

# BECK RESIDENCE—Shoreline Restoration



## PROJECT SPECS

Date Constructed ... Fall 2011

Shoreline Protection ~170 ft

Buffer Length.....~150 ft

Buffer Area.....~1700 ft<sup>2</sup>

Natives Planted.....~875

Cost Share Funding 50% of project expenses up to \$3,000.00

### Pre-Restoration Conditions

The Beck property lies on the south shore of Forest Lake (lake 1). The site was dominated by mown turf grass, reed canary grass, and had a significant shoreline erosion.. As a result, there was:

- Active shoreline erosion due to limited root structure to withstand wave/ice action
- Direct conveyance of nutrients and pollution from the property into the lake, increasing algae and unwanted vegetation blooms.
- Limited plant diversity
- Limited wildlife habitat



**Before  
Summer 2011**



**October,  
2011**

### After Restoration

Shoreline erosion was stabilized with rock-rap designed for the site taking into account wave height and ice action. Mown turf grass and invasive plants were replaced with a variety of native plantings along the lakeshore. Approximately 875 native grasses, flowers, shrubs, and aquatic plants were planted. The native plantings, hardwood mulch, and riprap provide many benefits, including;

- Stopping soil from washing into the lake
- Stormwater is slowed and retained as it flows toward the lake increasing infiltration and decreasing input of nutrients and pollutants to Forest Lake
- Plant diversity is dramatically increased and the increase in root structure protects the shoreline from erosion due to runoff and wave/ice action.
- Fish and wildlife habitat is increased