





Apple Valley: Falcon Ridge Middle School Raingardens

The Falcon Ridge Raingardens were installed with native plants to treat stormwater while keeping the Middle School's snow storage needs in mind.

The project was completed cooperatively by the:

- City of Apple Valley
- Dakota County Soil and Water Conservation District
- Falcon Ridge Middle School
- Vermillion River Watershed Joint Powers Organization



Restoring Long and Farquar Lakes

Years of stormwater runoff being delivered to Long and Farquar Lakes have contributed to elevated levels of nutrients in both lakes. In addition, the lakes contain curly leaf pondweed, an invasive aquatic plant, and rough fish populations; both have negative effects on the lakes' water quality.

In an effort to reduce the nutrients being delivered from external sources, the Vermillion River Watershed Joint Powers Organization partnered with the City of Apple Valley, Falcon Ridge Middle School, and the Dakota County Soil and Water Conservation District to build raingardens designed to reduce nutrient levels in both lakes to appropriate levels.

Cost-share funding from the Vermillion River Watershed Joint Powers Organization enabled the City of Apple Valley to install two raingardens at the Falcon Ridge Middle School. The raingardens will capture stormwater runoff from the school parking lots preventing it from entering the storm sewers and travelling to Long and Farquar Lakes.





City of Apple Valley, MN within the Vermillion River Watershed.

Vermillion River Watershed Joint Powers Organization

14955 Galaxie Avenue Apple Valley, MN 55124 www.dakotacounty.us 952-891-7000

The Vermillion River is a vital natural resource that is important to public health and recreation, as well as preserving unique wildlife habitats. It flows from New Market Township in Scott County, through residential and agricultural areas in central Dakota County, and cascades into a 100-foot ravine before it enters the Mississippi River near the Cities of Hastings and Red Wing, Minnesota. Throughout its journey, the river reflects urban and rural life within its 335-square mile watershed.

Problem:

- Large amounts of runoff carrying nutrients were being delivered to Long and Farquar Lakes
- Invasive plant and fish species
- Excessive algae blooms
- Limited recreational opportunities

Actions:

- Install two raingardens to capture first half-inch of runoff from school parking lots draining to Long and Farquar Lakes
- Installed engineered soil and established native plants and cultivars in each raingarden to treat the runoff

Benefits:

- Reduces water quality problems such as cloudiness, algae blooms, and low dissolved oxygen by reducing pollution into Long and Farquar Lakes
- Provides the school with an environmental education focus area and improved aesthetics
- Provides pollution reductions necessary for Long and Farquar Lakes Total Maximum Daily Load (TMDL) study
- Allowed to the school to maintain its snow storage space

Costs and contributions:

- City of Apple Valley: \$135,329 engineering and labor
- Vermillion River Watershed Joint Powers
 Organization: \$60,000 cost share
- Dakota County Soil and Water Conservation
 District: design and construction technical
 assistance

