



East 40th Street Green Infrastructure Project

Why Treat Stormwater?

When it rains, oil and other pollutants are picked up in stormwater and can flow untreated into local waterways and ultimately Puget Sound. These pollutants have negative immediate and long-term impacts on surface water quality and fish habitat. Green stormwater infrastructure projects filter rain and stormwater runoff, benefiting the health of our waterways and the animals that live within them.

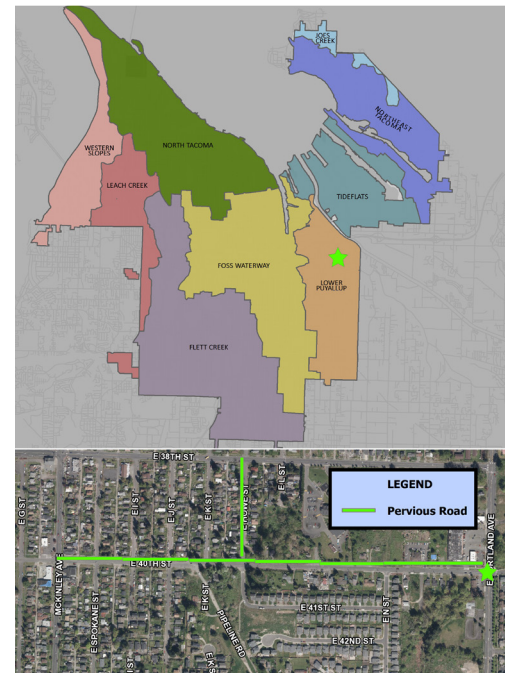
East 40th Street Project

The 40th Street Green Infrastructure Project provided improved water quality to 30 acres in the First Creek, Lower Puyallup Watershed. This area is home to a number of wildlife species, habitats, and various wetlands. The project helped create a healthy groundwater flow entering First Creek, restored the area to its natural conditions, and reduced neighborhood flooding.



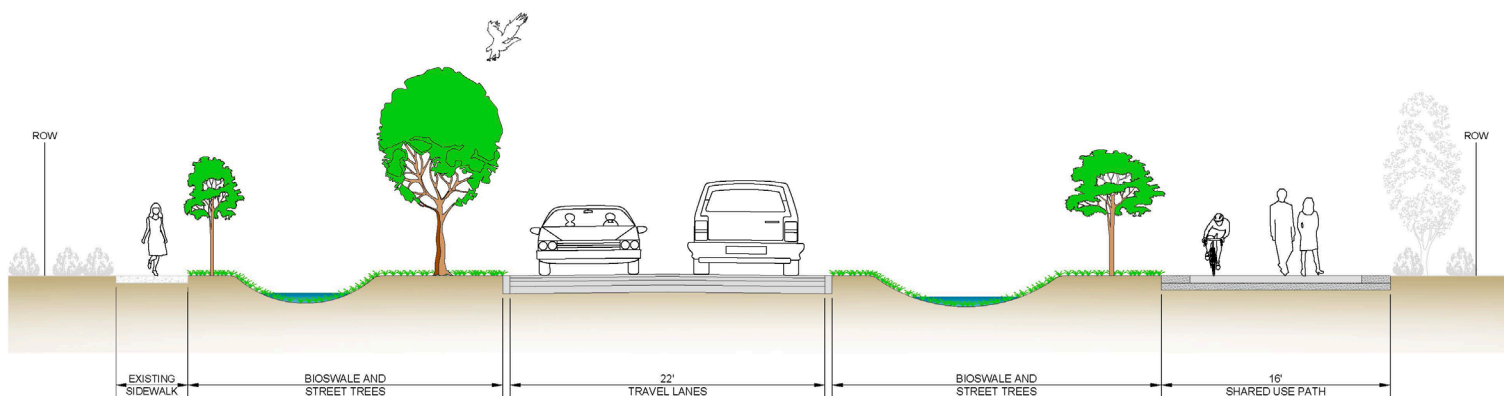
Location

East 40th Street
Tacoma, WA



Partners

WA Dept. of Ecology
City of Tacoma - Public Works
KPG
Tacoma Public Utilities - Water
AESI
GeoDesign
Northwest Cascade Inc.
Totem Electric
Miles Resources
Silver Streak Inc
Watershed Environmental
Solutions, LLC



Project Improvements

New permeable roadway designed with a reduced width to improve traffic safety and reduce vehicle speeds.

A new shared use path for enhanced pedestrian and bicycle experience.

Biofiltration swales designed to reduce flows and treat polluted runoff from adjacent streets.

Swales and street trees provide a buffer to the roadway.

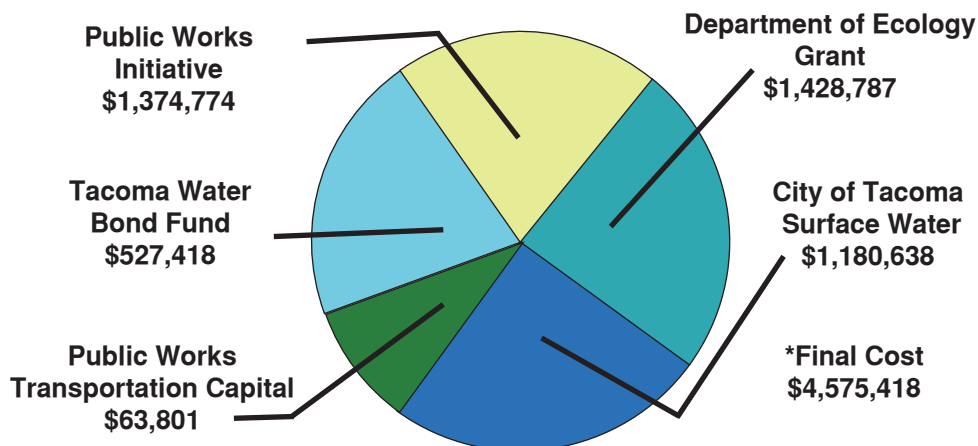


For More Information

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Funding



Green stormwater infrastructure was the most cost effective solution for this project. The life cycle cost of traditional design methods was estimated at nearly twice the cost.

Project Benefits

Localized flooding of East 40th Street happened in part due to the street being a low point of the East Tacoma neighborhood, such that all connected side roads drain stormwater to it. The road also has an amazingly wide right-of-way, varying from 80 to 100 feet in width. The design team took advantage of the wide right-of-ways, installing biofiltration swales for basic treatment of runoff and runoff coming from side roads and the greater neighborhood. As a result, water quality and quantity improvements were applied to the basin. The permeable pavement areas infiltrate 20.75 acres providing a significant reduction in flows and improved water quality.