

8th Avenue North Phase 2

8th Avenue North Phase 2 was the City of St. Cloud's first reconstruction project to implement bioretention as a form of stormwater management. Future projects will infiltrate and treat stormwater runoff using various techniques including bioretention.

Other City projects using bioretention to manage stormwater include:

Cooper Avenue N (tree planters)

8th N Avenue Phase 3 (tree planters)

Bear Ridge (tree planters)

Regional Library (green roof, rain garden)

Fire Station #5 (bioretention swale).

Riverside Greenhouse (rain garden)



Rain garden at St. Cloud Regional Library



For additional information, questions or to report a problem please contact:

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Thank you for your assistance maintaining the tree planters. Your efforts are appreciated by the City and the environment.

Tree Planters Protecting Water Quality



Tree Planter on 8th Ave North

TREE PLANTERS

What is it?

Tree planters are depressed areas where a tree is planted in engineered soils to reduce the amount of runoff and pollutants entering the nearest water body. This type of stormwater management practice is called

BIORETENTION.

Why is it useful?

Natural infiltration of rain removes pollutants such as fertilizers, pesticides, oil and heavy metals. These pollutants are captured before entering the Mississippi River. Trees also provide aesthetic value and play an important role in the environment.

How does it work?

Stormwater is directed into the planter through an opening in the curb. Tree planters hold water so that it can be infiltrated. The trees, mulch and soil combine physical, biological and chemical processes to remove pollutants. Standing water is expected for 24 - 48 hours in a properly functioning tree planter.

What You Can Do To Help?

Although the City is responsible for long-term maintenance of the tree planters, **we ask for your continued assistance** in making this project successful. Take **ownership** and **pride** of the tree planters in your boulevard and the entire neighborhood by:

Removing Sediment & Debris

Remove sediment, debris and litter from the **curb cut and planting bed** as needed to ensure stormwater can enter and infiltrate. Continue to **mow the grass strip** between the curb and tree to allow water to enter.



Remove debris as needed & mow grass strip

Educate

Educate your neighbors and friends about tree planters and their benefits.

What is The City Doing?

To ensure project success the City will:

- Annually inspect all tree planters.
- Replace mulch as needed.
- Replace trees if necessary.
- Respond to resident questions/concerns.
- Educate residents about the planters and **importance of routine maintenance efforts.**
- Evaluate the effectiveness of tree planters on water quality and the environment.

The Value of Trees

- Two medium-sized trees can remove 500 pounds of carbon dioxide annually and provide enough oxygen for a single person to live for more than a year.
- One medium-sized tree can intercept up to 1,200 gallons of precipitation annually.
- Trees properly placed around buildings can reduce air conditioning needs by 30% and save 20-50% in energy used for heating
- Healthy mature trees add an average of 10% to a property's value

Source: USDA Forest Service