REBUILD BY DESIGN

MEADOWLANDS



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Get involved!

- If you would like to become a member of the CAG, please contact Alexis Taylor at rbd-meadowlands@dep.nj.gov. NJDEP welcomes your participation and input into this process!
- ✓ Share information from this newsletter with friends and neighbors.
- ✓ Educate your friends and colleagues on the Proposed Project and NEPA process.
- Continue to build interest in the Proposed Project.
- Subscribe to receive email updates on the Proposed Project at www.rbd-meadowlands.nj.gov.

Please visit www.rbd-meadowlands.
nj.gov to obtain current Proposed
Project information and data, including confirmation of the above meeting dates.

NEWS December 2016

Report from December's Citizen Advisory Group Meeting



December's CAG Meeting

The December Citizen Advisory Group (CAG) meeting for the Rebuild By Design Meadowlands (RBDM) Flood Protection Project was held on Tuesday, December 6, 2016 at the Port Authority Conference Room in the Borough of Teterboro. The meeting included a detailed overview of the concept development process for the Proposed Project's Alternative 1 (Structural Flood Reduction). Alternative 2 (Stormwater Drainage Improvements) and Alternative 3 (Hybrid Alternative) will be discussed at future CAG meetings.

Existing Flooding Conditions

A complete understanding of existing flooding conditions in the Project Area is necessary to properly evaluate the concepts being developed for Alternative 1. As presented by the RBDM Project Team, nearly all of the Project Area is located within the 100-year floodplain, which means there is a 1 percent chance in any given year that the area will be inundated by floodwaters.

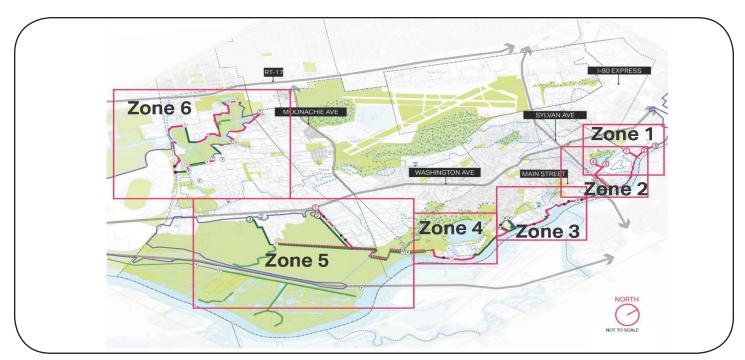
The Project Area along the Hackensack River has a mean high water elevation of approximately 2.75 feet North American Vertical Datum of 1988 (NAVD 88), based on the National Oceanic and Atmospheric Administration's (NOAA) gauge 8530278-Hackensack, Hackensack River. During a 100-year storm event (1 percent chance of this storm occurring each year), water levels are at approximately 8.3 feet NAVD 1988, which exceeds the existing ground elevation in many areas (FEMA, 2014). In addition to the existing flooding conditions in the Project Area, the Proposed Project must anticipate and plan for the expected change in sea level, which is projected to rise between 0.6 and 1.1 feet by 2050 and between 1.2 and 2.4 feet by 2075 (NOAA Intermediate Low and Intermediate High values, respectively, as presented in NOAA 2013.) REFERENCES:

FEMA. "Preliminary Flood Insurance Study, Bergen County, New Jersey (All Jurisdictions)." 2014. http://www.region2coastal.com/view-flood-maps-data/view-preliminary-flood-map-data/. (accessed December 29, 2016).

 $NOAA. ``Estimating Vertical Land Motion from Long-Term Tide Gauge Records. '`May 2013. http://tidesand-currents.noaa.gov/publications/Technical_Report_NOS_CO-OPS_065.pdf (accessed October 3, 2016).$







Alternative 1 Potential Alignment Overview

Within the Project Area, existing ground elevations are at or above 7 feet NAVD 88 in some areas due to existing berms or existing land slopes. Where possible, the 7-foot elevation line of protection would be tied to high ground in some areas of the Project Area through a series of both soft- (i.e., berms) and hard-edged (i.e., walls) components, thereby minimizing construction costs and the need for flood control structures in all areas.

A variety of alignment options are being considered and evaluated as part of the ongoing alternatives screening process. Interactive maps of these alignment options will be available to the CAG at future meetings. In addition to the 7-foot baseline study elevation, the RBDM Project Team is in the process of assessing higher elevations as part of the screening process and feasibility study.

Did You Know?

The Project Area contains a series of old berms that provide limited flood protection against the Hackensack River. These berms typically consist of raised ridges of earth that resulted from the historic excavation of drainage ditches during mosquito control efforts. However, these berms are not entirely effective because they are neither continuous nor uniform in height. Many of the berms have settled, slumped, or were originally constructed haphazardly. The existing berm system provides limited flood protection (typically, against less than a 10-year flood event) to residential and industrial

Kit of Parts

As presented at earlier CAG meetings, building the line of protection can draw upon a variety of design components. These components, or the "Kit of Parts," range from a basic sheet pile flood wall



Example of Bench Floodwall

to more elaborate bench, planter, canopy, and amphitheater designs. Based on the CAG's initial input and the residential and commercial needs of the Project Area, the RBDM Project Team will design alignment options that incorporate a variety of these components in a way that is not only cost and time efficient, but that also maximizes potential ancillary benefits, such as increased opportunities for recreation, neighborhood connections, and enjoyment of natural resource areas.

Next Steps

Concept development for each of the Proposed Project's alternatives is ongoing. The RBDM Project Team continues to welcome input from the CAG, and will summarize feedback received at future meetings. The next CAG meeting is scheduled for Tuesday, January 31, 2017, and will focus on updates to the development of Alternative 2 (Stormwater Drainage Improvements).

