Agenda

1. Introduction and Welcome (6:00 pm)
2. Where we are in the process (6:05pm)
3. What we have done since last meeting (6:10 pm)
   1. Public Meeting Summary
   2. Meetings with Agencies
   3. Existing Plans and Projects
4. Draft Vision Statement (6:30 pm)
5. Assets, Critical Issues & Needs and Opportunities (6:45 pm)
6. Next Steps and Q&A (7:45 pm)
7. Wrap-up (8:00 pm)
Where we are in the process

30 Week Schedule

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- **Planning Committee Meeting**
- **Public Meeting**

TODAY

- Community Vision Understanding Assets
- Assessing Risk Identifying Strategies to Increase Resiliency
- Producing the Final Plan

NYCR Gravesend & Bensonhurst
2 Months Look Ahead

TODAY
Planning Committee Meeting 3
Vision
Discuss Needs and Opportunities
Risk Assessment

08/22/14
Section 2: Risk Assessment
Needs and Opportunities

09/14- TBD
Planning Committee Meeting 4
Reconstruction Strategies

09/14 - TBD
Public Engagement Event 2
Reconstruction Strategies

10/14 - TBD
Section 3: Reconstruction Strategies

10/14 - TBD
Planning Committee Meeting 5
Project Profile

NYRCR Gravesend & Bensonhurst
Public Meeting Summary
Summary of Meeting with DEP

Current Projects and Funding:
• Developing a drainage plan for the area surrounding Bay 23rd St, Bath Avenue and Cropsey Avenue due to recurring flooding there.
• Avenue V pumping station should be operational soon, if not already.

Planned Projects and Funding
• No planned projects currently, but after the development of the drainage plan there will be projects (not funded)

Potential NYRCR Projects:
• Projects will be “partial separations” that create storm sewers in the combined sewer area to relieve flows in the combined sewer system.
• DEP needs a better sense of what types of projects can go into the plan
Meetings with City/State Agencies

• NYC Parks Department (NYCDPR) - 8/08/2014
• NYC Economic Development Corporation (EDC) - 8/08/2014
• NYC Office of Emergency Management (OEM) - 8/04/2014
• NYC Department of Transportation (DOT) - TBD
• Community Board 11, 13 & 15 District Managers - TBD

To be scheduled:

• NYC Housing Authority (NYCHA)
• Office of Long-Term Planning and Sustainability (OLTPS)
• NYC City Planning (DCP)
• MTA
Existing and Proposed Projects:

1. Tidal Barrier Study
2. Calvert Vaux Park
3. MTA Yard Flood Mitigation
4. Ave V Pumping Station Expansion
5. Coney Island Hospital
6. Bulkhead Repair

Projects Funded/Completed Post Sandy
1. Implementation plan for new Coney Island Creek wetlands and tidal barrier (2015)
2. Improvements at Calvert Vaux Park
3. Flood mitigation design at MTA’s Coney Island complex (Planning Stage)
4. Pumping station and force mains expansion (2014)
5. Coney Island Hospital improvements
6. Bulkhead repairs (Completed)
7. 17th Ave pedestrian bridge replacement (Design)
8. High level storm sewer drainage plan (2015)

Recommended Projects Post Sandy
A. Install armored stone shoreline protection (elevations) of Coney Island Creek to prevent “back-door” flooding (SIRR)
B. Raise bulkheads in low-lying neighborhoods (SIRR)
C. Reconnaissance Study for Storm Surge Reduction and Flood Barrier Systems (Gerritsen Beach and Sheepshead Bay/Coney Island NYRCR Plan)
D. Retrofit public housing units damaged by Sandy and increase future resiliency if public housing

Coney Island NYRCR Relevant Proposed Projects (not mapped)
- Southern Brooklyn Emergency Response Plan (NYRCR Coney Island)
- Public Emergency Preparedness Outreach
- Designation of Emergency Response and recovery centers
- Increase resiliency of small businesses throughout peninsula
- Vocational Training Program
- Funding for microgrid study for NYCHA and Mitchell-Lama Properties
What we heard…
Community Strengths

- Access to public transportation
- Vibrant and diverse community:
  “mosaic of ethnicities”
  “Community is quiet and peaceful, people are friendly and helpful”
  “Community pulled together”
- Great parks and parklands along the waterfront
- Many small businesses and shopping that serve local community needs
  “mom and pops are the lifeblood”
- Stable, low crime rate, clean
  “Location is great, very clean, walking distance, low crime”
- Great schools
- Community is Booming / Important / Valuable
Vision Statement

Gravesend and Bensonhurst are culturally and generationally diverse communities, home to safe and stable residential neighborhoods that have excellent access to transportation, shopping and the waterfront.

Our vision is to rebuild and plan for a more resilient future where the safety and well-being of our community is maintained in the face of future storm events. We will work together to develop solutions that foster strengthened infrastructure systems, economic vitality, a healthy environment, improved access to the water, and enhanced tools for communication and emergency planning.
Assets, Critical Issues & Needs and Opportunities

**Six Recovery Support Functions**

**Economic**
- Downtown center, Businesses, Employment Hub, Lodging, Industrial, Warehousing, Manufacturing, Tourism, Grocery, and Restaurants

**Health and Social Services**

**Housing**
- Single Family, Multi-Family, Mixed-use, Supportive, Senior, and Affordable Housing

**Infrastructure Systems**
- Telecommunications, wastewater, stormwater, water supply, hazardous materials, solid waste, transportation, liquid fuels, and power supply

**Natural and Cultural Resources**
- Water bodies, wetlands, parks and recreation, cultural or religious establishments, libraries, museums or stadiums, natural protective features

**Socially Vulnerable Populations**
- Disabled, low-income, elderly, children, non-English speaking, homeless, pet owners
NYRKR Planning Process: The road to projects

Critical Issue
My street floods during typical rain events due to the lack of sewers

Need
Better drainage

Opportunity
Use existing natural resources to manage storm water

Strategy: Utilize green infrastructure to manage storm water on flood prone streets

Project: Reconstruct tree beds on Main Street to help manage storm water
Economic Development: Critical Issues

- Protect key commercial corridors in low lying areas
- Many local businesses along Shore Parkway and Cropsey Avenue were damaged and closed for a long time or permanently
- Lack of employment and training, including safety for low-wage workers who helped clean up the neighborhood post-Sandy

What needs and opportunities stem from these issues?
Health and Social Services: Critical Issues

- Socially Vulnerable populations:
  - 15% of population is over 65 years of age
  - 26% of households have 1+ person with a disability
  - 23% of population speaks English “less than very well”
- Emergency support services such as 911 were a major issue
- Over capacity of emergency rooms.
- Coney Island Hospital is in high risk area
- Nursing homes and adult care facilities at high risk of flooding and power outage
- Access to doctors, pharmacies, other services disrupted

What needs and opportunities stem from these issues?
Housing Discussion: Critical Issues

- Flooding and damage to homes
- Damage to utility systems in high-rise buildings

What needs and opportunities stem from these issues?
Infrastructure: Critical Issues

- Power outages
- Gas stations lost power and did not operate
- Contiguous protection along shoreline
- Flooding along Shore Parkway/Belt Parkway in Bath Beach
- Recurring flooding in low-lying areas near Cropsey and Bath Aves
- Maintenance and capacity of stormwater facilities (e.g. sewers)
Infrastructure: Critical Issues

- Sewer backups in basements
- Lack of permeable surfaces to capture stormwater runoff
- Low lying backyards and driveways—(lower the street level).

- Belt Parkway is vulnerable
- Flooded subways and MTA rail yard
- Congestion on north/south access roads to Coney Island
- Roads in disrepair

What needs and opportunities stem from these issues?
Natural and Cultural Resources
Natural and Cultural Resources: Critical Issues

- Pollution and degradation of Coney Island Creek
- Lack of access to parks along shoreline, access to water
- Fragmented park system
- Poor maintenance of parks
- Lack of green space north of Belt Parkway
- Impermeable surfaces throughout community

What needs and opportunities stem from these issues
Community Planning and Capacity Building: Critical Issues

- Lack of comprehensive community response to storm
- Communication: information came too late, if at all
- Lack of information about recovery tools
- Emergency response (e.g. 911) was inadequate

What needs and opportunities Stem from these issues
Risk Assessment: Introduction to DOS Risk Map

**Extreme Risk Areas**
Areas currently at risk of frequent inundation, vulnerable to erosion in the next 40 years, or likely to be inundated in the future due to sea level rise.

- FEMA V zone.
- Shallow Coastal Flooding
- Natural protective feature areas susceptible to erosion.
- Sea level rise - Added 3 feet

**High Risk Areas**
Areas outside the Extreme Risk Area that are currently at infrequent risk of inundation or at future risk from sea level rise.

- 1% annual flood risk zone
- Sea level rise - Added 3 feet

**Moderate Risk Areas**
Areas outside the Extreme and High Risk Areas but currently at moderate risk of inundation from infrequent events or at risk in the future from sea level rise.

- 0.2% annual risk (500 year) flood zone
- Sea level rise - Added 3 feet
- Category 3 hurricane inundation zone.
Risk Assessment: Risk to Assets

- **Risk** = HAZARD x EXPOSURE x VULNERABILITY
  - Risk is the chance that an asset will be damaged or destroyed in future storm events
  - Assessing risk will help the Committee understand and prioritize projects to protect assets at risk

- **Risk Assessment is Limited to:**
  - All Assets within Extreme and High Risk Areas
  - Critical and Locally Significant Assets throughout the community
  - Infrastructure Systems (e.g., power, sewer, transportation)
HAZARD = Storms that are typical for the community, which have greater impact on assets in extreme or high risk areas
EXPOSURE = local topography and shoreline conditions that can increase or decrease the effects of coastal hazards on assets

- **Erosion Rate**
  - Erosion Rate $\geq 1$ ft per year or unknown

- **Wetland Width**
  - Waterline is frequently at shore defense or upland vegetation

- **Shore Defenses**
  - Shore defenses absent OR not constructed to anticipated storm conditions, OR deteriorating

- **Vegetation**
  - Protective vegetation OR intervening structures between asset and flood source are absent

- **Dunes or Bluffs**
  - Dunes absent OR below BFE OR eroding OR lacks vegetation; Bluff slope unstable OR lacks vegetation

- **Soils**
  - Asset is located on coastal barrier island OR filled wetland
VULNERABILITY = Loss of Service or Function of an Asset after a storm

- How was each asset impacted by:
  - Superstorm Sandy or Hurricane Irene
  - Frequent storm events such as microbursts, severe rain storms, etc.

- Rank the vulnerability on a scale of 1-5:

  1. Insignificant
     - Limited
     - Interruption
  2. Minor
     - Service loss > 1 week
  3. Moderate
     - Service loss 1-4 weeks
  4. Significant
     - Service loss > 1 month
  5. Major
     - Permanent loss
Next Steps

• Planning Committee Meeting #4
  • Possible dates: Wednesday Sept. 3 or Monday Sept. 8?
• Confirm public engagement meeting date/location
  • Wednesday September 10?
  • Format/Location?
• Outreach

• Overview Section: Review by Planning Committee