

US EPA ARCHIVE DOCUMENT

Ginny Black

Minnesota Pollution Control Agency
US Composting Council Board of Directors
And
Plymouth City Council

Projects

- Demonstration Project (compost blanket)
- Wood Creek (compost blanket)
- Raingardens (engineered soil mix)
- Shoreland Restoration (compost incorporation)

When to consider Compost.

- Poor quality soils that will not support vigorous rapid growth.
- Projects completed late in the season
- Locations that are steep or hard to reach with heavy equipment
- Areas where weed control cannot be used
- High profile areas where immediate results are needed
- May be able to get GHG credits

General Benefits

- Weed free source of organic matter.
- Promotes plant growth and rooting.
- Great moisture holding capabilities.
- Contains low levels of nutrients.
- Disease suppression qualities.
- Can fix poor soils, physically, and biologically.

Storm Water Management & Erosion Control

- Water retention
 - 10 lbs compost holds 8 lbs water
 - Reduces runoff/erosion

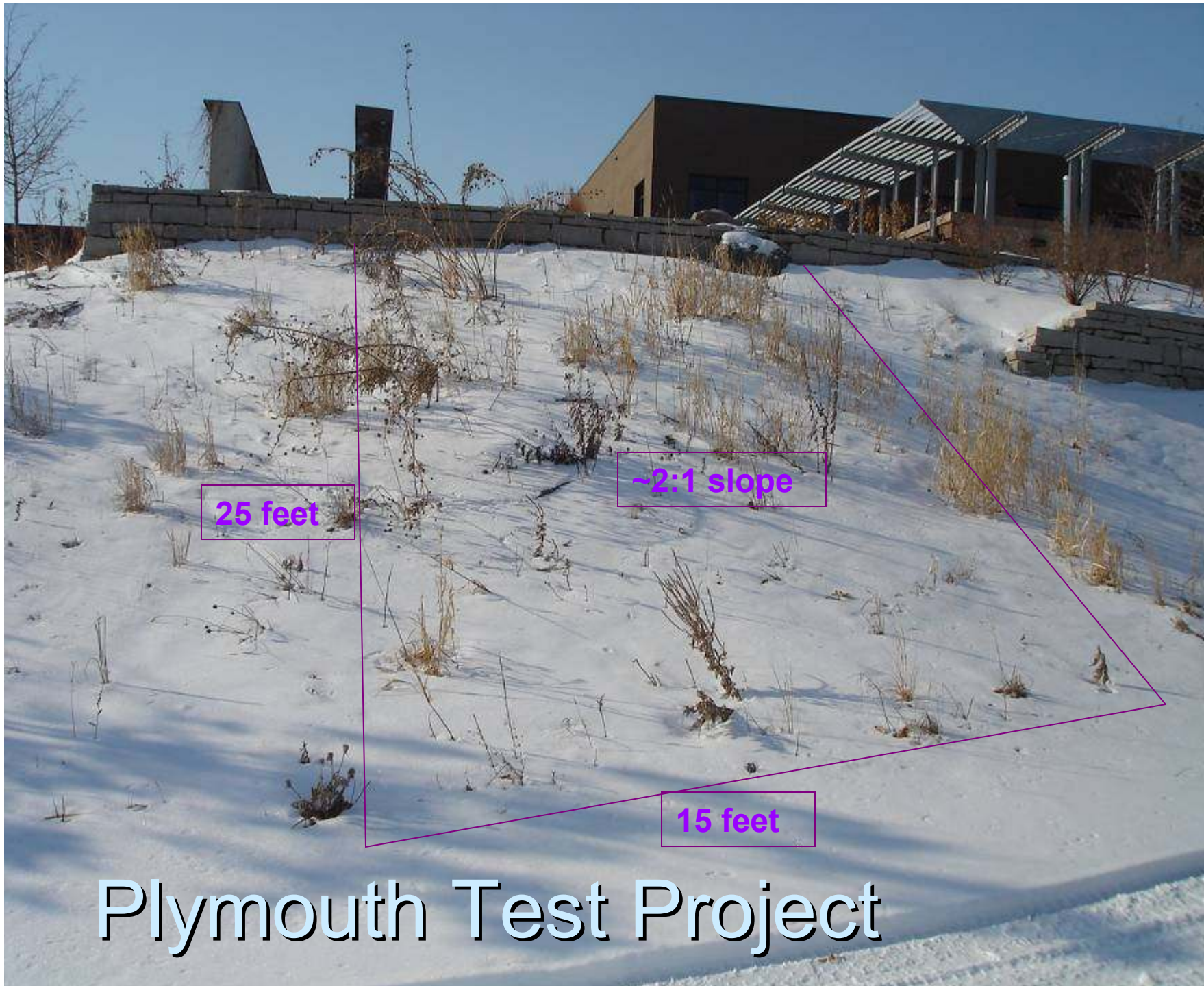
- Quick Re-vegetation

Plymouth Test Project

- Public Safety Expansion
- Native plantings
- Steep slope 2:1
- First planting very thin
- Highly eroded
- Very Public site



Plymouth Test Project



Plymouth Test Project

Plymouth Test Project

- Test plot of yard waste compost/pond storm water dredgings
- First year no growth, no erosion
- Second year prolific black-eyed susans
- Third year, heavy fall leaf layer prevent flower growth, mainly green vegetative growth

Wood Creek

- Tributary stream to Medicine Lake, listed as impaired for Phosphorus
- Plated as a wooded out lot to an HOA, 1970's
- Sever erosion
- Endangered decks and homes
- Deposition of lg. alluvial fan in Medicine Lake



Picture courtesy of City of Plymouth



West end of project

Picture courtesy of City of Plymouth



Middle West end of project



Middle East end of project

APR 8 2008

Picture courtesy of City of Plymouth



Middle East end of project



Middle East end of project

Picture courtesy of City of Plymouth



MAY 30 2008

Picture courtesy of City of Plymouth



SEP 30 2008

Picture courtesy of City of Plymouth



MAY 30 2008

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SEP 30 2008
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Plymouth Rain Gardens

Plymouth Raingardens

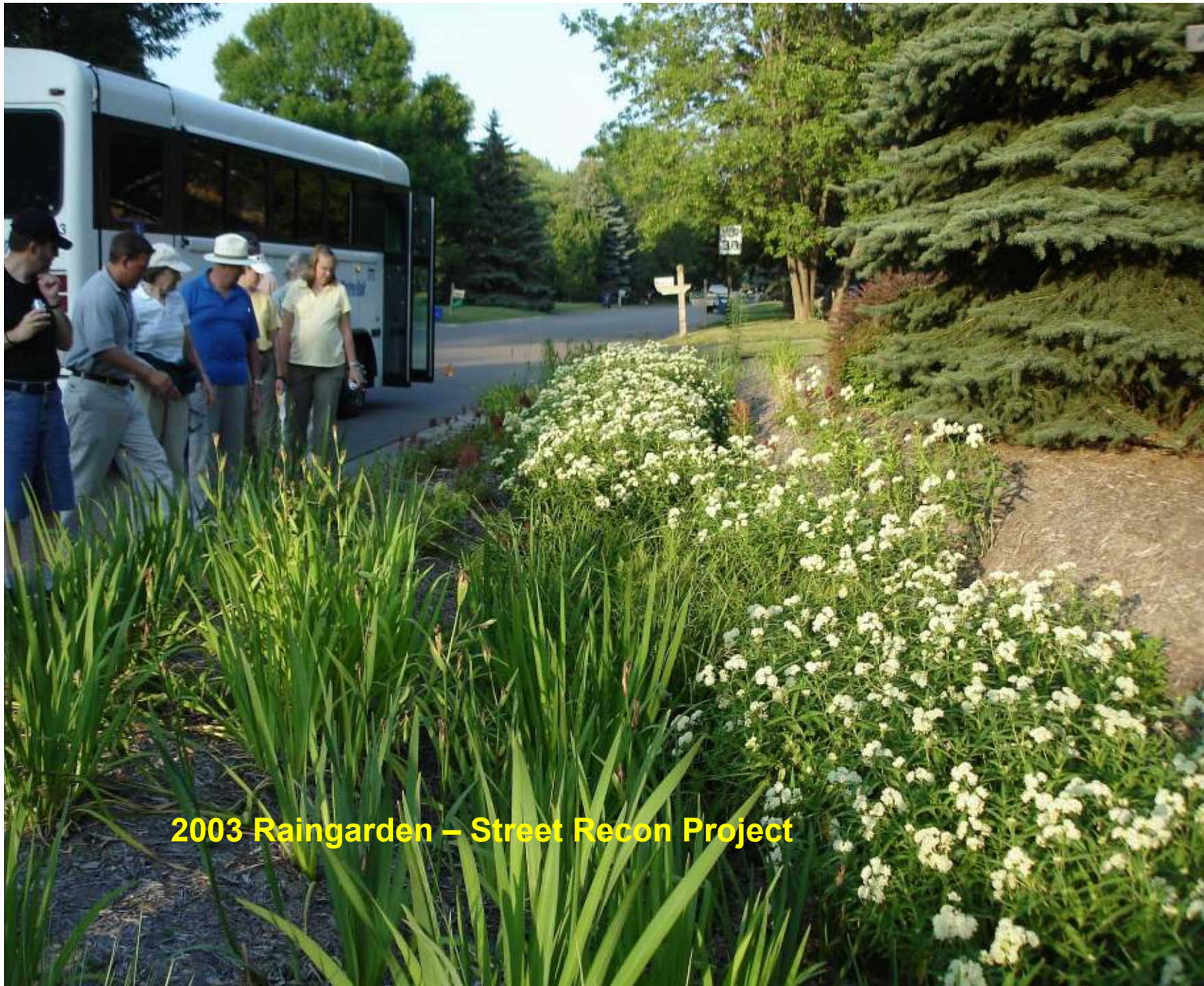
- Surface Water Management Plan of 2000
- Surface Water Management Fee, 2002
- Commercial Rain Gardens, 2004
- Residential with Road Reconstructions, 2003 to present

Plymouth Rain Garden Spec.

- Soil Amendment
 - 70/15/15 on-site soil/compost/sandy soil mix.
- Mulch
 - shredded raw wood material from hard timber
 - No individual piece shall exceed 5" in any direction.
- Edging
 - commercial grade, 4" x 1/8", Green Steel Edging by Sure Loc or approved equal
- Drain tile
 - 4" in diameter filter sock, connected with a 4" x 4" x 4" TEE to drain tile in the street or a nearby catch basin as specified on the construction plans or in the field

Nursery Plant Stock

- Shrubs (Gallon Pots)
 - Annabelle' Hydrangea
 - Emerald Mount' Honeysuckle
 - Viburnum "Bailey Compact" (*V. trilobum*)
 - Perennials (4" Pots)
 - Sedum 'Autumn Joy'
 - Liatris 'Floristan Violet'
 - Daylily 'Lemon Lollypop'
- Blue Flag Iris (*Iris versicolor*)
 - Black-eyed Susan "Goldstrum"
 - Aster 'Alma Potschke' (*A. novae-angliae*)
 - Aster 'Purple Dome'
 - Feather Reed Grass 'Karl Forester'
 - Little Bluestem



2003 Raingarden – Street Recon Project



2003 Rain Garden – Street Recon Project
2004 Street Recon Rain Garden - Garden Lane and 46th Av. N.

2006 Plants, Ponds and Practices Tour, 2005 Street Recon



2005 Street Recon Rain Garden Project – Southwest Plymouth







2005 Street Recon Rain Garden Project – Southwest Plymouth



SHORELINE RESTORATION

- ◆ Promoting healthy habitat
- ◆ Improving water quality

Look for this symbol around Medicine Lake. It identifies a shoreline restoration project that will reduce erosion, filter pollutants, provide wildlife habitat and stabilize the shoreline to help protect the health of Medicine Lake.



Shoreline Restoration – West Medicine Lake Park

The Star: Derek Asche,
Plymouth Resoure Water Management Tech



Shoreline Restoration – West Medicine Lake Park