

St. Cloud State University Q Parking Lot Pollution Reduction Project

"This project shows that St. Cloud State and its facility management is fully engaged with the local environment to manage pollutants entering the Mississippi River" – Joe Teff



Practices :

Biofiltration Basin and Native Plantings

Target Waters :

Mississippi River

Year Constructed :

2015

Components :

- Pretreatment Stormwater Pond
- Biofiltration Basin
- Native Planting
- Over 8,000 Native Plant Plugs
- Control Valve on Basin Tile Outlet

Benefits :

- Clean Water Leaving Site
- Pollinator Habitat

Partners :

- St. Cloud State University
- Stearns County SWCD
- City of St. Cloud
- Conservation Corp of MN and Iowa

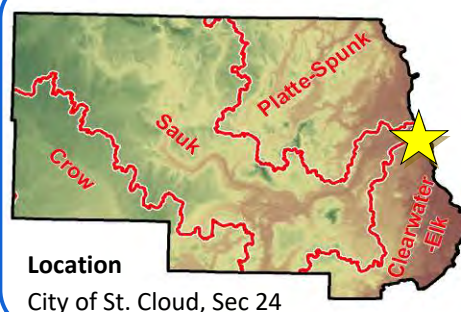
Watershed :

Mississippi River – St. Cloud

Project Description: St. Cloud State University Q-Lot is a parking lot made up of 8 acres of gravel and asphalt. These impervious surfaces did not allow for rainfall or snow melt to soak into the ground. The water ran off directly into the storm sewer system which flows straight into the Mississippi River. SCSU staff frequently witnessed sediment plumes, the color of chocolate milk, at the storm sewer outfalls. The storm water carried with its sediment, bacteria, automotive fluids and other pollutants. The goal was to reduce the pollutant load entering the Mississippi River from Q-Lot by capturing and treating the first inch of rainfall in a treatment train of best management practices.

Pollution Reduction Estimates:

Phosphorus	12.25 Lbs/Yr
TSS	1.92 Tons/Yr



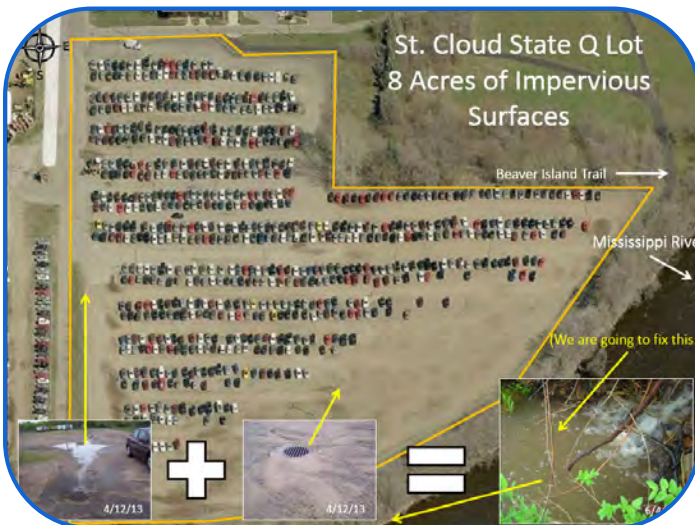
Location
City of St. Cloud, Sec 24

Stearns County Soil and Water Conservation District
110 2nd Street South, Waite Park, MN 56387

Ph: 320-251-7800 x3
www.stearnscountyswcd.net

SCSU Q Parking Lot Pollution Reduction Project

"This project is a great example of how an educational institution can make a commitment to protect the environment" – Wayne Cymbaluk - Stearns County SWCD Staff



Clean Water Fund Application Image



Construction begins



Getting ready to plant over 8,000 native plant plugs



One of the many native flowers growing in the basin

Stormwater Pond and Bioretention Basin
Collecting, Filtering & Releasing Water Slowly

Mississippi River water quality is important to St. Cloud State University. The university installed this bioretention basin to ensure all stormwater from Q Lot is filtered to remove pollutants before the water reaches the river. The basin's deep-rooted native plants help filter and break down the pollutants.

Common Pollutants in Stormwater:
Oil, Grease, Antifreeze, Brakes, Coolant, Paint, Gasoline, Oil, Sediment, Debris, Trash, Automobiles, Tires

The Alternative:
Without this basin, stormwater from Q Lot would flow directly into the Mississippi River, increasing pollution and harming the environment.

Q Parking Lot

- 1 The pond collects stormwater.
- 2 Sediment and pollutants catch.
- 3 Plants and soil break down pollutants.
- 4 Water flows through an outlet or into the ground.
- 5 Clean water enters the Mississippi River.

Stormwater Project Benefits:

- Reduce flooding
- Remove pollutants
- Control runoff volume and flow
- Reduce greenhouse gas
- Provide wildlife habitat

Project funded by:

Project Signage

Funding:

State Funds*	\$ 186,286
Landowner Investment	\$ 48,798
Federal Funds	\$ 0.00
Other Funds	\$ 0.00

* Administered by Stearns SWCD – Minnesota Clean Water Fund through the Clean Water, Land & Legacy Amendment.