



Green Infrastructure Citizens Group

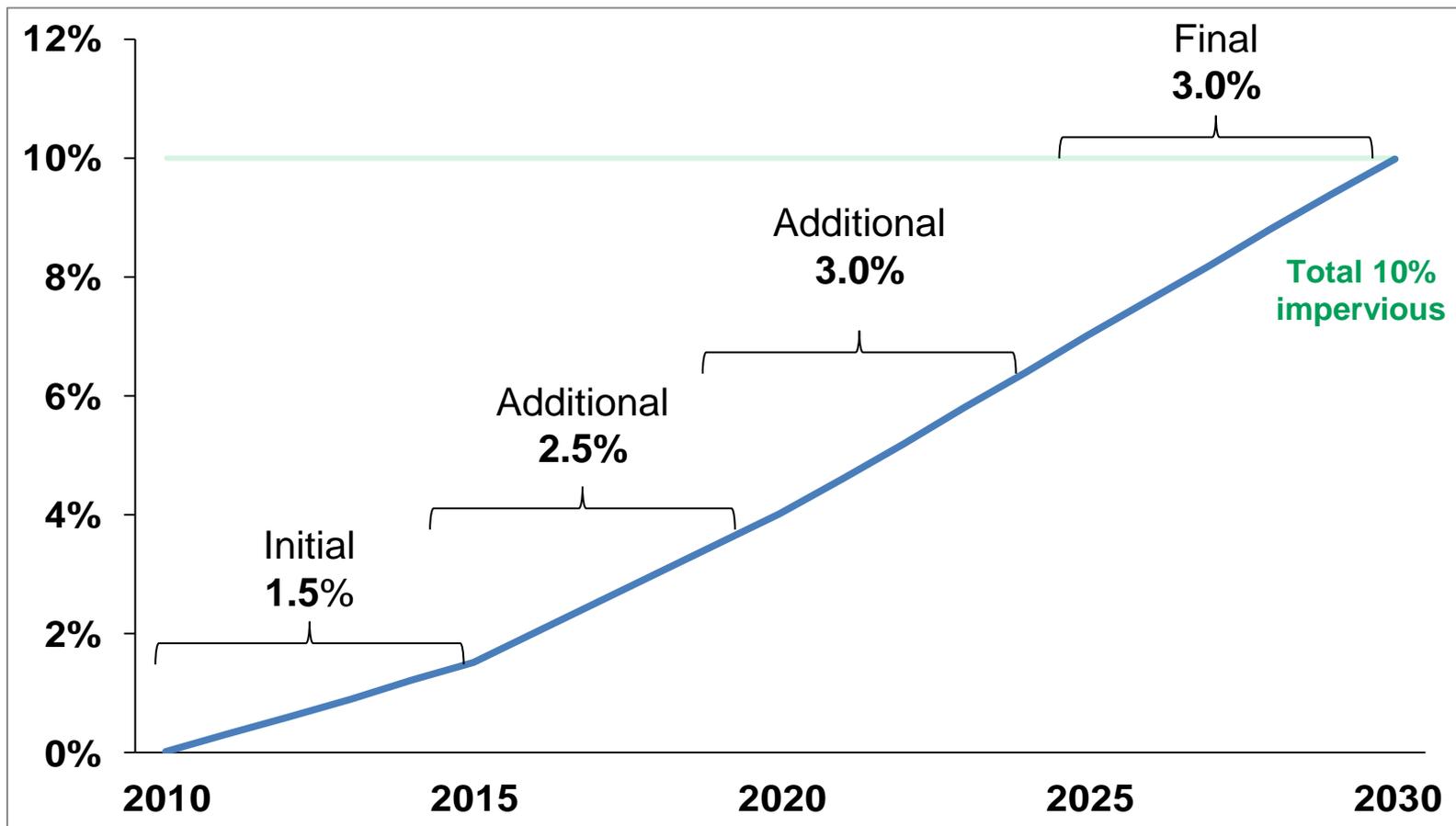
November 1, 2011

St. Francis College, Brooklyn New York

- ❖ CSO Consent Order
- ❖ Annual Report
- ❖ Green Infrastructure Programmatic Updates
- ❖ 2012 Green Infrastructure Grant Program
- ❖ Change By Us

CSO Consent Order

- ❖ Draft Agreement with New York State Department of Environmental Conservation
- ❖ Estimated \$2.4 Billion in public and private infrastructure investments over 20 years



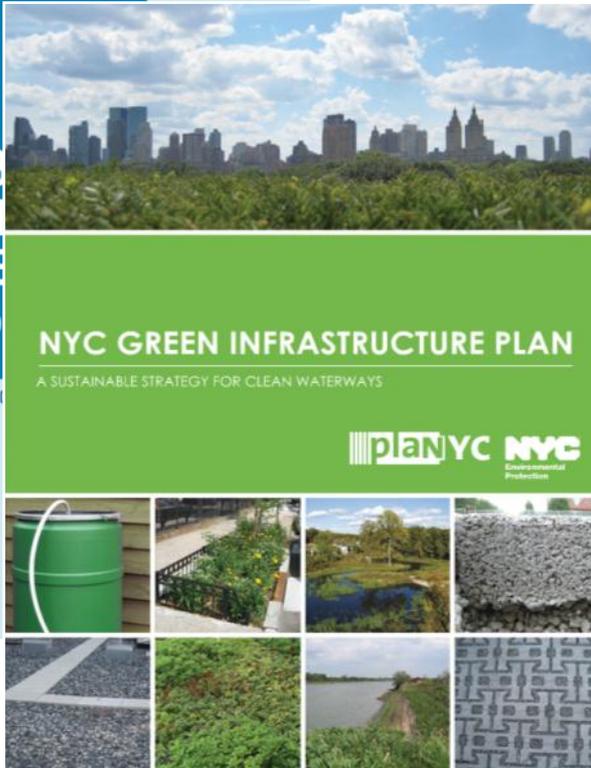
- ❖ DEC is holding a public meeting on the draft consent order on November 9th at 6 pm.
- ❖ The meeting will be held at DEC's Region 2 Annex Building located at 11-15 47th Avenue, Long Island City, NY.
- ❖ Public comments on the draft agreement can be emailed to gekline@gw.dec.state.ny.us or faxed to 518-402-9029.
- ❖ For more information visit DEC's Environmental News Bulletin http://www.dec.ny.gov/enb/20111019_not2.html

planNYC

planNYC

SUSTAINABLE
STORMWATER
MANAGEMENT
PLAN 2008

A GREENER, GREATER NEW YORK



- ❖ Describes the progress made on the Green Infrastructure Plan's five key components
 - Build cost-effective grey infrastructure
 - Optimize the existing wastewater system
 - Control runoff from 10% of impervious surfaces through green infrastructure
 - Institutionalize adaptive management, model impacts, measure CSOs, and monitor water quality
 - Engage local stakeholders
- ❖ Describes some of the design, challenges, and performance of our pilot projects

NYC Green Infrastructure Plan Goals:

- 1) Funding
- 2) Agency Coordination
- 3) Pilot Projects
- 4) Community Outreach
- 5) System Optimization
- 6) Performance Standard
- 7) Stormwater Charge Pilot
- 8) Refine Models
- 9) Identify Other Sources of Funding
- 10) Replace CSO signs

Goal 1: Funding

Goal: Prepare a Green Infrastructure Fund

Status: Achieved

Steps Taken:

\$187 million has been allocated for green infrastructure investments on public property in combined sewer areas through 2015 and a total of \$735 million has been allocated through 2021



Goal 2: Agency Coordination

Goal: Create an Inter-Agency Partnership to incorporate stormwater management into roadway, sidewalk, and other capital projects and to provide for the maintenance of green infrastructure

Status: Achieved

Steps Taken: Created Green Infrastructure Task Force in Dec. 2010

- Dept. of Buildings
- Dept. of City Planning
- Dept. of Citywide Administrative Services
- Dept. of Cultural Affairs
- Dept. of Design and Construction
- Dept. of Education
- Dept. of Transportation
- Dept. of Parks and Recreation
- Dept. of Sanitation
- Dept. of Housing & Preservation Development
- Economic Development Corporation
- Law Department
- NYC Housing Authority
- Office of Management and Budget
- Mayor's Office of Long Term Planning and Sustainability
- NYC Health and Hospitals Corp

Goal 3: Pilot Projects

Goal: Build green infrastructure demonstration projects on a variety of land uses

Status: Achieved



Rain Gardens Pilot



Parking Lot Swale Pilot



Blue Roof Pilot



Perforated Pipe System Pilot

Goal 4: Community Outreach

Goal: Engage with Community Groups to support the implementation of green infrastructure

Status: Achieved and Ongoing

Steps Taken:

- ❖ Green Infrastructure Grant Program
- ❖ Green Infrastructure Steering Committee
- ❖ Green Infrastructure Citizens Group
- ❖ 2011 Rain Barrel Giveaway Program
- ❖ Coordination with Change By Us
- ❖ Coordination with MillionTreesNYC
- ❖ Community Notification
 - Community Presentations
 - Postcard Mailing
 - DDC Project Newsletters



Goal 5: System Optimization

Goal: Launch a comprehensive program to increase optimization of the existing system, including drainage plans, hydraulic studies, the survey and rehabilitation of 136 miles of interceptor sewers in two years, the inspection and repair of tide gates and programs to prevent grease from obstructing the sewers

Status: Achieved and Ongoing

Steps Taken:

- ❖ Inspections of the structural condition of 136 miles of intercepting sewers
- ❖ Task Order Contracts initiated for a contractor to examine and make repair recommendations
- ❖ 25 tide gates per month will be inspected and repaired within: Newtown Creek, Red Hook, Port Richmond and Wards Island



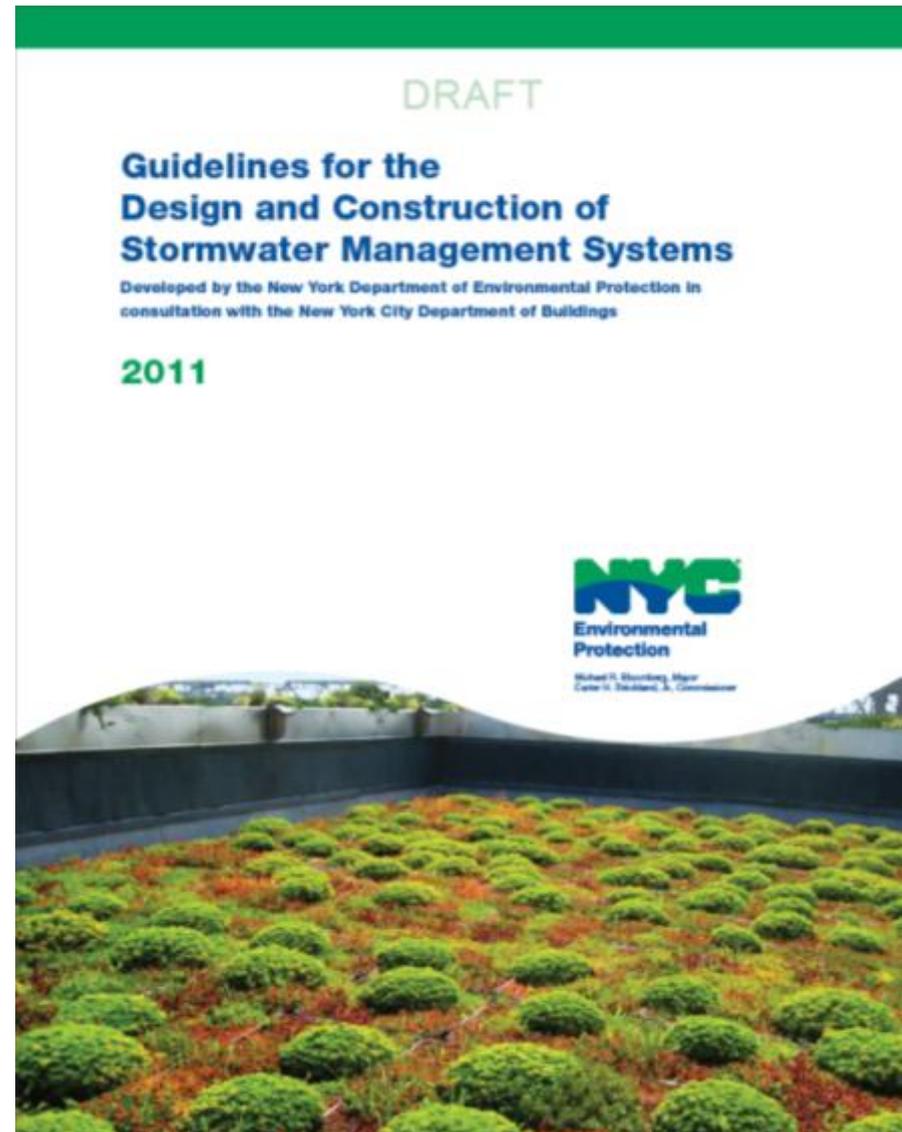
Goal 6: Performance Standard

Goal: Develop a stormwater management standard for new construction and alterations that expand existing development

Status: Achieved

Steps Taken:

- ❖ Stakeholder outreach including meetings with interagency, industry and environmental groups in 2010 and 2011
- ❖ Public Hearing was held October 31, 2011 (comments will be accepted until November 30, 2011)
- ❖ *Draft Guidelines for the Design and Construction of Stormwater Management Systems* released following peer review to accompany the rule



Goal: Pilot wastewater charge for stormwater runoff generated by stand-alone parking lots with no existing water service

Status: Achieved

Steps Taken:

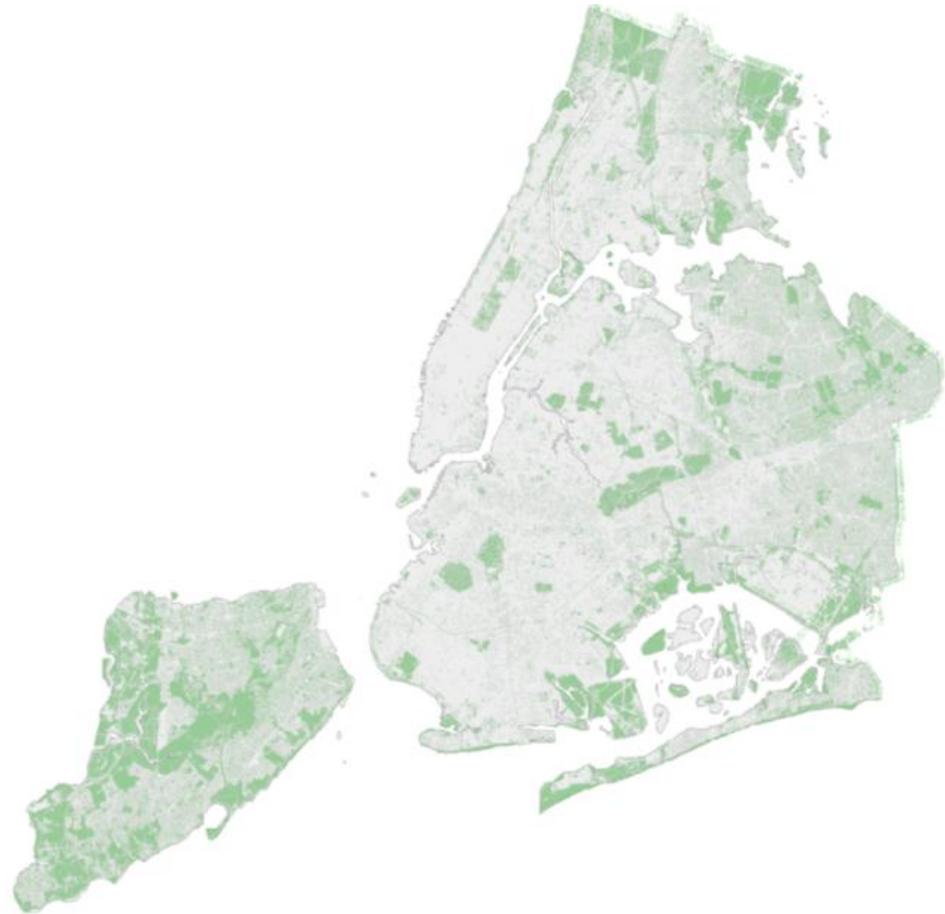
- ❖ DEP adopted a pilot billing system to include a wastewater charge for stormwater for stand-alone parking lots
- ❖ 267 parking lots with no water service are charged \$0.05 per square foot for wastewater services (\$669 annual average/lot)
- ❖ DEP implemented a credit program to incentivize approvable green infrastructure technologies
- ❖ Charges are waived for lots that demonstrate stormwater capture to prevent entering the sewer system

Goal: Refine DEP models by including updated data and extending predictions to ambient water quality

Status: Achieved and Ongoing

Steps Taken:

- ❖ Recalibrated the InfoWorks model for six of the 13 watersheds using updated impervious surfaces, flow monitoring and other data sources
- ❖ Landside model recalibration and water quality modeling will be completed as DEP develops watershed-specific long term control plans (LTCPs)



Goal: Identify other funding for additional elements of the Green Infrastructure Plan

Status: Initiated and Ongoing

Steps Taken:

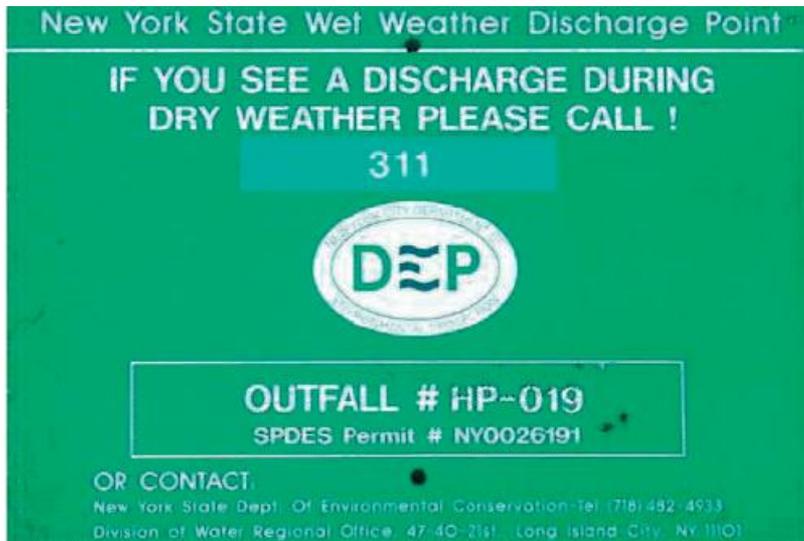
- ❖ 2011 Green Infrastructure Grant Program, Awardees will contribute nearly \$700,000 to their green infrastructure construction projects
- ❖ DEP is also pursuing opportunities for public-private partnerships for green infrastructure projects as well as cost sharing with City Council Members using their discretionary funds

Goal 10: CSO Signs

Goal: Replace all combined sewer overflow (CSO) outfall signs to reduce potential exposure

Status: Achieved

Steps Taken: Replaced 410 signs at combined sewer overflow (CSO) outfalls

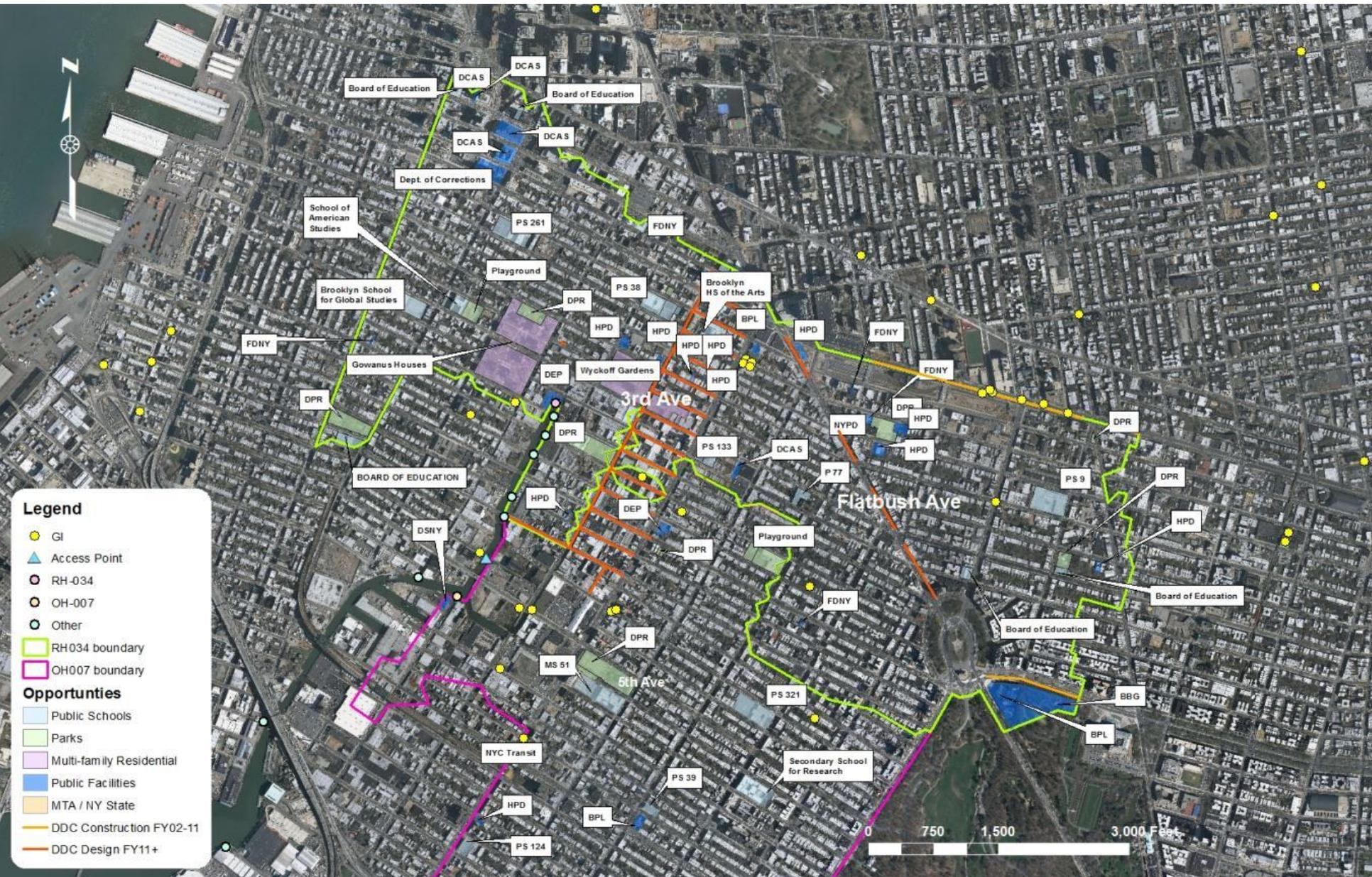


- ❖ Task Force Partnerships
- ❖ Opportunities Analysis and Siting Green Infrastructure
- ❖ Design Specifications and Standards
- ❖ 2011 Planned and Built Projects
- ❖ Neighborhood Demonstration Areas
- ❖ Green Infrastructure Webmap
- ❖ Green Infrastructure Grant Program
- ❖ Change By Us

Ongoing discussion for site selection with:

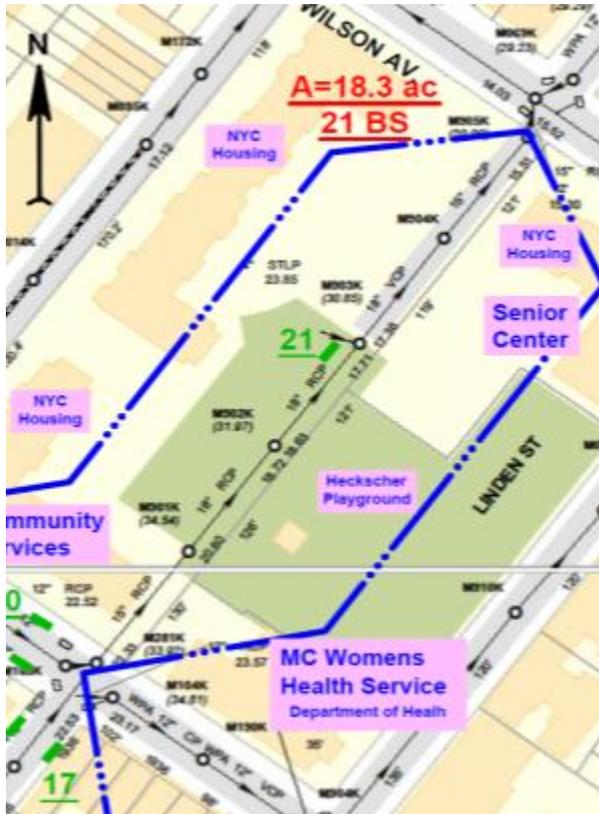
- ❖ Department of Design and Construction
- ❖ Department of Transportation
- ❖ Department of Parks and Recreation
- ❖ Department of Education/School Construction Authority
- ❖ NYC Housing Authority
- ❖ Metropolitan Transportation Authority
- ❖ NYC Health and Hospitals Corporation
- ❖ Department of Cultural Affairs
- ❖ Department of Sanitation

Ongoing Opportunities Analyses



- ❖ General process for reviewing Bioswale proposals
- ❖ Criteria for approval: Combined sewer area, wide sidewalks, no utilities

Trace Sewers and Desktop Analysis



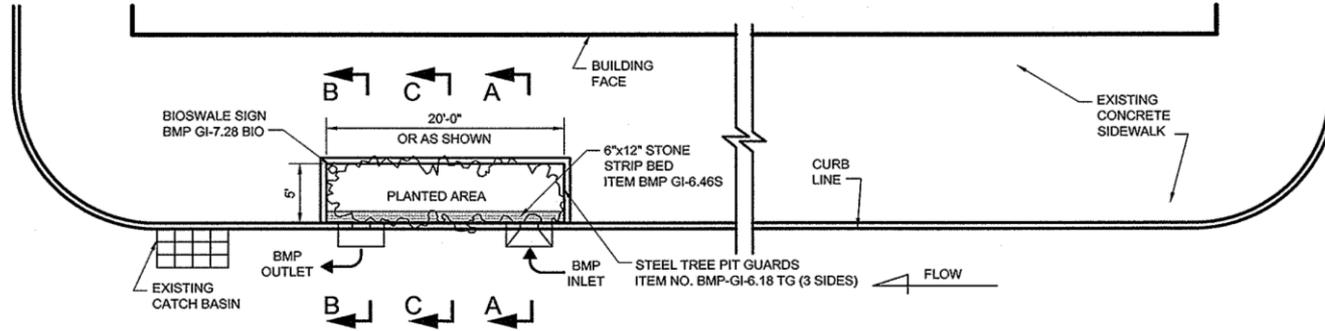
Visit site



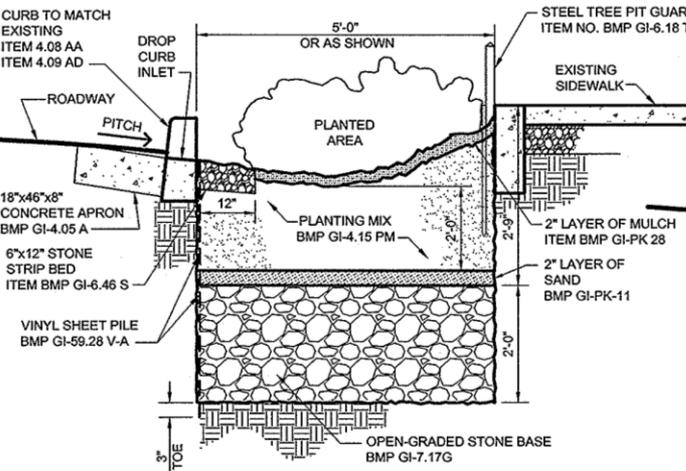
- ❖ DEP Green Infrastructure Standard Designs below are 95% complete for:
 - ROW Bioswale Type I
 - ROW Bioswale Tree Pit Guard
 - ROW Bioswale Planting Plan
 - ROW Bioswale Stormwater Inlet
 - ROW Bioswale Type II
- ❖ At least six more Standard Designs for ROW Bioswales will be developed
- ❖ Green Infrastructure Standard Specifications for all GI projects have been developed.

Standard Design: Right of Way Bioswale

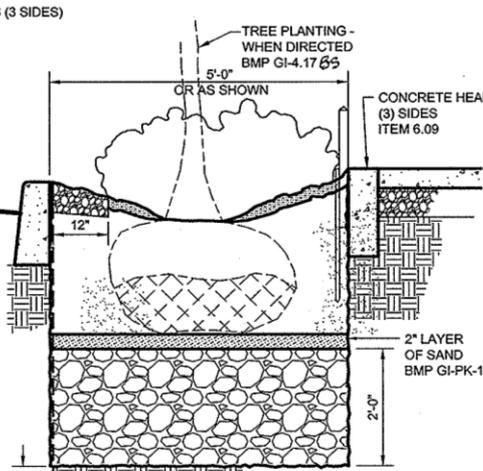
BIOSWALE - NO CONNECTION TO SEWER



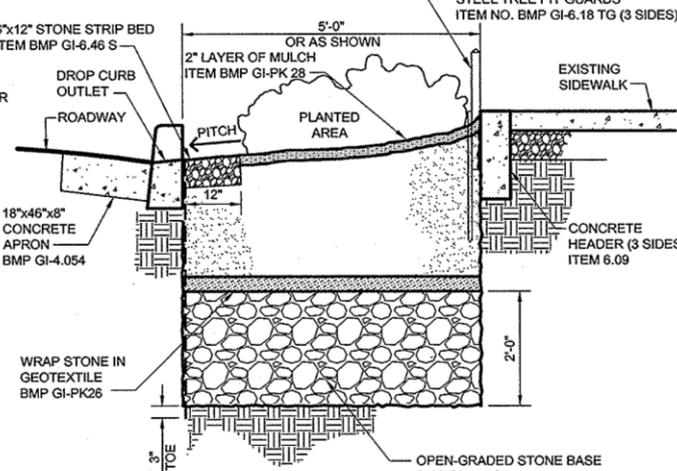
PLAN



SECTION A-A



SECTION C-C



SECTION B-B

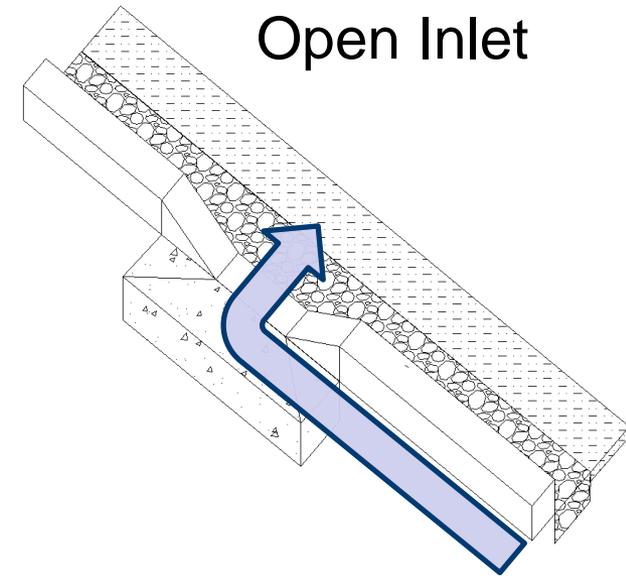
Curb Inlet Modifications



Original Cast-Iron
DEP Bioswale Inlet

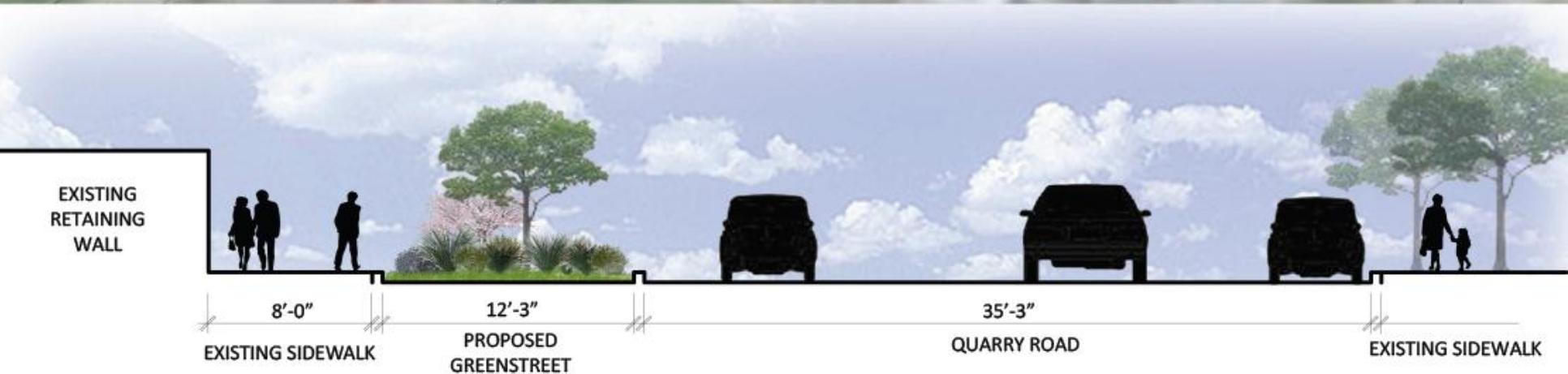


Open Greenstreets
Inlet



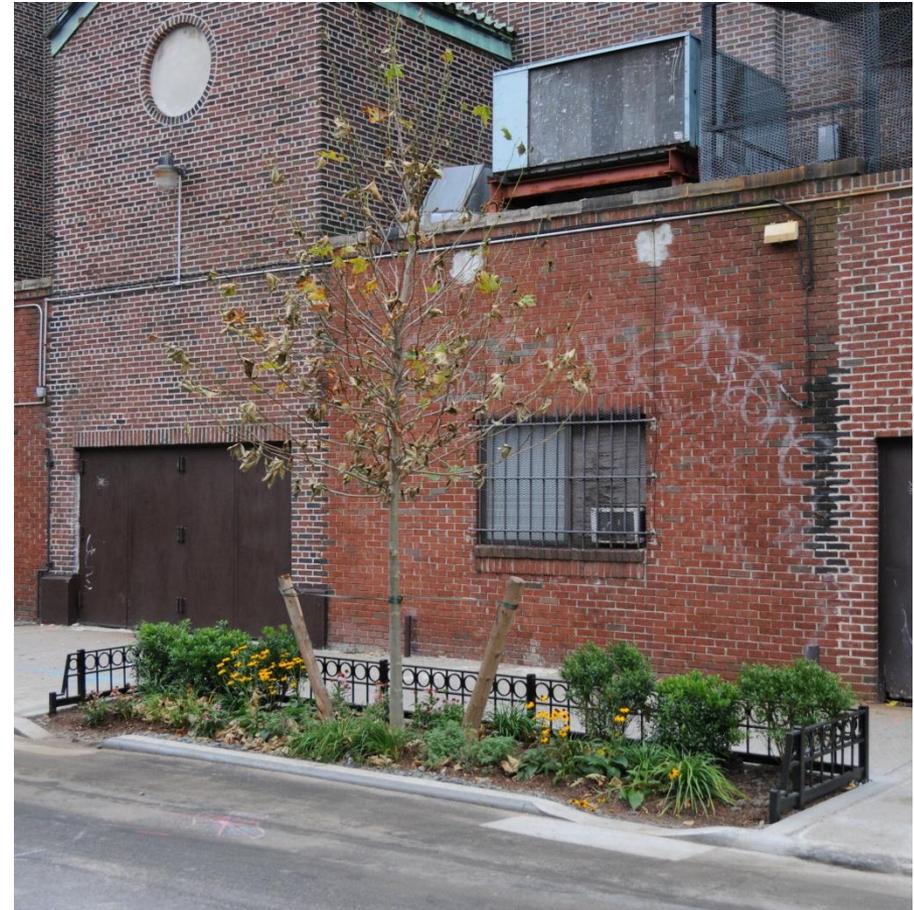
New DEP Bioswale
Inlet

Greenstreets



Construction Fall 2011- Spring 2012

Atlantic Ave	7 bioswales
Downtown Brooklyn	7 bioswales
Nostrand Ave	11 bioswales
College Point	4 bioswales
Metropolitan Ave	7 bioswales
Paulding Ave	8 bioswales
Total	44 bioswales

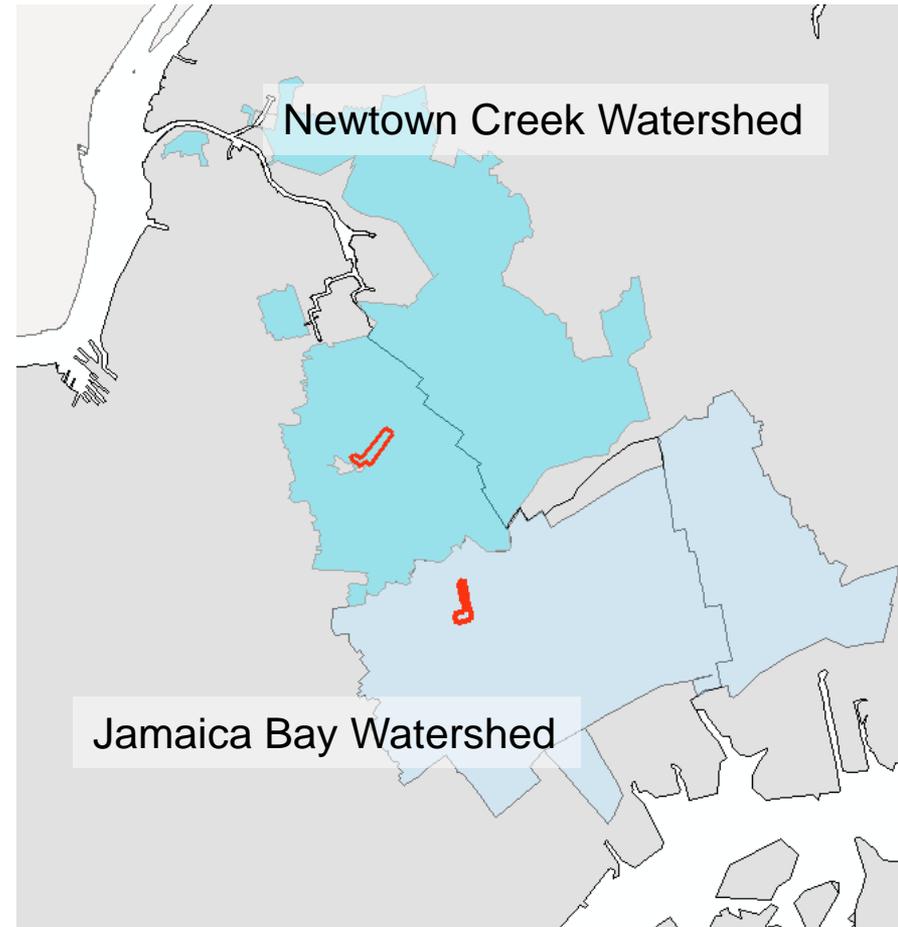


Neighborhood Demonstration Areas

Bronx River - 40 Acres

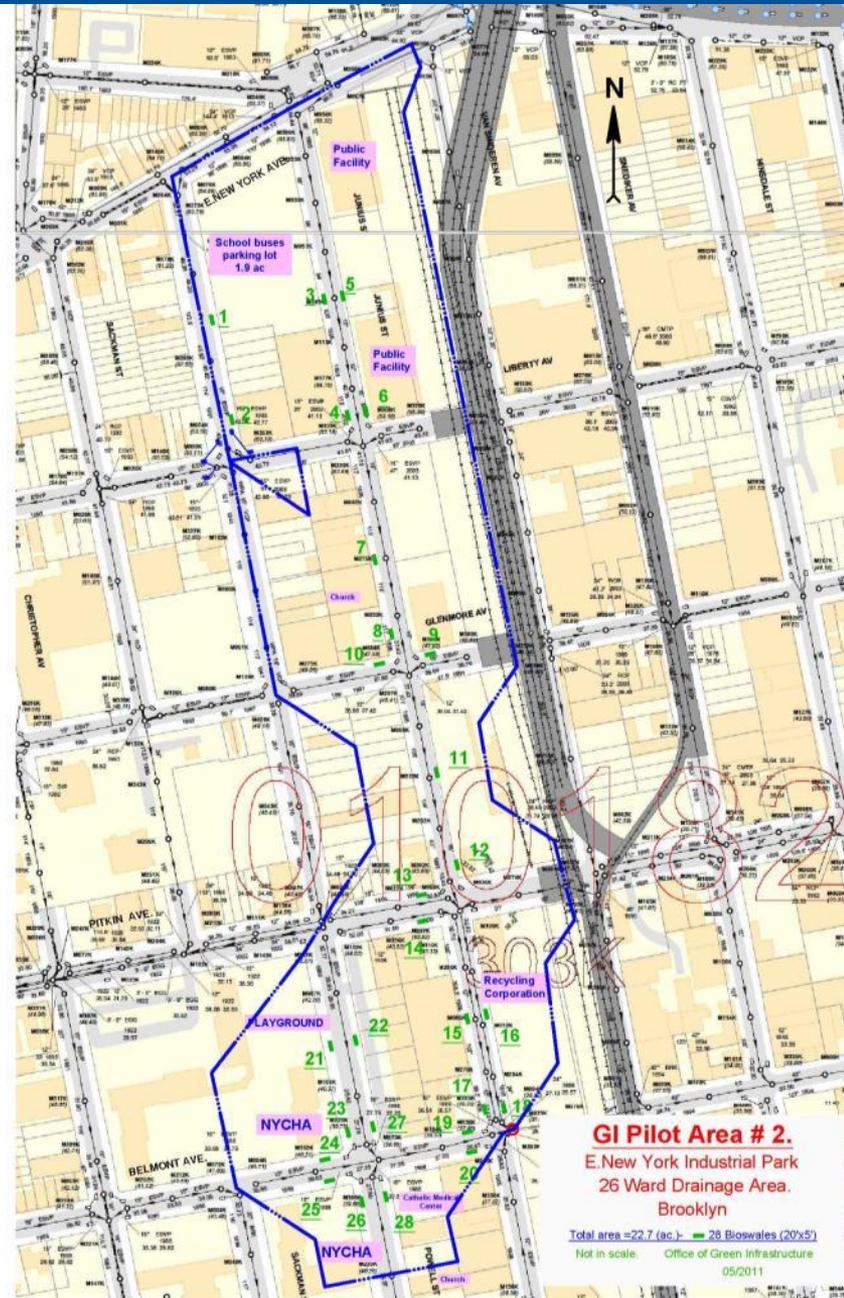
Newtown Creek – 18 Acres

Jamaica Bay – 23 Acres



Neighborhood Demonstration Areas

- ❖ Flow meters will be placed in the combined sewer pipes and will collect continuously collect flow data
- ❖ Dry and wet weather flows will be measured pre-construction and post-construction
- ❖ Results will be compared and will inform GI program going forward



Green Infrastructure Webmap



GREEN INFRASTRUCTURE



Search for a Location

SEARCH TYPE

ADDRESS NUMBER

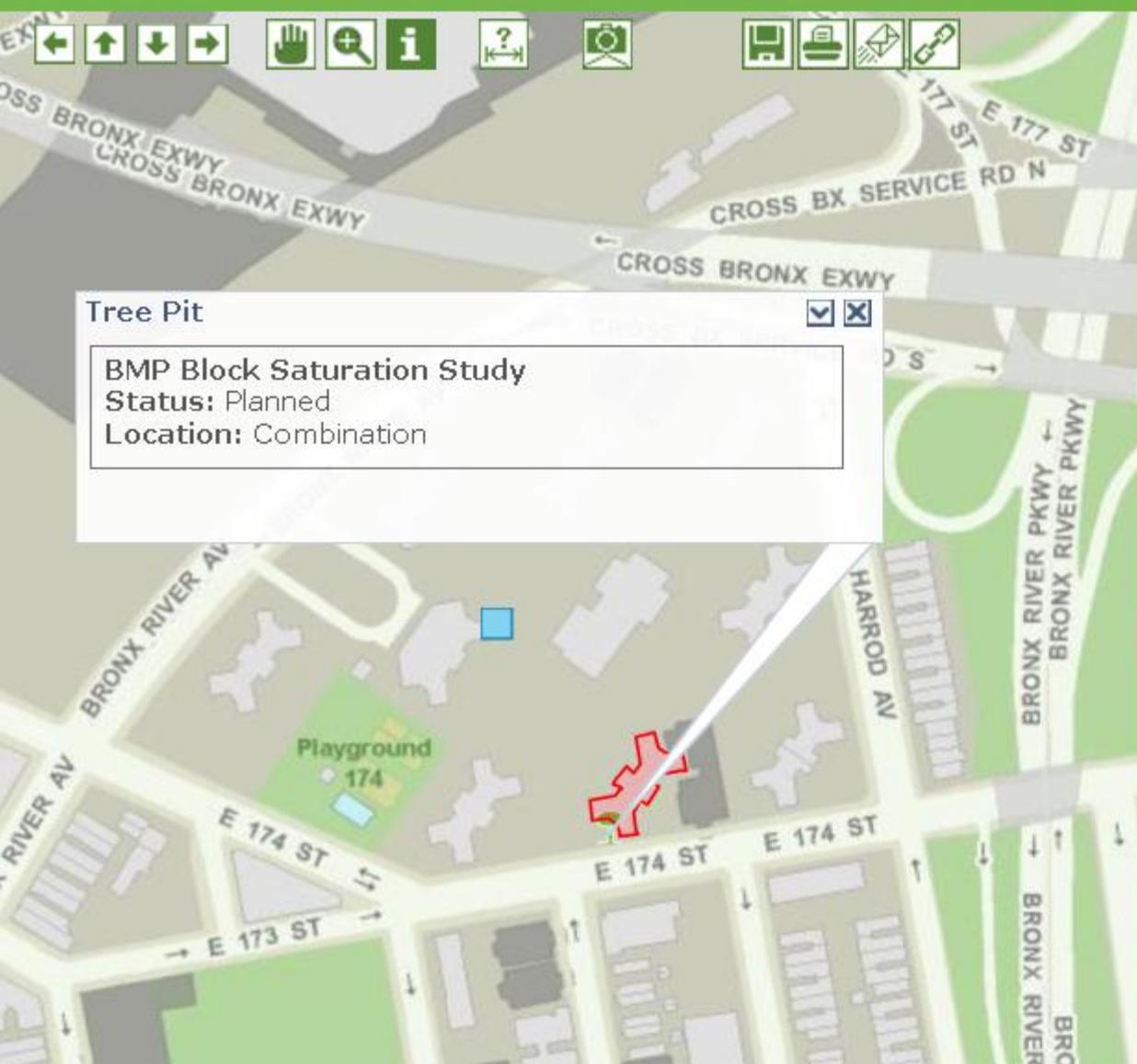
STREET NAME

BOROUGH

Searched Locations

Show Additional Data on Map





Tree Pit [Close] [Refresh]

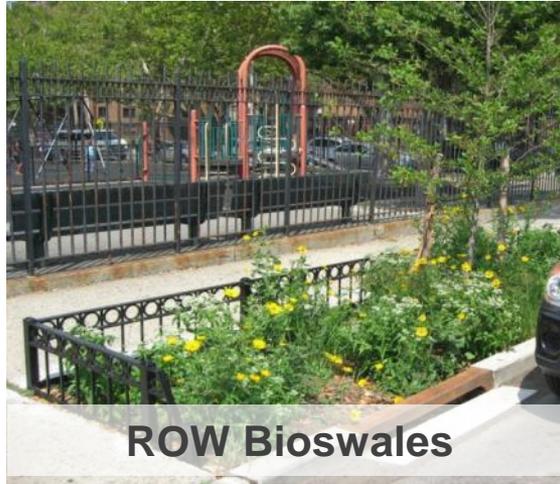
BMP Block Saturation Study
Status: Planned
Location: Combination

Search for a Location
Searched Locations
Show Additional Data on Map

- Green Infrastructure**
- Blue Roof
 - Cistern
 - Constructed Wetlands
 - Green Roof
 - Pervious Pavement
 - Rain Barrel
 - Rain Garden
 - Rainwater Reuse System
 - Swale
 - Tree Pit

- ❖ Up to \$5,000,000 will be awarded in 2012
- ❖ Requirements:
 - Use green infrastructure to reduce or manage stormwater entering the combined sewer system
 - Be within NYC's combined sewer area on (1) non-City property or (2) public sidewalks abutting a recipient's property
 - Be completed within one year
 - Provide for long-term maintenance
- ❖ Online Application will be available at www.nyc.gov/dep

Examples of Eligible Projects



Preference will be given to projects that are:

- ❖ Within priority watersheds
- ❖ Innovative and can be widely adopted
- ❖ Promote educational and community development
- ❖ Support economic growth and job creation
- ❖ Cost effective and can be supported with matching funds
- ❖ Sufficient maintenance provided over long term for onsite project

Location	Date and Time
Bronx Borough President's Office 1 st Floor Rotunda	December 1, 2011 6:00pm
Brooklyn Borough President's Office Borough Hall Courtroom	December 6, 2011 6:00pm
Queens Botanical Garden Meeting Room	December 14, 2011 4:30pm

Workshop Agenda:

- ❖ 2012 Grant Program Timeline
- ❖ Eligibility Criteria
- ❖ Navigating the Online Application
- ❖ Tips for Successful Applications
- ❖ Grantee Requirements (Funding Agreements and Deed Restriction)

<http://www.nyc.gov/dep/grantprogram>



Green Infrastructure Grant Program

Welcome to the online application for the New York City Department of Environmental Protection's 2012 Green Infrastructure Grant Program. Up to \$4 million will be available for green infrastructure projects such as right of way bioswales, blue roofs, green roofs and porous pavement on private property and in sidewalks. **Applications are due by 11:59pm on Wednesday, February 15, 2012.**

To begin an application online, create a login here:

<p>Registered Applicant : Login</p> <p>User ID: <input type="text"/></p> <p>Password: <input type="password"/></p> <p>LOGIN</p> <p>Forgot Your Password?</p>	<p>New Application?</p> <p>Register Now</p>
--	---

Applications may be submitted by mail [\[PDF Link Here for Hard Copy\]](#) and must include an electronic copy (in PDF format) of their application on compact discs. The due date for mailed applications is the same as on-line submissions. **Mailed applications received after Wednesday, February 15, 2012 (regardless of postmark date) will be considered late and will not be reviewed.**

Use the following address to request a hardcopy application and to submit by mail:

Mikelle Adgate, Office of Green Infrastructure
NYC Department of Environmental Protection
59-17 Junction Blvd. 11th Floor
Flushing, NY 11373
sustainability@dep.nyc.gov



- Home
- My Application
- Log-off

- [Required Applicant Information](#)
- [Project Proposal Summary](#)
- [Project Details](#)
- [Required Documents](#)
- [Review and Submit](#)

Required Applicant Information

Instructions

Complete the following form describing the grant applicant(s). Be sure to press the Save button before moving to the next section, or if you want to save your work and complete it later.

Primary Applicant Information

Are You A:

Organization Name:

Address:

City:

State:

Zip Code:

Email Address:

Telephone Number 1: - - Ext.:

Telephone Number 2: - - Ext.:

If you are a business or a nonprofit include your Employer Identification Number (also known as a Federal Tax Identification Number).

Designated Project Manager Contact Information

First Name:

Last Name:

Change By Us

To make connections, share ideas and find partners for your grant application please visit New York City's Change by Us website: <http://nyc.changeby.us>

 **Change by Us NYC**

NEWS

ABOUT

JOIN

LOGIN

HEY NYC! How can we make our city a greener, greater place to live?

My idea is:

ADD
my IDEA

NEW IDEAS

SEE MORE IDEAS →

0/175



For any questions or comments, please email:
sustainability@dep.nyc.gov

For more information:
nyc.gov/dep/greeninfrastructure