

# From Roof to Raingarden: Managing Stormwater on the Site

*In 2008, the Maplewood City Council approved major landscape renovations for the Maplewood Nature Center. Drainage problems at the site had led to standing water after rain falls, concerns for safety, potential for property damage, and degradation of Green Heron Pond.*

*It was time to manage rain water on the site and enhance the landscape so it could serve as a demonstration site for environmentally-friendly landscape techniques. The hardscape was completed in 2008. In spring and summer 2009, staff and volunteers will plant the gardens. In future years, interpretive signs and additional exhibits will be added.*



A rain chain directs roof runoff in the rain planter.

## The sustainable landscaping demonstrations include:

**A**

- Rainwater from the **visitor center roof** is stored in large rain barrels and used to water three rain gardens.

**B**

- **Rain canal** carries water from rain barrels to the gardens. All it takes is a turn of the tap on the rain barrels.

**C**

- **Pervious pavers** allow rain and snow melt to percolate into the gravel beneath. No more standing water or icy patio conditions.

**D**

- **The rainwater planter** is an elegant structure of sculpted concrete. Rain water from the roof makes it way through the downspout, down a **rain chain** to splash upon a rock and into the planter. It features **wildlife art**.

**E**

- Native plants useful for their adaptability, wildlife value, and aesthetic qualities will be planted in rain gardens, the picnic area, and wildlife shelterbelt.



The rain canal takes water from a rain barrel to the rain garden.

## Enhanced play and picnicking area include:

**F**

- A trail with **footbridges** leads families by butterfly and rain gardens to the future play area, the oak grove, and bird watching area, and onward to the pond and woodland trails.

**G**

- A nature play area, still in development, will feature a naturalistic climbing structure for young children.

**H**

- Sidewalks are equipped with **grates** beneath which rain flows to raingardens. **Animal footprints** in the walkway demonstrate connections to nature.

**I**

- A small amphitheater serves as an outdoor classroom. This semi-circle of large **limestone rocks** provides seating for presentations and picnickers, and stepping stones for kids.



# From Roof to Raingardens: *Celebrating Rainwater*

In Maplewood Nature Center's Yard

*Can you find... ?*



**Roof where  
Rain Falls**

**A**



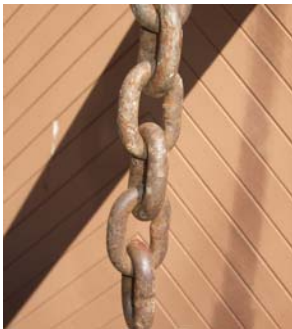
**Rain Canal**

**B**



**Pervious Pavers**

**C**



**Rain Chain**

**D**



**Wildlife Art:  
Small Dragonfly**

**E**



**Bridge lets Water  
Flow Below**

**F**



**Grate Leads to  
Rainwater Garden**

**G**



**Goose Footprint**

**H**



**Rock shaped like  
Water Drop**

**I**

*See next page for written descriptions of these features....*