Green City, Clean Waters

Howard M. Neukrug, PE
Deputy Commissioner, Environmental Services
Philadelphia Water Department
Southeast Philadelphia (10th & Moyamensing), photo by Andrew Dobshinsky
James Elverson Middle School (13th & Susquehanna)
• Water quality issues
• Odors
• Low dissolved oxygen
• Bank erosion
• Lack of channel habitat + biological diversity
• Wetland degradation
• Poor public access to streams
• Dumping and trash
• Vandalism
• Flooding
THE OLD APPROACH TO MANAGING WATER
Breaking ground with a $1.6 billion plan to tame water

By Sandy Bauers

Philadelphia has announced a $1.6 billion plan to transform the city over the next 20 years by embracing its storm water — instead of hustling it down sewers and into rivers as fast as possible.

The proposal, which several experts called the nation's most ambitious, reimagines the city as an oasis of rain gardens, green roofs, thousands of additional trees, porous pavement, and more.

All would act as sponges to absorb — or at least stall — the billions of gallons of rainwater that overwhelm the city sewer system every year.

The plan's complex funding formula would raise rates somewhat but also attract grants and encourage private investment.

Further, the Water Department says the city's greening would result in more jobs, higher property values, better air.

See STORMWATER on A14
Green City, Clean Waters

• $2 billion, 25 yr program

• Promise to “green” 1/3rd of the city

• Restore and protect our urban streams

• Conserve rain water

• .....rather than waste it down the drain
Green City, Clean Waters

• Capture rainwater in cisterns, rain barrels and infiltration beds

• Use it to feed grass and trees and rain gardens

• Replenish the groundwater

• Green Philadelphia!
Rain Garden
West Mill Creek, Philadelphia, PA

Pervious Pavement
Mill Creek Basketball Court Philadelphia, PA

Stormwater Wetland
Saylor Grove, Philadelphia, PA

Stormwater Tree Trench
West Mill Creek, Philadelphia, PA

Stormwater Planter
Columbus Square, Philadelphia, PA

Stormwater Bump-out
NE Siskiyous Street, Portland, OR

Green Roof
PECO Building, Philadelphia, PA

Rain Barrel
Row home, Philadelphia, PA

Flow-Through Planter
New Seasons Market Portland, OR
Green City, Clean Waters

EIGHT GREEN PROGRAMS

Public Lands
- Streets
- Schools
- Public Facilities
- Open Spaces

Private Lands
- Industrial/Commercial/Institutional
- Homes
- Parking
- Alleys, Driveways and Walkways
An improved, growing and green city

East Park, Fairmount Park  (Schuylkill River), photo by Andrew Dobshinsky
Spring Gardens Community Garden, photo by Robert Y Lee
Allegheny Ave. + Cedar St.
PHILADELPHIA’S NEW STORMWATER REGS

Submitted Stormwater Projects

Combined Sewer Area
1 billion gallons

1.2 billion gallons
NEW STORMWATER PARCEL BASED BILLING SYSTEM will impact 80,000 properties

Current annual stormwater bill: $5,000
New annual stormwater bill: $30,000
THANK YOU for GIVING FishTOWN GRASS