



SUMMARY OF PUBLIC COMMENTS ON FIVE CONCEPTS FOR REBUILD BY DESIGN (RBD) - HUDSON RIVER

December 10 to December 31, 2015

The following is a summary of over 250 verbal and written responses submitted by the public (as received by New Jersey Department of Environmental Protection [DEP]) on five RBD concepts presented at a Public Meeting on December 10, 2015. Verbal comments were recorded at the public meeting and at subsequent drop-in sessions held on December 14, 15 and 17, 2015.

Presentations and public comments during the December 10, 2015 Public Meeting were recorded and can be found at <http://www.rbd-hudsonriver.nj.gov>. In addition to the question and answer sessions held during the meeting and subsequent drop-in sessions, public comment was provided in writing through either the use of comment forms provided at these sessions; comments submitted through the U.S. Mail; and comments submitted by email at the project website (<http://www.rbd-hudsonriver.nj.gov>). The Project Team requested that all comments on the five concepts be submitted no later than December 31, 2015.

The opportunity for the public to provide comments on these five concepts was the second major opportunity for public input on the RBD Hudson River project since the U.S. Department of Housing and Urban Development (HUD) awarded the grant. The first opportunity was in September 2015 during the scoping period, when a public meeting was held and public comments were solicited on the scoping document that outlined the purpose and need for the project. There will be another formal opportunity for public comment in the coming months, before the preferred alternative for the project is selected. There will also be an opportunity during review of the Draft Environmental Impact Statement (DEIS) later in 2016. In addition to providing public comment during and after public meetings, DEP welcomes input from the public at any time during the planning process.

About a third of the written comments received between December 10th and 31st were from residents of waterfront communities (almost exclusively Maxwell Place) and another third of the comments originated from residents of Garden Street. The addresses of the balance of the commenters was not provided with their comments. The majority of comments expressed disapproval of one or more concepts for the Resist component of the project. Specifically, those who reside in the waterfront communities of Maxwell Place and the Tea Building expressed opposition to Concepts B, C, and D, primarily objecting to the construction of a permanent seawall (or any type of resist structure) because of its effect on waterfront views and access. Residents identified the waterfront views and waterfront parks as among the most cherished aspects of quality of life in Hoboken and do not want to lose them. Some of these residents also noted that they did not experience significant flooding during Superstorm Sandy in October 2012. These residents also suggested either construction of a resist structure that would provide flood risk reduction for storms less than the 100-year storm or a network of non-permanent, fully deployable resist structures. There were few major objections raised specific to Concept E.

Comments received from Garden Street residents voiced opposition to Concept A. Residents expressed concerns that the Resist component will bisect the community and cause conflict between neighbors. They also stated that implementation of Concept A will lower their property values so much it will qualify as a blighting/condemnation/taking. In addition, a form letter being used by residents of Garden Street was submitted which contained a number of concerns, including: hindering emergency vehicle access, reducing pedestrian use, complicating snow and garbage removal and making parking more difficult.

Many comments expressed support for advancing the Delay, Store and Discharge (DSD) components; some commenters expressed a desire to have these components given funding priority over Resist components, or to pursue the DSD components only. Residents want to see “every day events” (e.g., recent water main breaks) addressed and existing infrastructure problems fixed rather than proceed with precautionary measures against another possible Sandy-type event. Commenters also encouraged the separation of storm water and sewer outfalls and adding additional pumps to the system.

The project team evaluated the public input and is considering modifications to the concepts that will result in the selection of three Alternatives. The selection of the three Alternatives will complete the concept development phase and will move the project into the alternatives analysis phase. During this phase of the project the three alternatives will be further developed and analyzed, as will a “no-build” or “no-action” alternative, with the goal of selecting the preferred alternative in the spring/summer of 2016. The no-action alternative is required by the National Environmental Policy Act (NEPA) and defines what the project area will be like without any proposed improvements. Furthermore, the no-action alternative provides a comparison to the

build alternatives. The three Build Alternatives will be posted on the project website as soon as possible and will include engineering assessments and clarifications for any changes or updates to the drawings.

Additionally, in response to the significant public comment received about the project during the comment period, as well as comments and questions that have been brought up over the course of the project, responses to a list of frequently asked questions are provided below. The questions are grouped based on the following categories: Project Background, Project Process, Project Funding, and the Five Concepts.

FREQUENTLY ASKED QUESTIONS

PROJECT BACKGROUND

Where can I find out current information about the project and stay involved?

All project information and materials for the Rebuild by Design Hudson River Project can be found on the project website at www.rbd-hudsonriver.nj.gov. Also, interested persons may sign up for the website listserv at <http://www.state.nj.us/dep/floodhazard/rbd-hudsonriver-subscribe.htm>.

Feedback can be emailed to rbd-hudsonriver@dep.nj.gov, or mailed to David Rosenblatt, Director, Office of Flood Hazard Risk Reduction Measures, 501 East State Street, Mail Code 501-01A, PO Box 420, Trenton, NJ 08625-0420.

What is this project about?

This project proposes to take a multi-faceted approach to address flooding from major storm surges and high tides as well as from heavy rainfall events. The Proposed Project will occur throughout the City of Hoboken, and will extend into Weehawken and Jersey City, with the following approximate boundaries: the Hudson River to the east; Baldwin Avenue (in Weehawken) to the north; the Palisades to the west; and 18th Street, Washington Boulevard and 14th Street (in Jersey City) to the south.

The project's comprehensive approach to resilience considers four integrated components:

Resist: a combination of hard infrastructure (such as bulkheads, floodwalls and seawalls) and soft landscaping features (such as berms and/or levees which could be used as parks) that act as barriers during exceptionally high tide and/or storm surge events;

Delay: policy recommendations, guidelines and urban green infrastructure to slow stormwater runoff;

Store: green and grey infrastructure improvements, such as bio retention basins, swales, and storage tanks, that slow down and capture stormwater, and which will complement the efforts of the City of Hoboken’s existing Green Infrastructure Strategic Plan; and

Discharge: enhancements to Hoboken’s existing stormwater management system, through enhanced storm water collection systems, outfalls and/or pumping stations.

Why are we doing this project?

Superstorm Sandy flooded nearly 80% of Hoboken. Residents and businesses suffered financial and emotional hardship long after the storm passed and the flood waters receded. This project’s goal is to reduce the flood risk for thousands of residents and businesses that were devastated by Sandy and are vulnerable both to future storm surge and to recurring inland rainfall flooding.

The project will benefit the entire community, which relies on critical infrastructure that is currently vulnerable to future storm surges. This includes electrical substations, the sewage treatment plant, ambulance headquarters, police and fire stations, and hospital. A detailed discussion of the project’s Purpose and Need can be found in the Final Scoping Document, which is available for download on the project’s website at www.rbd-hudsonriver.nj.gov.

How would these proposed plans effect Hoboken in the years to come? Why do we need to build anything at all and what would happen if it was decided not to build any protective measure for our community?

As recent storms like Hurricane Joaquin and Winter Storm Jonas remind us, the New Jersey coastline and the project area will continue to be hit by storms in the future. The current FEMA guideline (FEMA 577) indicates a 26% chance of another Sandy type storm hitting Hoboken in the next 30 years. Even moderate storms could result in devastating flooding events and can be more frequent with sea level rise. By taking a proactive approach now, the project area will help reduce flood risk for years to come.

Who ultimately makes the final decisions regarding this project?

The Hudson River Project has an Executive Steering Committee. The role of the steering committee is to collaborate, exchange information and provide a forum for committee members to provide input to the DEP throughout all phases of the project, from feasibility through construction. The steering committee discusses and attempts to build consensus on the direction of the project, project schedule, project related policy issues and concerns raised to the mayors and the DEP by the public.

The steering committee is chaired by the DEP Commissioner and/or his designee, and also includes the DEP RBD project team members and the Mayors and members of their staffs from Hoboken, Weehawken, and Jersey City. Representatives of other stakeholders are periodically incorporated into this committee as needed.

The Executive Steering Committee is an advisory board. All final project decisions rest with the DEP as the recipient of the Community Development Block Grant-Disaster Recovery (CDBG-DR) funds and the agency responsible for implementation of the RBD project.

How was Dewberry hired for this project?

Dewberry Engineers, our Feasibility Study and EIS contractor, was engaged by the State via a publicly advertised Request for Proposals. In September 2013, Dewberry was awarded NJ TRANSIT Contract No. 13-002D, Purchase Order No. B51355, to perform Environmental Consulting Services. NJ TRANSIT's Board of Directors authorized the use of the Dewberry contract to support Superstorm Sandy related work. A Task Order was issued to retain Dewberry to perform a feasibility study and EIS for the RBD Hudson River Project.

As a major player in coastal flood hazard analysis and protection, Dewberry (<http://www.dewberry.com/>) has more than 25 years of experience working with FEMA on disaster response, recovery, mitigation and prevention planning. With more than 200 professional experts in such specialties as water resources, floodplain management, and hurricane and storm damage reduction infrastructure, Dewberry has performed geospatial mapping and modelling services for more than 75 local and state governments. A few examples of other coastal resilience projects and services that Dewberry led or is leading include:

- Red Hook Flood Resiliency Feasibility Study in Brooklyn, NY;
- Integrated Coastal Flood Protection for Long Beach WWTP in Long Island, NY;
- Oakwood Beach Flood Study in Staten Island, NY;
- Flood Control, Floodplain and Water Quality Consulting, County of San Diego, CA;
- Design of flood protection system for PATH's Hoboken Portal and Elevator
- Design of flood protection system for MTA's Six Critical stations in Lower Manhattan;
- Sea Level Rise Risk Management Study, North Carolina; and
- Post-Sandy coastal mapping of the entire East Coast for NOAA.

Is Stevens Institute - Davidson Laboratory helping in this project?

Yes, Stevens Institute - Davidson Laboratory is assisting DEP with this project. Through an existing State Contract with the New Jersey Sea Grant Consortium, DEP has engaged Stevens engineering professors with expertise in flood modeling to provide technical assistance and peer review on this project. This contract engagement can be found on the NJ Office of State Comptroller website:

<http://nj.gov/comptroller/sandytransparency/contracts/sandy/approved/contracts.html>.

PROJECT PROCESS QUESTIONS

Who set the project timeline?

One of the challenges for all of the RBD projects nationwide is the aggressive schedule mandated by the authorizing federal legislation. All RBD projects are under the same deadline and must be completed by September 2019; however, HUD has the ability to extend that deadline to no later than September 2022. Additionally, all funds must be obligated by September 2017. This means that environmental assessments and other studies must be performed, a preferred alternative must be selected, and the Draft Environmental Impact Statement must be completed as soon as possible, to give the State enough time to prepare, submit and receive HUD approval on an updated Action Plan Amendment.

Where are we in the project timeline?

The project team is completing the concept development phase of the Feasibility Study and Environmental Impact Statement. The project is moving into the alternatives analysis phase, where three concepts will be advanced as build alternatives to be further developed and analyzed, as well as a “no-build” or “no-action” alternative, in order to determine a preferred alternative in the spring/summer of 2016. There will be formal opportunity for public comment in the spring/summer of 2016 before the preferred alternative for the project is selected. There will also be an opportunity during review of the Draft Environmental Impact Statement (DEIS) later in 2016. See <http://www.state.nj.us/dep/floodhazard/docs/rbd-hudson-project-schedule-20151207.pdf> for more information.

What has been the public process so far?

Throughout the course of the Feasibility Study and Environmental Impact Statement process, a public involvement plan has been implemented in accordance with the Project’s Citizen Outreach Plan (COP). The COP was developed by DEP with community input to provide a framework for public involvement throughout the entire lifetime of the Project, of which the environmental and feasibility studies are only one part. A copy of the final COP is available on the Project website at <http://www.rbd-hudsonriver.nj.gov>. The COP called for establishment of two groups, each of which has been providing suggestions, comments, and other feedback to this project on an ongoing basis: the Citizen Advisory Group (CAG) and the Executive Steering Committee (ESC). The CAG is a diverse group of community members who have provided a great deal of feedback to the project team and State officials regarding the concepts. The ESC is an advisory group led by the DEP Commissioner and the mayors of the three affected communities. In accordance with the COP, public input on the project was solicited during the scoping process in September 2015.

The framework for this project was publicly announced in October 2014, when the funding for the project was awarded by HUD to the DEP. Two public meetings occurred prior to beginning the National Environmental Policy Act (NEPA) process. A January 20, 2015 meeting was held to introduce the project to the community. An additional public meeting

took place on June 23, 2015 to introduce the project team that would be performing the feasibility study and EIS work. This meeting also introduced the NEPA process and how it would proceed. The first public meeting held as a part of the NEPA process was a public meeting to solicit comments on a Draft Scoping Document. It occurred on September 24, 2015, with two follow-up meetings open to the community during the week of September 27, 2015. The public also was invited to submit written comments on the document until October 9, 2015. The Project Scoping document was revised to incorporate public comments; it was finalized on November 20, 2015, and is available at

<http://www.state.nj.us/dep/floodhazard/docs/rbd-hudson-river-final-scoping-document.pdf>.

Another public meeting was held on December 10, 2015 to review various concepts developed in accordance with the Scoping Document. Additional community follow-up meetings took place on December 14, 15, and 17, 2015.

What public agencies have been involved in the project?

The project team has been coordinating with DEP, North Hudson Sewerage Authority (NHSA), New Jersey Transit (NJT), and the U.S. Department of Housing and Urban Development (HUD). Additional agencies that have been or will be consulted with include the U.S. Army Corps of Engineers (USACE), U.S. Environmental Protection Agency (EPA), Federal Emergency Management Agency (FEMA), U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS), Jersey City Municipal Sewerage Authority (JCMUA), Port Authority of New York and New Jersey, and the New Jersey Historic Preservation Office (NJHPO). The project team has also been closely coordinating with the mayors' offices of Jersey City, Weehawken and Hoboken, who are represented, along with DEP, on the project's Executive Steering Committee (ESC).

PROJECT FUNDING QUESTIONS

What must the project funding be used for?

As stated in HUD's Federal Register (FR) notice 79 FR 62182, published October 16, 2014 [Docket No. FR-5696-N-11], the \$230 million award is to assist in the funding of Phase 1 of the Project. Phase 1 includes the feasibility, design and environmental analysis of the entire comprehensive project, as well as funding for the implementation of the Resist component and possibly some of the Delay, Store, Discharge (DSD) elements.

It is possible that the \$230 million will not cover the cost of implementing the entire Resist, Delay, Store, Discharge components as currently conceived, so consideration will be given to phasing in certain aspects of the project.

Will the Delay, Store & Discharge (DSD) portion of this project be built to help with systemic flooding as part of the \$230 Million?

DSD components will be considered as part of the overall project strategy, and will be included in the preferred alternative. Depending on the cost of the Resist element of the project, funds may be available to address some of the DSD elements of the project.

It should be noted that each city in the project area, as well as the responsible sewerage authorities, are actively working independent of the RBD project on Delay, Store and Discharge components to reduce surface water that enters the Combined Sewerage Overflow (CSO). These include zoning changes and new and ongoing initiatives (such as the NHSA's Long Term Control Plan and Hoboken's Green Infrastructure Strategic Plan). All these efforts will further the overall project goals.

Is it possible to use the RBD funds for other projects instead?

No. The awarded funds are specifically required to be used to implement the "Resist, Delay, Store, Discharge" proposal submitted in connection with the Rebuild by Design competition.

FIVE CONCEPTS QUESTIONS

Why are we learning about the five project concepts now?

Dewberry has been gathering data on existing conditions and performing significant engineering analyses since June 2015. That work – together with information gathered from stakeholders and through public involvement – resulted in the five concepts produced for consideration and comment. The concepts were made available to the general public after the CAG, the ESC, primary stakeholders and major utilities provided feedback in November of 2015, in accordance with the project scoping document. The five concepts were then presented at a Public Meeting on December 10, 2015. Concepts are currently being revised based on community input.

How were the five concepts developed?

The concept development process was a culmination of significant information gathering conducted and analyzed since the beginning of the feasibility and EIS work began in early June 2015. This included compiling historical data and conducting field work to gather detailed information on topography, geotechnical characteristics and conditions of existing waterfront structures. In addition, there was interaction with the Executive Steering Committee (ESC), Citizen Advisory Group (CAG) and the public to collect additional information and provide project input.

After analyzing much of the information, all potential concept ideas first were screened to determine whether they met the Purpose & Need of the project. After passing that screen, the individual ideas were evaluated to determine whether a proposed idea was feasible, practical or prudent. Further qualitative consideration was given to critical attributes of conceptual

ideas, such as: minimizing direct impacts on privately owned property, the number of deployable structures required, potential to achieve FEMA certification and ability to obtain the same outcome with fewer impacts on the natural or built environment. The result of these evaluations led to the development of different ideas/options that could be used to develop the resist, delay, store, discharge concepts. This collection of options is known as the “tool kit”.

Next, Dewberry combined components from the tool kit based on thematic frameworks to create comprehensive strategies to address both coastal storm surge flooding and rainfall-induced flooding. For example, one theme (which became Concept A) minimized construction and maintenance costs while another combined components to maximize risk reduction from surge flooding (which became Concept C). A set of project evaluation criteria were concurrently developed with comprehensive input from both the CAG and the ESC. These criteria included evaluating how each concept met the project’s scope and the project’s purpose and need (as developed with feedback from the public through the scoping process) and the Scoping Public Meeting. For example, one project evaluation criterion was the percentage of the population within the study area that would receive flood risk reduction benefits. Using the project evaluation criteria (available at <http://www.state.nj.us/dep/floodhazard/docs/20151203-rbdh-cag-concept-screening-metrics.pdf>), the CAG and ESC provided recommendations and DEP finalized the five concepts that were presented at the December 10 public meeting.

Why do the five concepts provide different levels of risk reduction in the project area?

The five different Resist strategies within the concepts were developed to provide a range of feasible alternatives, obtain feedback on each alternative from the public, and aid in deciding which concepts should advance for further analysis. By proposing five different concepts, the community can better understand the tradeoffs between full risk reduction (flood barriers along the waterfront) and other less protective (inland) concepts that may be possible. These concepts also introduced some ideas for potential amenities that, after further development and community input, could be integrated into flood risk reduction measures.

Is there something that can be done to help buildings that might not benefit directly from the final preferred flood risk reduction measure?

Yes, and Hoboken in particular is considering measures that will do just that. There are different strategies that individual property owners could implement within their buildings to protect against flooding. Hoboken is proposing an infrastructure trust fund to provide public funding for these localized flood risk reduction measures.

Can changes be made to alignments after the three build alternatives are selected?

The current goal is to reduce the number of concepts to three alternatives in order to enable the engineering and environmental analysis work to proceed most efficiently. As additional engineering and environmental work and analysis are completed, and additional public input

is provided, it is possible that additional variations on the three build alternatives will be developed.

Have you reviewed all possible alignments?

As discussed above, a large number of alignments have been evaluated against both screening criteria and project evaluation criteria. During the public involvement process on the five concepts, additional variations were identified and are being evaluated. The Environmental Impact Statement will consider a reasonable range of alternatives that can accomplish the purpose and need of the project, as outlined in the Scoping Document.

What will our streets look like if some of these concepts are implemented?

As the three Build Alternatives are developed, the project team will also be developing clear visual images as to what the various resist structures could look like and will provide that information to the public. The project team will show examples from other locations, but the final structure design will not be completed until the next phase of the project.

Are these alignments going to remove parking?

Efforts will be undertaken to minimize any potential impact on parking. The EIS will address what, if any, effects on parking will occur based on the three build alternatives.

What are “deployables?”

There are two types of deployable systems – **active systems** and **passive systems**. This can lead to confusion when talking about where and when a deployable can be used.

Active systems require some form of human intervention to be effective; while passive systems do not. Examples of active systems include installing flood logs manually between bollards/posts before the arrival of flood or installation of a gate that can be closed across a road.

An example of a passive system involves installing flood barriers in the road bed that activate automatically when the floodwater reaches this system. Depending on the site conditions, such active or passive systems can be installed; however each of these systems has limited capacity to withstand the enormous forces exerted by flood waters. Based on research and discussions with FEMA regarding passive deployable systems, no instances where areas effected by coastal storm surge, wave action, debris loads (such as boats) and hurricane force winds could be identified where passive deployable systems were used successfully. Although there are manufacturers that promote use of passive deployable systems, these systems have not been tested fully in both lab and real field conditions.

Notwithstanding these concerns, deployable systems are required in areas where under normal circumstances access is necessary and permanent flood control measures are impractical

and/or cannot be implemented (i.e. across streets). In those cases, properly engineered sliding or swinging gates can be and have been utilized successfully in coastal environments.

Are we fixing the North Hudson Sewerage Authority (NHSA) Sewers System? How Does the DSD plan work with NHSA?

The Delay, Store, Discharge (DSD) components will work to reduce the amount of rainwater entering the existing sewer system in areas prone to flooding from rain events. Although a reduced volume of rainwater entering the sewer system will improve the system's operation, it will not solve the problems associated with the CSO. Under the EPA CSO Control Policy, the NHSA was issued CSO permits for both the Adam Street Water Treatment Plant and the River Road Sewerage Treatment Plant on March 12, 2015 (modifications were made in October 2015). In accordance with the issuance of these permits, the NHSA is required to develop long term control strategies, as part of a Long Term Control Plan (LTCP) in compliance with the requirements of the Clean Water Act. The LTCP consists of nine elements including public participation and an implementation schedule. The LTCP will be developed over the course of 59 months beginning with the submittal of a Selection and Implementation of Alternatives Report in the Final LTCP by June 1, 2020. The RBD Team will work with the NHSA throughout the development of the LTCP and the RBD process to provide consistency between the two efforts.

Why are we building walls in areas that never flooded?

Prior to European settlement, most of the land within the city limits of Hoboken (with the exception of Castle Point) was low lying marshland subject to frequent flooding. As the city developed, this historic marshland was filled. However, more than 70% of Hoboken remains below the level of the 100-year storm surge, and is therefore vulnerable to future storm surge flooding events of that magnitude or higher. One of the project goals is to see a reduction in flood insurance rates for people and businesses within the project study area. In order to accomplish this, the project must meet FEMA minimum standards to address both the 100-year storm surge event and the 100-year rainfall flooding event. The structures, as well as the locations being considered, are being developed in order to meet the FEMA minimum standards for levee certification. This standard includes an added level of safety, which translates to an increase in height of the flood risk reduction measures. Superstorm Sandy was close to a 100-year storm event but with limited wave action and very little rainfall; this is why structures are being proposed in areas beyond the extent of previously observed flood events.

Can we guarantee that people near the resist structure (if built) will not flood more than previously? What happens to the water when it reaches the structure(s)? Will homes that didn't flood before be at risk because of the structure(s)? Will the walls create flooding in areas that were never flooded before?

Experts are performing storm surge and rainfall modeling, which will enable us to project the probable effects of each concept under various conditions. Pursuant to N.J.A.C. 7:13 Flood Hazard Area Control Act Rules, if a proposed resist structure causes increased flooding in an area beyond flood levels that exist without the structure, that structure or approach will have to be modified, mitigated, or moved or it will not advance.

Would a flood wall or flood resiliency structure restrict access to emergency vehicles such as ambulances and fire trucks? Would these structures impede deliveries and garbage removal or otherwise impede traffic flow?

The Resist structure's potential impacts on vehicular and pedestrian access, including emergency vehicles, public service vehicles and private vehicles must be considered on both a short-term basis (during construction) and over the long-term (once construction is complete). The Resist structure's effect on the community's accessibility during flood events will also be evaluated. These effects will be weighed against flood risk reduction values during the alternatives analysis and will help inform the selection of the preferred alternative. Part of the process of the alternatives analysis is to develop emergency routes that can be used to provide necessary services to the citizens in the project area during a storm regardless of the location of resist barriers. All resist barriers will be designed and constructed to avoid and/or minimize long term impacts on any vehicular access.