

11/6 - Measure for Measure: A Discussion of Resilience Plans for the Tri-State Area

AIANY Design for Risk and Reconstruction Committee

Some of the large-scale projects under consideration or under way for the Tri-state Area include:

- *US Army Corps of Engineers.* The US Army Corps of Engineers has developed five alternative concepts as part of its New York-New Jersey Harbor and Tributaries Coastal Storm Risk Management Feasibility Study. These include:
 - Alternative 1: No Action
 - Alternative 2: NY/NJ Outer Harbor Barrier
 - Alternative 3A/3B: Multiple Barriers and Floodwalls & Levee Systems
 - Alternative 4: Solitary Bay and River Basin Barriers, Floodwalls & Levees
 - Alternative 5: Perimeter Only
- *New York/New Jersey Metropolitan Storm Surge Working Group.* The New York Harbor Storm Surge Barrier is a large-scale solution proposed by the New York/New Jersey Metropolitan Storm Surge Working Group, led by Malcolm Bowman of Stony Brook University.
- *Rebuild By Design/HUD.* The Big U, part of the HUD-funded Rebuild by Design program, addresses three sections of Lower Manhattan's coastline: East River Park; Two Bridges and Chinatown; and Brooklyn Bridge to The Battery.

Other projects address these challenges using hard and soft infrastructure, natural barriers, and other adaptation strategies, such as:

- *Rebuild By Design/HUD.* The Living Breakwaters project creates a series of offshore breakwaters along Staten Island's southeast shoreline, and coordinates with New York Rising's Tottenville Dune and Coastal Dune Plantings project.
- *New York City.* The East Side Coastal Resiliency (ESCR) project is a 2.4-mile integrated coastal protection system that encompasses shoreline from Montgomery Street to East 25th Street and incorporates one section of the Big U work.
- *New York City.* The Lower Manhattan Coastal Resiliency (LMCR) project is another integrated coastal protection system for the Lower Manhattan shoreline that identified \$500 million of possible resilience investments and strategies. It incorporates one section of the Big U work as well.
- Localized flood walls to protect specific critical facilities against 500-year floods (e.g., hospitals such as NYU Langone on Manhattan's East Side, etc.)
- New York Raised Shorelines Project – Raised edges at waterfront green space
- Smaller, more localized floodgates in such locations as Newtown Creek and the Gowanus Canal.