal flower, big and little bluestem and swamp milkweed will fill the infiltration area. Stop in and see it next spring!

Riparian Protection: The Friends continued to work with landowners to improve streamside land practices. As a result, we planted over 2700 trees and shrubs on nine properties: Alder Brook (Essex); Allen Brook (Williston); Stevens Branch (Barre); Dog River (Northfield); North Branch (Worcester); Ridley Brook (Duxbury) and Winooski River (Plainfield and Marshfield).

Fish Passage & Habitat: Many culverts in Vermont are barriers to fish passage, causing fragmented habitat and isolated populations. In 2012, we initiated projects to either replace or retrofit two culverts each on Crossett Brook in Duxbury and Beaver Meadow Brook in Marshfield. We expect construction be completed in 2013.

We were a partner to the Conservation District on an instream habitat assessment in the Dog River.

Stormwater Management: We installed two substantial stormwater management facilities. One is at the Essex Elementary School along Alder Brook and the other on a commercial site in Northfield along the Dog River. Conservative estimates (not included winter sand removal or reduced bank erosion) are that the two facilities will prevent over 1200 pounds of sediment and up

to 1.8 pounds of phosphorus from entering the streams. At the Northfield site, controlling the stormwater will also help prevent another streambank collapse which occurred at the site during Irene.

We partnered with the Regional Planning Commission and the Conservation District to complete a study of water quality impacts from dirt roads in the North and Kingsbury Branches (Woodbury, Calais, E. Montpelier, Middlesex & Worcester).

Water Quality Monitoring: The Friends facilitated three volunteer water quality monitoring programs: the Headwaters (Plainfield, Marshfield and Cabot) for the 6<sup>th</sup> year; the Four Rivers area (Winooski & Dog Rivers, Stevens & North Branches) for the 4<sup>th</sup> year and as part of the Chittenden County Stream Team on several small urban streams. We also conducted follow up storm water outfall monitoring in Barre. We will continue to work with Public Works on remaining problems.

Education and Outreach: We published Living in Harmony with Streams: A Citizens Handbook to How Streams Work (downloadable from our website).

We hosted residential stormwater talks and workshops in Essex, Williston, Northfield and Montpelier.

We delivered several talks at schools in the watershed as well as engaging students in volunteer projects.

River Access: We completed a paddling access study of the Winooski mainstem as well as the major tributaries. We completed construction of a new boat access at the Plainfield Co-op.

## **Organizational Development:**

Completed a strategic plan that will guide the Friends growth and program priorities over the next 3-5 years.

## 2013 Projects & Goals

- Continue work with landowners on riparian protection and restoration
- Expand stormwater education programs in Washington County
- Focus water quality monitoring programs on identifying pollutant sources
- Work with the Granite Museum to maintain natural area.
- Complete fish passage projects on Crossett Brook and Beaver Meadow Brook
- Work with towns to reduce runoff from local roads
- Implement additional stormwater control projects
- Improve access to the river

Friends of the Winooski River PO Box 777 Montpelier VT 05601 802-882-8276 info@winooskiriver.org www.winooskiriver.org