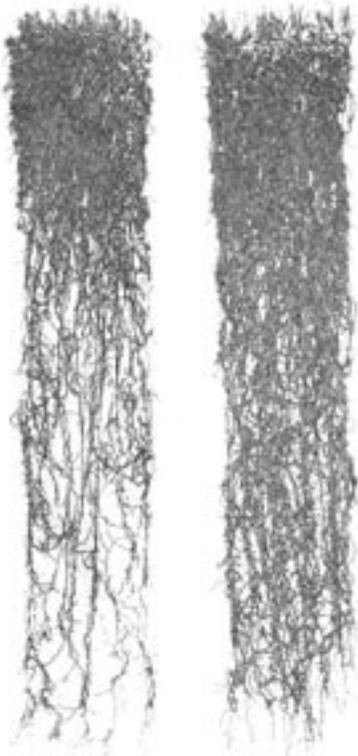


Services

- Hydrologic analysis
- Site design & engineering
- Planting plans
- Community education programs
- Interpretive signage
- Implementation supervision



Deep-rooted plants facilitate infiltration of stormwater.

A leader in ecologically sound stormwater management techniques, Barr has developed a unique expertise in rainwater gardens and other innovative stormwater treatment practices. In designs such as those pictured here, stormwater becomes a resource to be enjoyed.

Rainwater gardens are shallow depressions that are strategically placed to catch runoff from roads, parking lots, driveways, and roofs. Deep-rooted plants are planted to facilitate infiltration, filter pollutants, and create bird and butterfly habitat.

Rainwater gardens can be used on small sites or as the primary treatment technique in a larger system, allowing a neighborhood to manage street runoff improving water quality and reducing the volume of stormwater reaching nearby streams and lakes. The gardens are excellent for use in highly visible areas, where they not only manage runoff effectively, but add visual interest.

With a team of expert hydrologists, engineers, and landscape architects, Barr is ideally suited to design rainwater gardens that are both functional and beautiful.



In the Swede Hollow neighborhood, Barr designed a series of rainwater gardens that accept stormwater from local streets and the roof of a nearby commercial building.

A neat edge and pedestrian access make the gardens a neighborhood amenity.

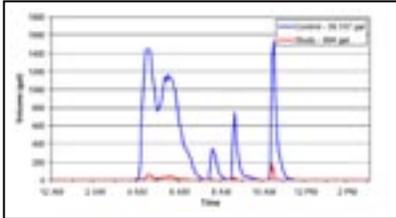


An urban transformation—Rainwater gardens unify a neighborhood

Burnsville Rainwater Garden System

In Burnsville, Barr designed 17 rainwater gardens in a residential neighborhood. The gardens line the streets adding beauty and interest to the neighborhood.

The gardens protect nearby Crystal Lake by trapping contaminants and reducing runoff volumes. Barr's ongoing study of the



gardens is demonstrating positive results. The above hydrograph represents data from a significant rainfall in May 2004.

Barr also created a maintenance guide to help homeowners care for their rainwater gardens.



The gardens contain a variety of colorful perennials and hardy shrubs that filter phosphorus and other pollutants out of stormwater.



A Burnsville yard before, at left, and after, below. Gradual slopes and limestone retaining walls frame the plantings.



(Continued)

Ecological stormwater management—Rainwater gardens mimic natural systems

Northland College Comprehensive Stormwater Management

When Northland College decided its campus should reflect the ethic of its environmental education program, it hired Barr's interdisciplinary landscape architecture team for a multitude of campus-design initiatives.



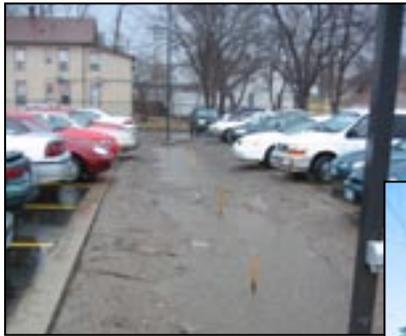
A series of parking lots were planted with drought-tolerant native plantings. Nearby stormwater meadows filter pavement runoff.



Stormwater meadows and rainwater gardens mimic natural wetlands by filtering rainwater through vegetation and soils.



At El Colegio Charter School, rainwater gardens filter runoff from impervious surfaces—the roof, parking lot, and roadway.



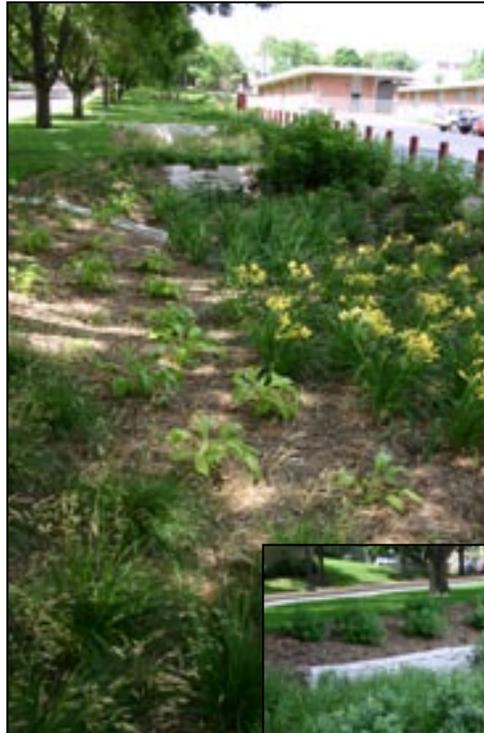
Above, stormwater flows off this parking lot forming a muddy pond. At right, the parking lot is transformed into a friendly oasis where stormwater is used to nourish a garden.



(Continued)



At the Science Museum of Minnesota, Barr created rainwater gardens that met the Science Museum's goal of demonstrating to visitors how a beautiful shallow vegetated depression can protect the Mississippi River by treating stormwater.



Rainwater gardens, such as those Barr designed for the University of Minnesota St. Paul and the University of Minnesota Duluth, enhance the campuses and offer a unique opportunity for education. Barr has developed curriculum, conducted seminars, and designed interpretive signs as part of numerous rainwater garden projects.



To learn more about Barr's rainwater garden services, please contact Fred Rozumalski at 952-832-2733, or frozumalski@barr.com. You can also visit our website at www.barr.com.