



Protecting Your Water Resources

# STOIBER PROPERTY - Rain-garden & Biofiltration Swale

## PROJECT SPECS

Date constructed and planted.. October, 2010

Rain-garden ~ 300 sq. feet

Water quality swale ~50 ft

Natives planted ~ 350

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

### Pre-Restoration Conditions

The Stoiber property lies on the north shore of Forest Lake (Lake 3). The site is a residential lot with runoff from the front of property draining between the house and neighboring property directly to the lake without any treatment. The drainage way was poorly vegetated and heavily shaded which contributes to the:

- Direct conveyance of nutrients and pollution from the property going directly into the lake untreated, contributing to increased algae and poor water clarity in the lake.
- Limited near shore plant diversity



Before



After November, 2010



### After Restoration

The turf grass was replaced with a rain-garden and biofiltration swale which intercepts the storm runoff from the driveway and roof allowing a portion of it to percolate into the ground and filtering the rest through native vegetation before running into the lake. The project consisted in the establishment of a 300 sq. ft. rain-garden, a 45 foot biofiltration swale, and a small lakeshore buffer planting

The primary benefit of the rain-garden, swale, native plantings and mulch will be to reduce the amount of nutrients (primarily phosphorous) and sediment (dirt) into the lake helping to improve water quality and fish and wildlife habitat.