

GREEN INFRASTRUCTURE IN NEW YORK STATE

New York Rising: Regional Resiliency Summit

Vestal, NY

November 18, 2013

Andrew M. Cuomo, Governor

Matthew J. Driscoll, President and CEO



THE ENVIRONMENTAL FACILITIES CORPORATION

Providing Low-cost Financing and Technical Assistance to Municipalities, Businesses, and NY State Agencies for Environmental Projects



Clean Water State Revolving Fund

Provides financial assistance for wastewater and water quality infrastructure



Drinking Water State Revolving Fund

Provides financial assistance for drinking water infrastructure





Green Infrastructure Projects

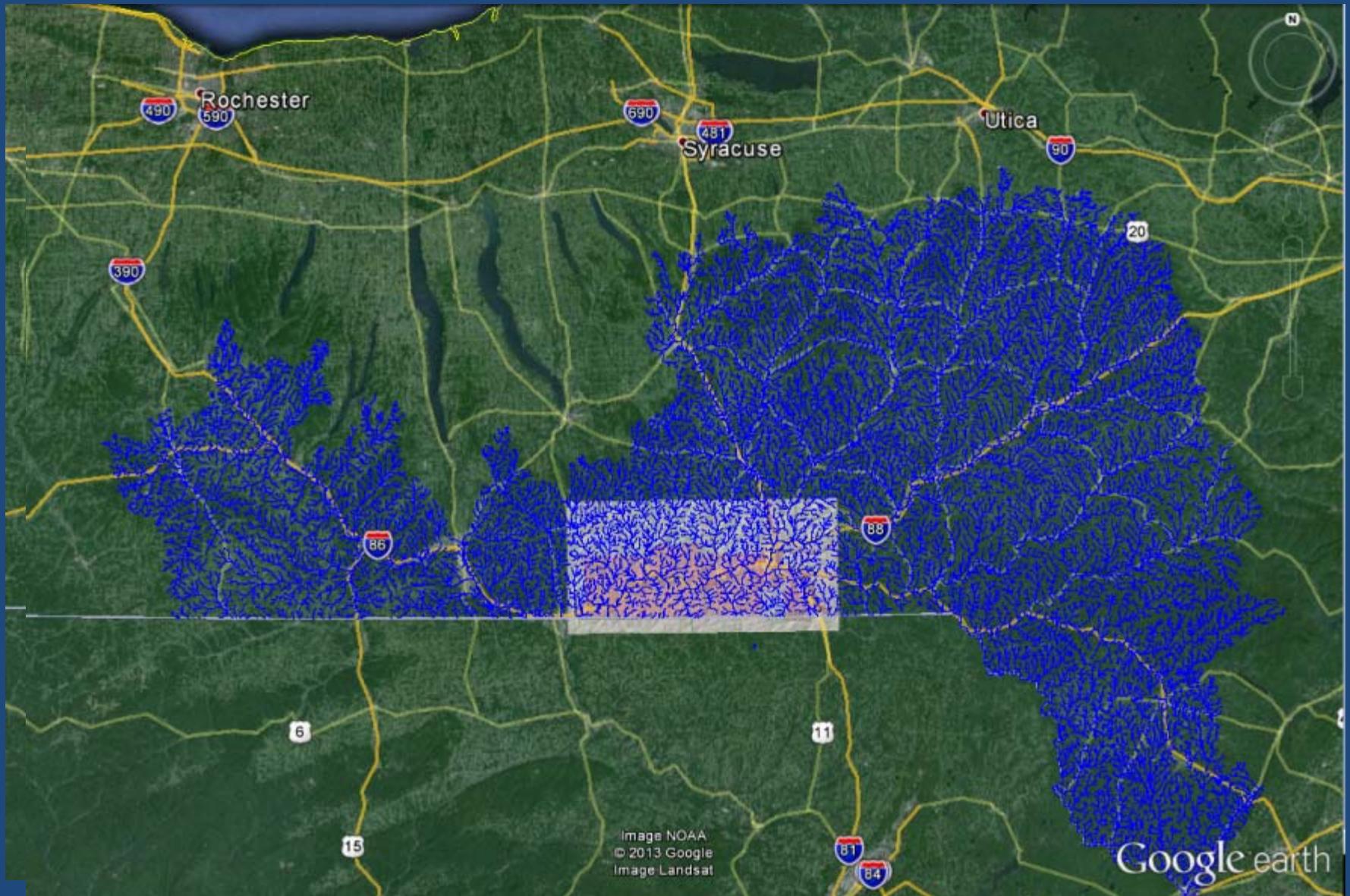


Source: Blue Neils

Combined Sewer Overflows



Source: Philadelphia Water Department



Sources: Google Maps and NYS DEC

What is Green Infrastructure?

*Green stormwater infrastructure includes a wide array of practices at multiple scales that manage wet weather and that **maintain and restore natural hydrology by infiltrating, evapotranspiring and harvesting and using stormwater.***

*On a **regional scale**, green infrastructure is the preservation and restoration of natural landscape features, such as forests, floodplains and wetlands, coupled with policies such as infill and redevelopment that reduce overall imperviousness in a watershed.*

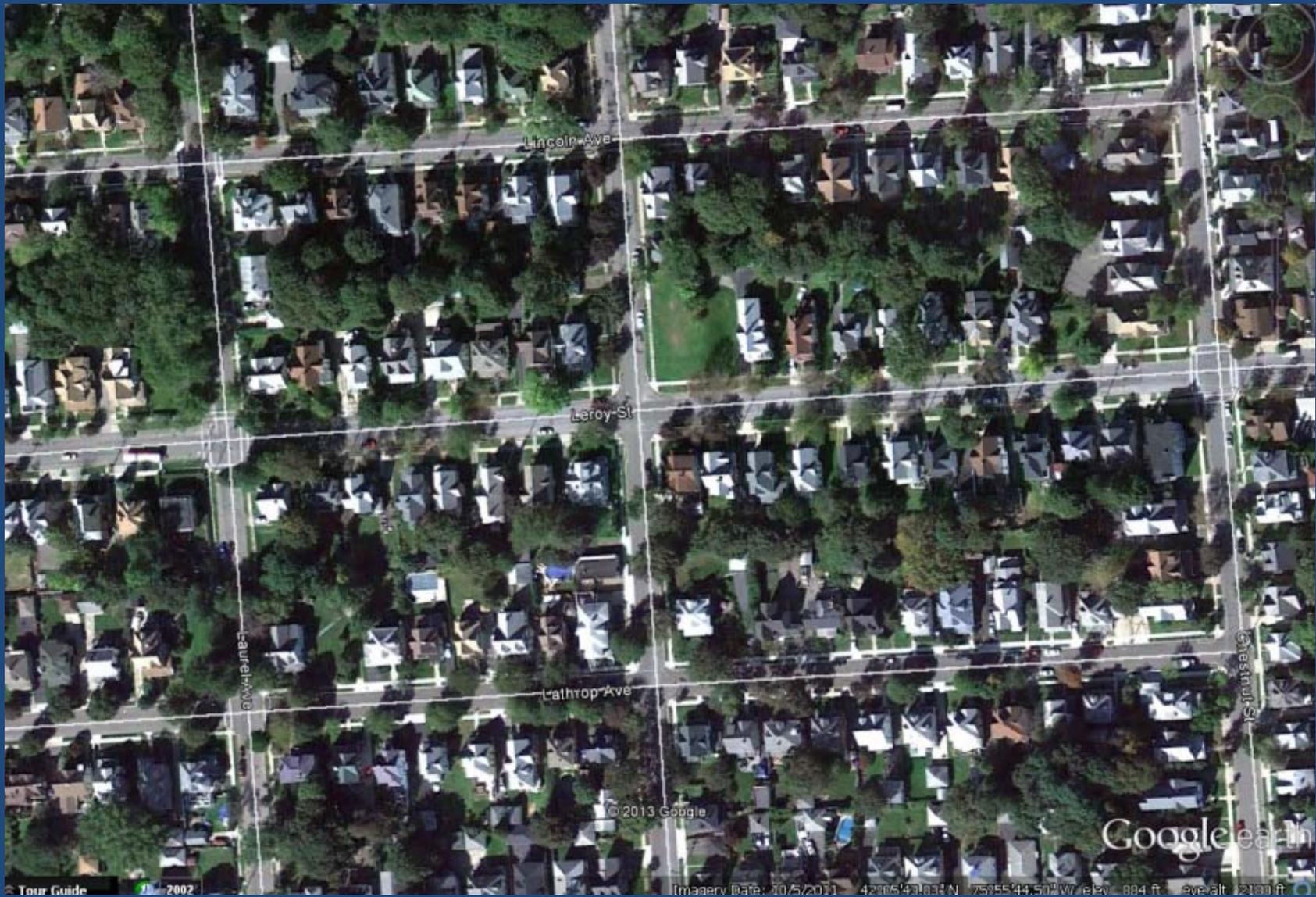
*On the **local scale** green infrastructure consists of site- and neighborhood-specific practices, such as bioretention, trees, green roofs, permeable pavements and cisterns.*

US EPA Green Project Reserve FY 2013





Source: Google Maps



Source: Google Maps



Source: Google Maps

Multiple Benefits of Green Infrastructure

Local Green Jobs

Air Quality Improvement

Energy Savings

Reduction in Crime

Increased Community Aesthetics

Higher Property Values

Reducing Urban Heat Island and Heat Stress

Reduced Carbon Footprint

Aquatic Ecosystem Improvements

Wetland Creation and Enhancement

Water Quality Improvements



Tioga County SWCD

GRAVEL BERM REMOVAL

Berm Removal for Stream and Floodplain Restoration

Tioga, Schuyler, Cortland,
Tompkins, and Steuben
Counties, NY



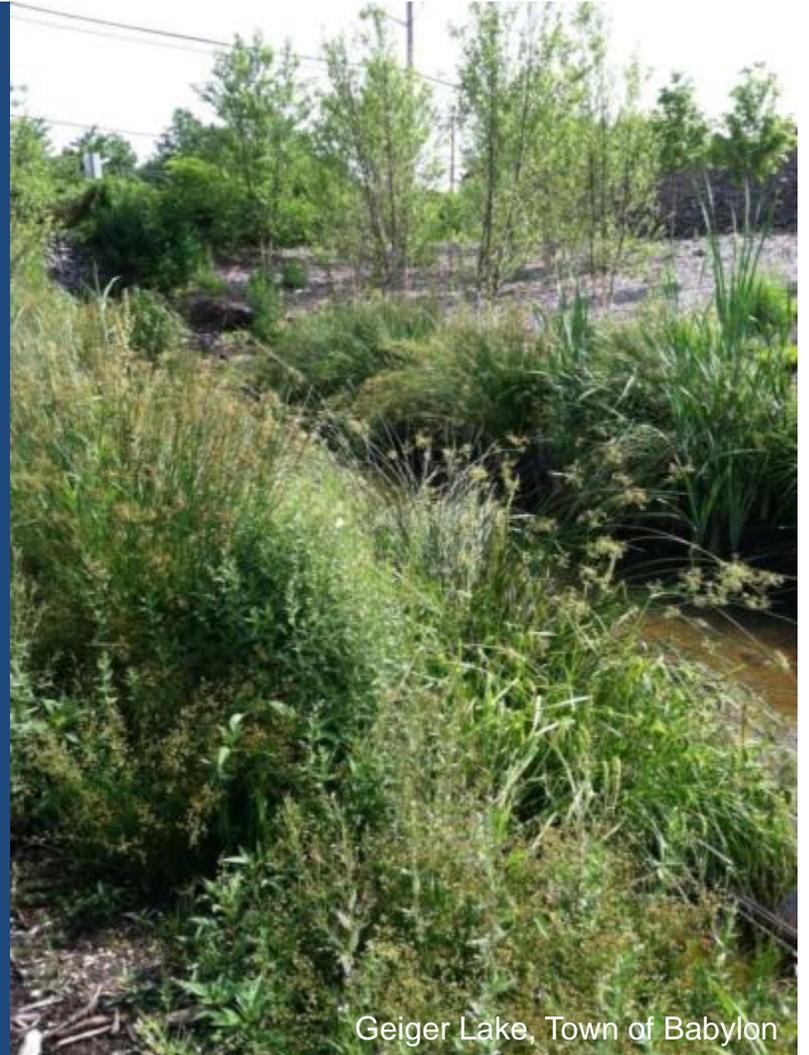
Tioga County SWCD

Berm Removal for Stream and Floodplain Restoration

Tioga, Schuyler, Cortland, Tompkins, and Steuben Counties, NY



Tioga County SWCD



Geiger Lake, Town of Babylon

Construction / Restoration of Wetlands, or Riparian Buffers



Daylighting the Sawmill River at Larkin Plaza

City of Yonkers



Daylighting the Sawmill River at Larkin Plaza

City of Yonkers



Permeable Pavement



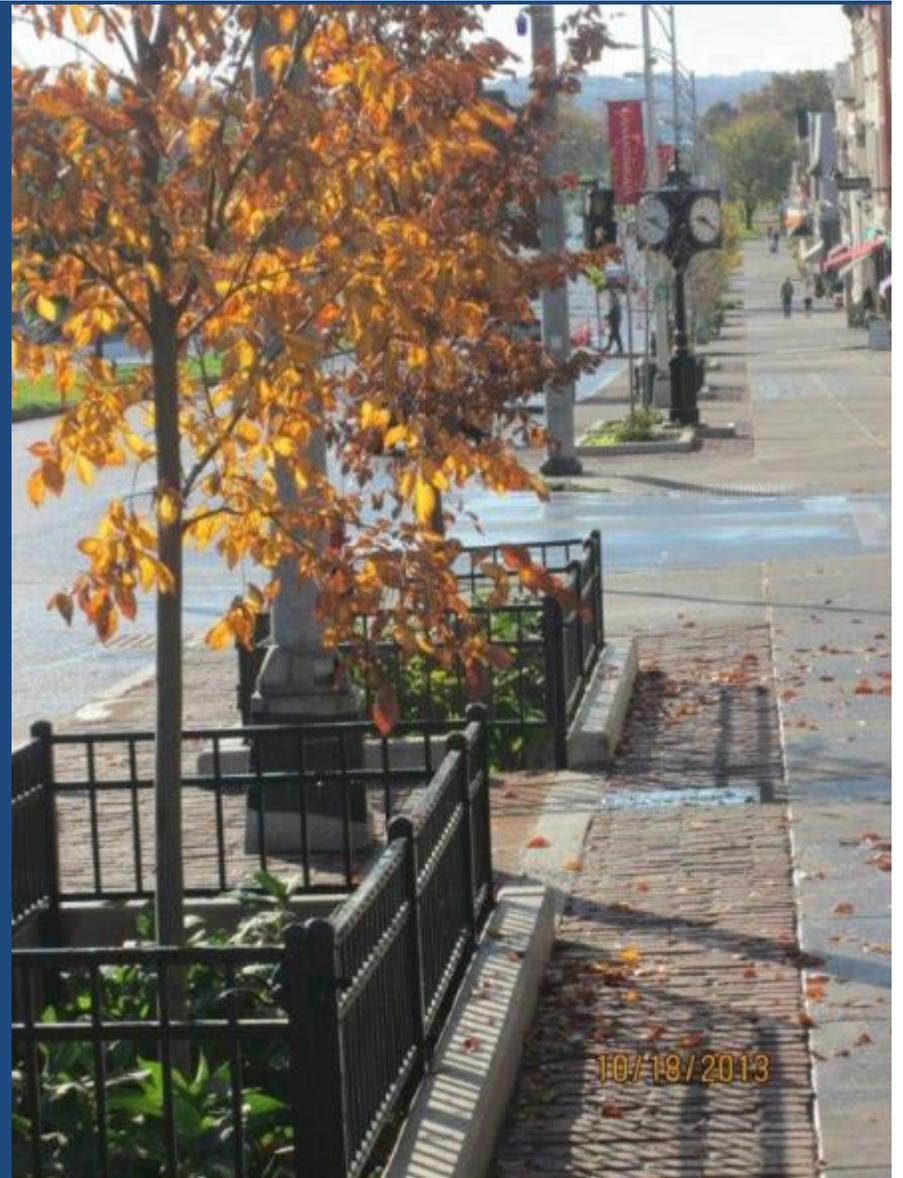
POROUS ASPHALT



Beach Road Porous Asphalt
Warren County, NY



Green Streets: Porous Pavement and Bioretention
Onondaga County, NY



Green Streets: Bioretention



Green Parking Lots: Bioretention



Images: Lehman and Getz Engineering

Village Hall Stormwater Retrofit

Greenwood Lake, NY



Images: Lehman and Getz Engineering

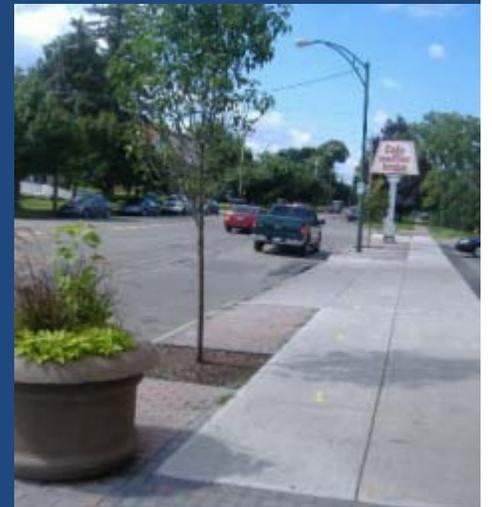
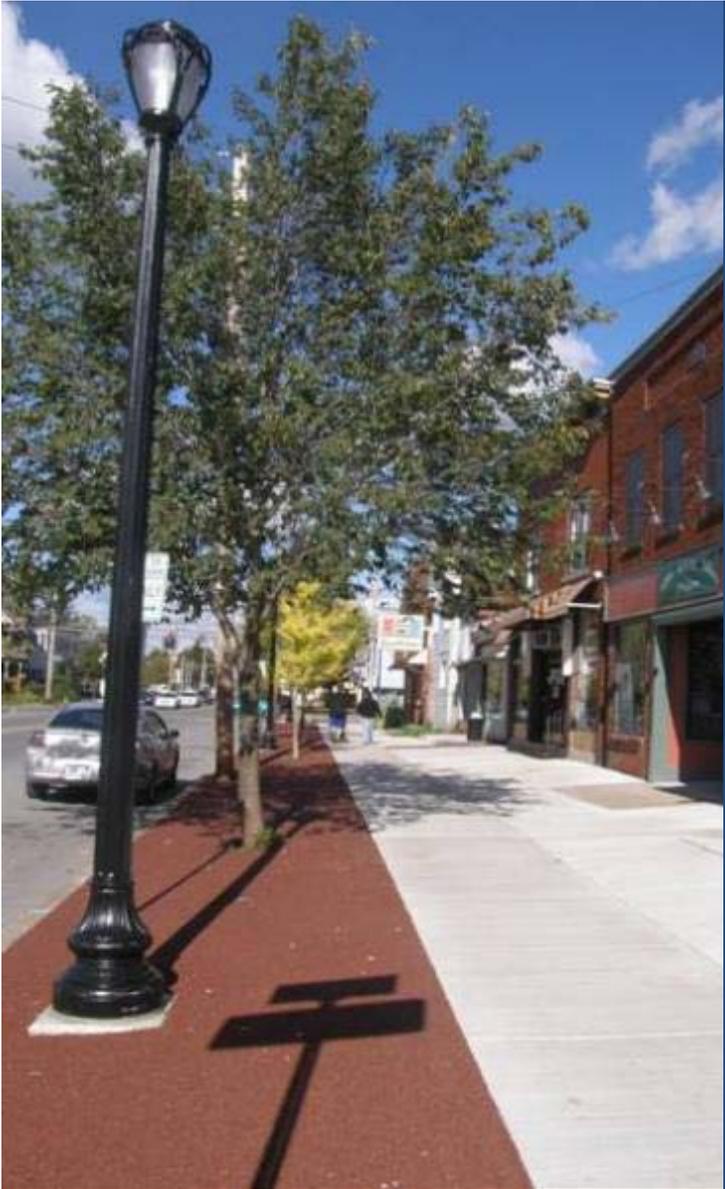
Village Hall Stormwater Retrofit Greenwood Lake, NY



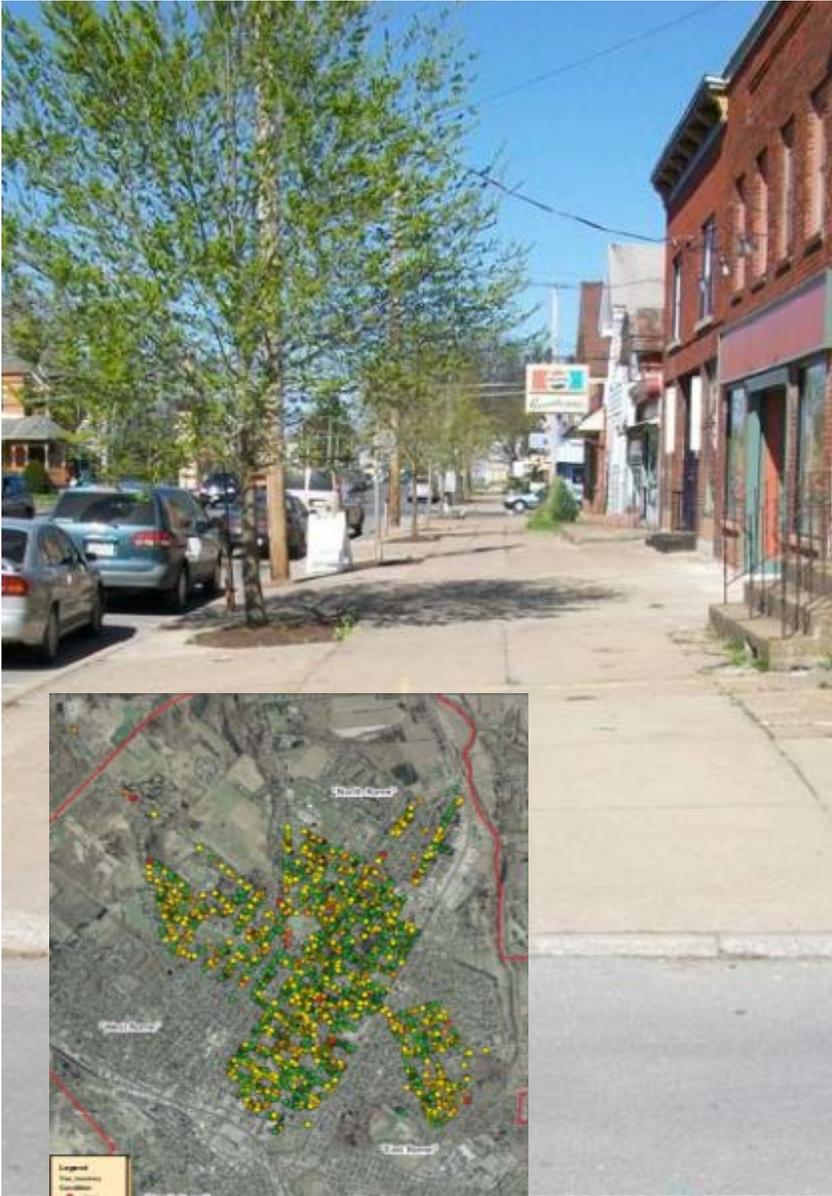
Images: Lehman and Getz Engineering

Village Hall Stormwater Retrofit

Greenwood Lake, NY



Stormwater Street Tree Pits, Trenches , Boxes



Images: City of Rome

Urban Forestry Programs Rome, NY

Green Streets

US EPA Municipal Handbook Series - Managing Wet Weather with Green Infrastructure: Green Streets



Source: Deep Root Partners, LP



Downspout Disconnection



Stormwater Harvesting and Reuse



Image: SUNY ESF
Green Roofs
Onondaga County, NY

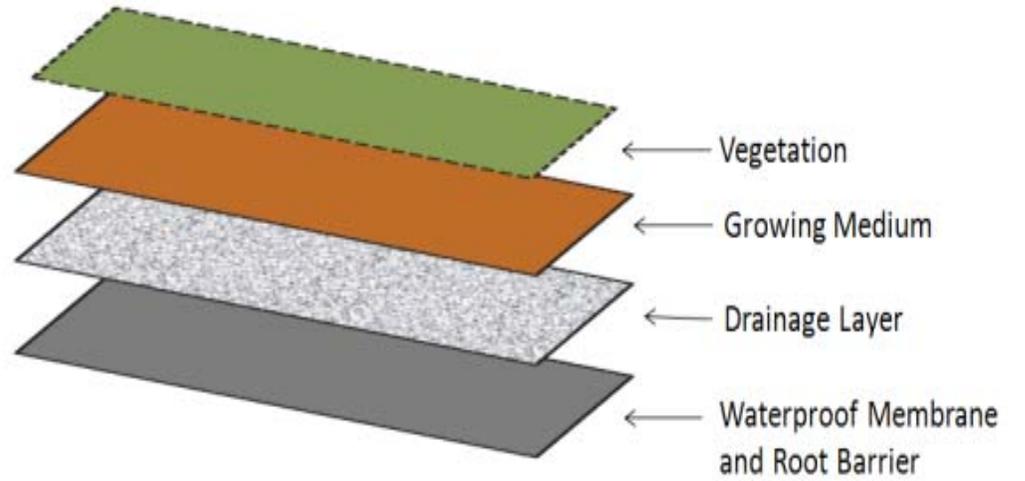
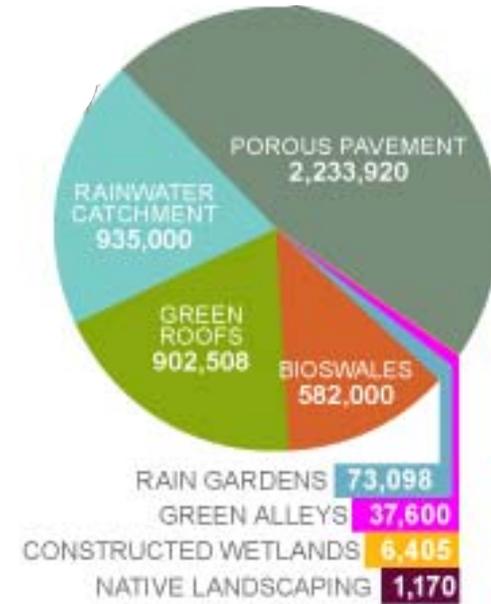
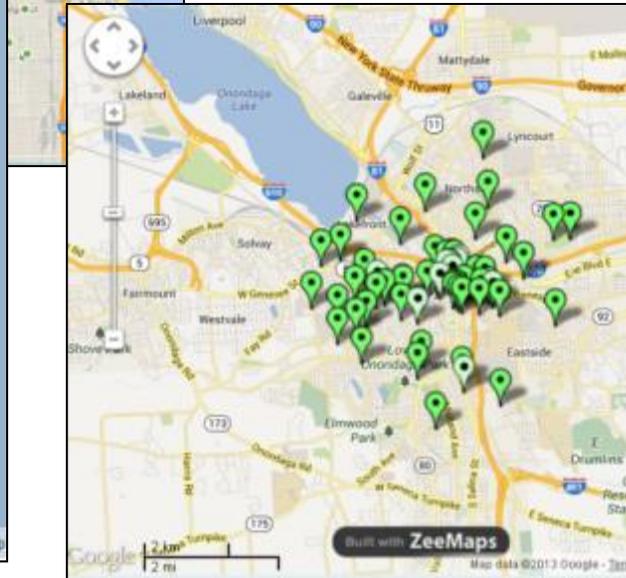


Image: James Gensel Fagan Engineers

Green Roofs

Quantifying and mapping the efforts and...



Maintenance, Maintenance, Maintenance...



Onondaga County Green Streets



Philadelphia Green Streets

Suzanna Randall, AICP

Green Program Manager

Suzanna.Randall@efc.ny.gov

Tana Bigelow

Green Infrastructure Coordinator

Tana.Bigelow@efc.ny.gov

NYS Environmental Facilities Corporation

625 Broadway

Albany, NY 12207

518-402-7461

www.efc.ny.gov

Financing for a Sustainable Future

