Battery:

Those locations circled in blue are at a lower elevation than the Coastal Inundation Landmark Reference Point circled in black. (Top of Walkway between Staten Island Ferry and Governors Island Ferry Terminals)

- A water level reading of 10.9 ft above MLLW at the Battery Gauge will have water touching the Coastal Inundation Landmark Reference Point.
- A water level reading of 11.9 ft above MLLW at the Battery Gauge will result in a 1 foot inundation above the Coastal Inundation Reference Point.
- A water level reading of 14.0 ft above MLLW at the Battery Gauge will result in a 3.1 foot inundation above the Coastal Inundation Reference Point. This was the level the water reached during Hurricane Sandy.
At 14.2 ft MLLW / 9.2 ft MHHW 10/29/2012 8-10pm

USGS/FEMA Sandy Storm Tide Mapper

Manhattan (East Side)
3 to 4 ft inundation at corner of 8th St and Avenue C and 20th St and Avenue C.

3 to 4 ft of inundation along Con Ed plant at East 14th Street and Ave C and 13th St and Ave C.

Several ft of inundation along points of 1st Avenue (34th St) and FDR Drive at 34th St. Fdr/Harlem River Drive was flooded for much of its length with several ft of water from Battery to 190's.
FDR Drive at 53rd St

Manhattan (Financial District)
Up to 3 to 5 ft of inundation along the West Side Drive…Battery Park…and FDR Drive in lower Manhattan…with inundation extending several block inland.

Inundation of Ground Zero Memorial and Greenwich St and Albany St intersection

Several ft of inundation into Battery Park underpass at Battery Tunnel
Several ft of inundation a few blocks inland of South Street Seaport

Manhattan (West Side)
Most of the Westside Highway south of 49th street...50’s to 70s, and along Riverside Park were inundated with 1 to 3 ft of water. Inundation in front of the Intrepid on West Side Hwy and 46th St and of Holland Tunnel.

Queens
(Hunters Point/ LIC) was inundated with 3 to 6 ft of water several block inland from the East River and Newtown Creek. Picture below from 49th Ave and 5th St.
Brooklyn (Red Hook) was inundated with up to 3 to 6 ft of water. Van Brunt and Commerce St in Red Hook and Van Dyke and Dwight inundated with 2 to 4 ft of water

(Gowanus) 1 to 3 ft of inundation at Union Street and Bond Street
(Gravesend) 86street subway station in Gravesend inundated with 1-3 ft of water.

(Dumbo) 1-3 ft of inundation along East River in Dumbo neighborhood under the Manhattan Bridge

(Brooklyn Heights) 1-3 ft of inundation along East River in Brooklyn Bridge Park
Bay Ridge – Several feet of inundation on Belt Parkway Eastbound by the Verrazano

At 10 ft MLLW / 5.0 ft MHHW 9/12/1960

Lower Manhattan in 1960 with Hurricane Donna. WTC site (West and Cortland street)
At 9.7 ft MLLW / 4.7 ft MHHW (December 1992 Nor’Easter)

Manhattan

South Street Seaport

LOWER MANHATTAN. Office workers battle wind and water while trying to cross the street near South Street Seaport.
FDR Drive – Flooding over car rooftops at 82nd St underpass

At 9.5 ft MLLW / 4.5 ft MHHW

USGS/FEMA Irene Storm Tide Mapper

Brooklyn (Red Hook)
1 to 3 ft of water inundated streets about 100 yards inland along portions of Gowanus Bay/Canal in Red Hook. (830-900am 8/28/2011)

Manhattan (Battery)-
1-2 ft of inundation along the promenade in Battery Park City.
1 ft of water inundation over wall of marina in front of Mercatile exchange (830-900am 8/28/2011)

Manhattan (East Side)
FDR closed in both directions at Houston Street (830-930am 8/28/2011)
About 1 ft of water inundation on the streets in South Street Seaport.

Manhattan (West Side)
Southbound Henry Hudson Drive closed in Harlem due to 3 ft of water over the roadway. (Freshwater/Coastal Flood)(1010am 8/28/2011)

North part of Holland Tunnel closed due to (Freshwater/Coastal Flood)(846am 8/28/2011)

West Village Houses – Part of 10th Ave closed with 2 cars stuck in water. (Freshwater/Coastal Flood)(850am 8/28/2011)
At 8.9 ft MLLW / 3.9 ft MHHW
Brooklyn
1-2 ft of inundation on Van Brunt Street in Red Hook, Brooklyn

Hoboken
1-2 ft of inundation at Hoboken Train Station

At 8.8 ft MLLW / 3.8 ft MHHW
The Path Train was closed at Hoboken.
Route 7 in Kearney was closed at multiple locations due to coastal flooding.
(536 pm EST on 3/13/2010)
At 8.5 ft MLLW / 3.5 ft MHHW

Battery Park seawall is covered by 818 pm.

Water reaching Battery tide gauge house at 822 pm.

Surge washing over the seawall, looking toward Governor's Island, Staten Island, Jersey City and covering Boardwalk covered by around 1 ft of water 830 pm facing the Harbor. (3/13/2010)
At 7.8 ft MLLW / 2.8 ft MHHW

**Manhattan** – Minor flooding on [FDR at 79th street](#). Water coming up through manhole. (2/8/2016)

At 7.7 ft MLLW / 2.7 ft MHHW

**Manhattan**
Inundation on the FDR Drive. Elevated East River waters backed up into the catch basins and storm sewers causing several manholes on the northbound FDR Drive to have their covers moved out of place with water bubbling and pouring out on to the roadway. We had partial road closures on the [FDR Drive in the upper 80's and lower 90's](#) until the waters receded. (6/4/12 900-1030pm)

**Staten Island**
East Shore- Inundation of [40 Hempstead Ave](#) a few blocks off New York Bay in the [Midland Beach section](#) (6/4/12 918pm)
At 7.6 ft MLLW / 2.6 ft MHHW

Manhattan - Inundation on the FDR Drive.

At 7.5 ft MLLW / 2.5 ft MHHW

Manhattan – Water begins to creep over lower walkway at South Street near Maiden Lane along East River…near South Street Seaport. (1/3/2014)

At 6.8 ft MLLW / 1.8 ft MHHW

Staten Island
West Shore- Inundation near Travis Ave and Victory Blvd in the Fresh Kills area. (6/3/12 830pm)
At 6.7 ft MLLW / 1.7 ft MHHW

Manhattan – Major Flooding (1 to 3 feet) on the FDR Drive from about 700 to 1000 pm in several spots due to the combination of heavy rainfall occurring as minor coastal flooding benchmarks were being reached. Picture below adjacent to 125th St.

At 6.5 ft MLLW / 1.5 ft MHHW + heavy rain at time. 4-6 inches 36 hr rain total

Brooklyn Heights – 2 ft of water in parking lot at intersection of Jay Street and John Street. (4/30/2014 7pm)

At 6.4 ft MLLW / 1.4 ft MHHW + SW winds of 40-45 g 60 mph

Brooklyn – Splashover of water from NY harbor onto Belt Parkway in Brooklyn.