

Capital Improvement Project



ConAgra Foods, Inc.: Drainage Swale and Biofiltration Basin

The ConAgra Mills facility re-graded their gravel lot, installed an asphalt swale leading to a grass swale, and constructed a biofiltration basin planted with native species.

The project was completed cooperatively by:

• ConAgra Mills

After

- Dakota County Soil and Water Conservation District
- Vermillion River Watershed Joint Powers Organization



Reducing Pollutant Loading to the Vermillion River

ConAgra Foods is one of North America's leading food companies and the parent company of ConAgra Mills, a leading national producer of premium multi-use flours and innovative whole grain ingredients. ConAgra Mills operates a large flour mill located in the City of Hastings and adjacent to the Vermillion River. The facility has a large impervious surface area, and during periods of heavy rain, a considerable amount of water runoff volume leaves the site. The facility's footprint includes significant rooftop area and a large asphalt and gravel lot that the facility uses regularly for shipping and receiving goods. The facility also receives raw grain for processing; as part of the milling process and shipping/receiving goods, fugitive dust and other pollutants are deposited on the ground.

Runoff from the buildings and the parking lots carries sediment and other pollutants with it. ConAgra Mills recognized an opportunity to treat the stormwater runoff to reduce pollutant loading into the Vermillion River.

In conjunction with the Vermillion River Watershed Joint Powers Organization, ConAgra Mills initiated a project to regrade their asphalt and gravel lots, construct an asphalt swale in the gravel lot to convey water and pollutants, and construct a grass swale to filter out pollutants. Cost-share funding from the Vermillion River Watershed Joint Powers Organization and ConAgra Mills enabled construction of a large biofiltration basin to capture and treat pollutants prior to the water discharging to the Vermillion River.





Asphalt swale conveys stormwater to the grass swale.



ConAgra Foods, Inc. is located in the City of Hastings, 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:

- Stormwater runoff pollutants are minimally treated before discharging to the Vermillion River
- On-site pollutants include sediment, chemicals, and grain dust
- П The Vermillion River is impaired for turbidity (cloudiness) in this reach of the Watershed

Actions:

- Re-grade asphalt and gravel lots
- Construct an asphalt and vegetated conveyance swale
- Construct a biofiltration basin to treat stormwater П pollutants prior to discharge to Vermillion River

Benefits:

- Reduces sediment and other pollutants in the Vermillion River
- П Possible reduction to ConAgra's stormwater utility fee
- Helps to meet requirements of ConAgra's NPDES Industrial Stormwater Permit
- Improves aesthetics
- П Allows for education, outreach, and stewardship

Costs and contributions:

- ConAgra Mills.: \$254,469 - engineering, construction, and labor
- Vermillion River Watershed Joint Powers Organization: \$102,684 - 50 percent of the biofiltration basin project cost
- Dakota County Soil and Water Conservation District: design and construction technical assistance

