



REBUILD BY DESIGN HUDSON RIVER: **RESIST - DELAY - STORE - DISCHARGE**

The Federal Department of Housing and Urban Development (HUD) created the Rebuild By Design (RBD) competition in the summer of 2013 to develop ideas capable of dramatically improving the physical, ecological and economic resilience of coastal areas. The municipalities of Weehawken, Hoboken and Jersey City were selected through the RBD competition for both the damage suffered in October 2012 from Superstorm Sandy and their long-term historical flooding problems.

The New Jersey Department of Environmental Protection (NJDEP) is the project lead for the \$230 million grant that HUD awarded for the project. HUD's award comes in the form of Community Development Block Grant-Disaster Recovery (CDBG-DR) funds, requiring compliance with the National Environmental Policy Act (NEPA) and its associated regulations. EIS is the NEPA compliance document. The Feasibility Study and Environmental Impact Statement (EIS) are being conducted according to HUD's requirements.

The NJDEP is charged with planning, designing and constructing the project. The first steps are to conduct a Feasibility Study and prepare an EIS. The Feasibility Study will investigate the constructability and viability of the project. The EIS evaluates the environmental impacts of the proposed actions, such as: utility impacts; subsurface soil conditions; right-of-way impacts; traffic/pedestrian flow; environmental justice; natural ecology; land use; viewshed and construction cost.

On June 4, 2015, NJDEP engaged Dewberry Engineers, Inc. to perform the Feasibility Study and complete the federally required EIS. Dewberry has retained OMA and SCAPE/LANDSCAPE Architecture and six other sub-consultants to contribute to the project. The full winning proposal can be found at www.rebuildbydesign.org/project/oma-final-proposal/.

RESIST - DELAY - STORE - DISCHARGE is a comprehensive urban water strategy conceived to protect Weehawken, Hoboken and Jersey City from both a tidal surge event and flooding caused by rain events. The area-specific strategies take into consideration development density, environmental conditions, recreational usage, transportation and economic issues. The project involves the following resilience measures:

RESIST



Resisting storm surge will be addressed by a variety of structural solutions ranging from terraced edges and levees with possible environmental and recreational features integrated into the design, as well as bulkheads, piers, elevation of structures and permanent or deployable floodwalls/seawalls.

DELAY



Effects of rain and flooding events can be mitigated using green roofs, rain gardens, reclamation of previously paved areas, modification/landscaping of open space, bioswales and permeable paving among other options.

STORE



Large-scale structures can be used to store the large volumes of rain water that have the potential to cause flooding. Cisterns, bioretention basins, stormwater chambers and constructed wetlands can all help store the excess water.

DISCHARGE



Wet weather pump stations and stormwater bypass force mains will improve storm drainage capacity and remove stormwater from the project area more quickly.

On April 20, 2015, through the New Jersey Department of Community Affairs (DCA), HUD adopted the NJDEP's RBD Action Plan Amendment, which describes how the federally funded project will proceed. This can be viewed at www.renewjerseystronger.org/wp-content/uploads/2015/APA-12-RBD-Amendment-4-22-15.pdf. As described by the plan, NJDEP is currently working with all three municipalities to develop a Citizen Outreach Plan (COP) to define and guide how the NJDEP, municipalities and the public will be kept informed throughout the project. The COP details the creation of a Citizen Action Group that will be populated by local residents and other interested local parties. The COP establishes that three public meetings and one public hearing will be held at key milestones in the EIS process and how all parties involved in the Hudson River RBD will have opportunities to provide input. The COP will be publicly noticed on July 1st in the New Jersey Register for a 30-day public comment period. The NJDEP also maintains a website and emailing list. Anyone can sign up to receive email updates on the RBD Hudson River project at www.state.nj.us/dep/floodhazard/rbd-hudsonriver.htm.

The NJDEP will be continuing public outreach and meetings throughout the entire Feasibility Study and EIS to keep the public informed and allow people to provide input on the project. The next two public meetings will soon be noticed in advance on the DEP's website and via the RBD Hudson River emailing list. These public meetings will cover the following issues:

September 2015 Scoping Phase Meeting - define what will be done as part of the NEPA process. This will include an understanding and agreement on the scope of work as well as the purpose and need of the project.

November 2015 Concepts Screening - during this phase, an evaluation of five concepts will be conducted. The concepts will be evaluated based on public, environmental and engineering concerns.