



# NYC Department of Environmental Protection Jamaica Bay Watershed Protection Plan

## PROJECT UPDATE

Presented at Floyd Bennett Field, October 4, 2006



## LOCAL LAW 71 (LL71)

- “Amend the administrative code of the city of New York, in relation to developing a watershed protection plan for the water/sewershed of Jamaica Bay.”
- Primary reasons include:
  - ◆ Wetland Loss
  - ◆ Water Quality
  - ◆ Habitat Loss
  - ◆ Ecological Degradation



## LL 71

Assess the technical, legal, environmental and economical feasibility of the following measures (at a minimum):

- BMPs to control soil erosion and stormwater runoff
- Minimization of impervious surfaces
- Creation of natural systems to control and minimize stormwater runoff
- Address threats to aquatic habitat (e.g., restoring salt marsh, soils, strengthen ecological buffers, etc.)
- Restore natural features to the water/sewershed
- Reestablish water flows
- Land acquisition and land use planning practices
- Coordination between federal, state and local entities
- Coordination with NYC Office of Env Coordination
- Public education program
- Increase enforcement efforts



## LL71 MEETINGS & DEVIVERABLES

- January 11, 2006 – Public Meeting
- February 9, 2006 – Public Meeting
- June 14, 2006 – Status Update Meeting
- July 1, 2006 – Advisory Committee (AC) Preliminary Recommendations
- September 1, 2006 – NYCDEP Interim Report and Responses to AC recommendations
- October 4, 2006 – Public Meeting
- December 2006 – Public Workshop
- March 1, 2007 – Draft WPP
- April 2007 – Public Workshop
- June 1, 2007 – AC Final Recommendations
- October 1, 2007 – Final WPP



# INTERIM REPORT

- Submitted to City Council and Mayor on September 1
- Summarized current efforts of the plan, proposed development and responses to the AC preliminary recommendations
- For each preliminary recommendation, a response plus the following determination was required:
  - ◆ recommendation will be incorporated into plan
  - ◆ recommendation will not be incorporated into plan
  - ◆ recommendation will be further assessed for inclusion in such plan



## WHERE DO WE GO FROM HERE?

- Continue meeting with Advisory Committee
- Continue evaluating AC preliminary recommendations (with AC)
- Continue defining and refining potential management strategies
- Coordinate with concurrent DEP planning processes (i.e., CSO planning and Comprehensive Water Quality Plan)
- Continue public/stakeholder involvement
- Develop realistic modeling scenarios
- Develop education and outreach materials
- Develop implementation for feasible and effective strategies



## REVIEW OF BMP GOALS

- Assess realistic opportunities to employ appropriate and effective stormwater BMP's that could effect quality and quantity of stormwater generated.
- How many BMP's will it take?
  - ◆ We don't know....yet.
- Can some be used?....yes
- Where will they be used?
  - ◆ Unique features within watershed (subways, utilities, basements, high groundwater, etc...) require extensive evaluation.



## TYPES OF BMPs

- Rain water harvesting (e.g., rain barrels)
- Vegetated systems (e.g., green roofs, swales, etc.)
- Street trees
- Urban wetlands
- Soil infiltration practices
- Reducing impervious surfaces with permeable paving materials



## PROPOSED BMP TECHNICAL ANALYSES

- Methodology being used to assess BMPs for potential incorporation in final plan include:
  - ♦ Identify spatially within watershed and hydrologic position (streets, buildings, etc.)
  - ♦ Categorize BMPs by type
  - ♦ Determine benefits (e.g., volume reduction, pollutant removal, etc.) against impediments (management, perception, etc.)
  - ♦ Sort by land use
  - ♦ Field verification/identify suitable BMPs based on field data.



## UPCOMING PUBLIC WORKSHOP

- Date: Early December
- Time: 6:00 pm
- Location: ???
- Format: Small group discussions including technical experts and stakeholders for each goal category (i.e., water quality, wetlands, education and outreach, etc.)
- Objective: To discuss potential management strategies and technical analyses required to evaluate each



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# The Jamaica Bay Watershed Protection Plan:

## Update from the Advisory Committee

Presented at Ryan Visitors Center, October 4, 2006



## Background

- Local Law 71, enacted in 2005, requires DEP develop a Watershed Protection Plan to restore and maintain water quality and the ecological integrity of Jamaica Bay
- Local Law 71 also created the Advisory Committee to:
  - Provide Plan recommendations to the DEP and the Council
  - Provide advice to the DEP regarding the Plan
- The Advisory Committee consists of 7 members (4 appointed by the Mayor and 3 by the Council):
  - Doug Adamo, National Park Service
  - Manny Caughman, Community Activist
  - Len Houston, U.S. Army Corps of Engineers
  - Dan Mundy, Jamaica Bay Eco Watchers
  - Brad Sewell, Natural Resources Defense Council
  - Larry Swanson, Stony Brook University
  - Chris Zeppie, Port Authority of NY/NJ



Background (cont'd)

## Schedule (as revised by Intro. 376)

**June 29, 2006:** Advisory Committee submitted preliminary recommendations to the DEP and the Council

**September 1, 2006:** DEP submitted a Plan Interim Report that responds to Committee preliminary recommendations

**March 1, 2007:** DEP completes the draft Plan

**June 1, 2007:** Committee submits final recommendations to the DEP and the Council

**October 1, 2007:** DEP completes the Plan

**October 1, 2008** (and every 2 years afterwards): DEP submits a report to the Mayor and the Council on the Plan's progress and reasons why, if any, changes are needed



## Development of Preliminary Recommendations

- The Committee and DEP held public outreach meetings in Brooklyn and Queens in January and February 2006
- The Committee held monthly working sessions from November 2005 through June 2006 to draft goals and recommendations
- The Committee convened expert panels on the topics of stormwater and green building BMPs, wetland loss and water quality in order to hear the most current scientific information on the Bay's problems
- The Committee views its role as independent of, but cooperative with, DEP; monthly joint sessions were held and technical information and progress reports were regularly exchanged in developing the preliminary recommendations

*More information about the Committee's working sessions and expert panels are available on the Committee's website:*

<http://nbii-nin.ciesin.columbia.edu/jamaicabay/jbwppac/advisorycommittee.html>



## The Advisory Committee's Preliminary Recommendations

- Report containing the Advisory Committee's preliminary recommendations is available at:  
<http://nbii-nin.ciesin.columbia.edu/jamaicabay/index.html>
- Goals and recommendations were developed in 3 major areas:
  - water quality
  - ecology
  - planning and outreach
- 62 recommendations; 15 recommendations were designated as priority recommendations



# The Committee's Priority Recommendations

## Water Quality Priority Recommendations:

- Upgrade 26<sup>th</sup> Ward & Jamaica sewage treatment plants to tertiary treatment
  - *Reduce nitrogen pollution to the Bay*
- Stop centrate processing in the Bay
  - *Reduce nitrogen to the Bay; just removing 26<sup>th</sup> Ward's centrate would bring a 6% decrease in total nitrogen pollution*
- Revise codes, guidelines, and requirements governing construction, reconstruction, and landscaping of public infrastructure (streets, medians, etc.) to incorporate BMPs
  - *Decrease polluting stormwater runoff and CSOs*
- Create a stormwater BMP pilot program
  - *Maximize use of BMPs in pilot area(s) within the watershed*
- New water conservation program for NYC
  - *Increase sewage treatment plant capacity during storms, increase residence time of wastewater in the plant*



## The Committee's Priority Recommendations (cont'd)

### Ecology Priority Recommendations:

- Transfer city-owned wetlands and adjacent areas within the watershed to a responsible public agency
  - *Protect wetlands identified by the Wetlands Task Force*
- Expand buffer zone on tidal wetlands to 300 feet (consistent with statewide standards)
  - *Protect the city's ever-shrinking number of wetlands*
- Implement transfer of development rights program
  - *Preserve existing open space*
- Fill degraded low-lying marshes and monitor results
  - *Restore rapidly-disappearing salt marshes*
- Remove artificial barriers to tidal flushing
  - *Possible examples: culverts under FAA roads east of Rockaway Turnpike, culverts at 5<sup>th</sup> Road in Broad Channel*
- Develop a plan to halt the spread of invasive species
  - *Comprehensive, long-term effort (monitoring and control) needed*



## The Committee's Priority Recommendations (cont'd)

### Planning and Outreach Priority Recommendations:

- Increase the number of real time monitoring stations
  - *Improve understanding and accuracy of the Bay's ecological system and reduce reliance on modeling*
- Direct Mayor's Office of Environmental Coordination to create a Jamaica Bay specific environmental assessment form
  - *Increase scrutiny of projects within the Bay's watershed, including cumulative impacts from related projects*
- Add access points in Southwestern and Southeastern Queens
  - *Increase visitation and appreciation of the Bay from Southeastern and Southwestern Queens communities*
- Incorporate a unit on the watershed into the city's public education curricula
  - *Increase students' understanding and awareness of the Bay's ecological systems and the impacts that littering, water use and pollution have on the Bay*



## Next Steps for the Advisory Committee

- Solicit feedback on preliminary recommendations
- Continue to refine recommendations; final recommendations due June 2007
- Provide advice to DEP concerning draft Plan (due in March)
- Assist in building support and consensus for Jamaica Bay protection and restoration



## How Can I Get Involved?

- Fill out a comment sheet and/or talk to the Advisory Committee members
- Check on the JBRMIN Website for updates and meeting announcements:  
<http://nbii-nin.ciesin.columbia.edu/jamaicabay/index.html>
- Encourage others to get involved in the process
- Send Plan suggestions to Megan Lew, NRDC, 40 West 20 St., New York, NY 10011 or email [mlew@nrdc.org](mailto:mlew@nrdc.org)
- Let DEP and the Mayor know your views



The Jamaica Bay  
Watershed Protection Plan  
Advisory Committee