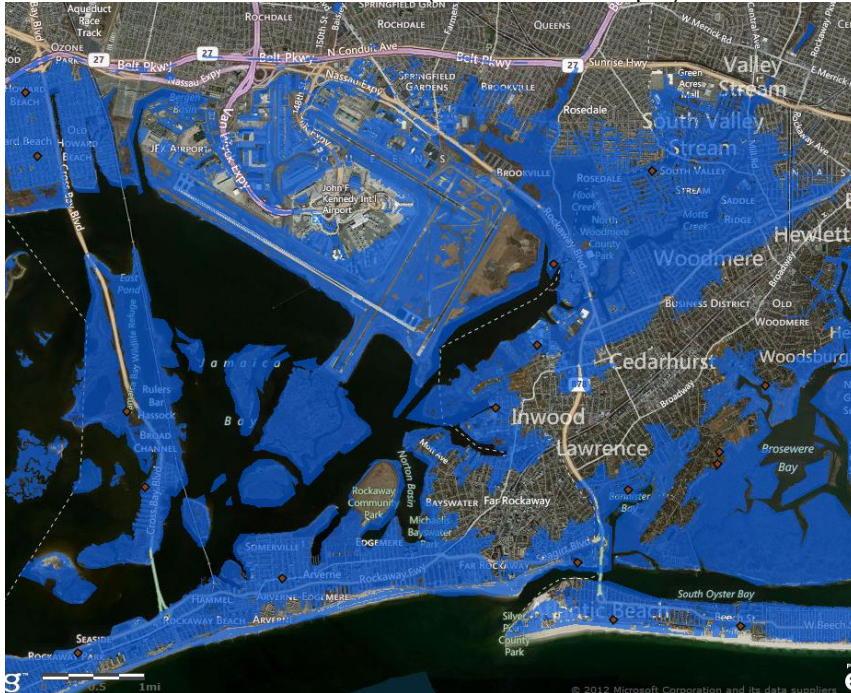


## Jamaica Bay at Inwood:

At 14.1 ft MLLW / 11.8 ft NGVD / **7.9 ft MHHW** (10/29/2012 9-10 pm)



Up to 3 to 5 feet of inundation were experienced in communities in and along Jamaica Bay. Inundation several blocks inland was experienced across coastal communities such as Howard Beach, Brookville and Inwood. Widespread major residential damage was experienced across areas such as Broad Channel, Meadowmere Park, and Old Howard Beach, where some of the deeper inundation occurred. In addition, JFK experienced 1 to 3 feet of inundation onto portions of their runways.

[JFK Airport](#) – JFK experienced 1 to 3 feet of inundation onto portions of their runways.



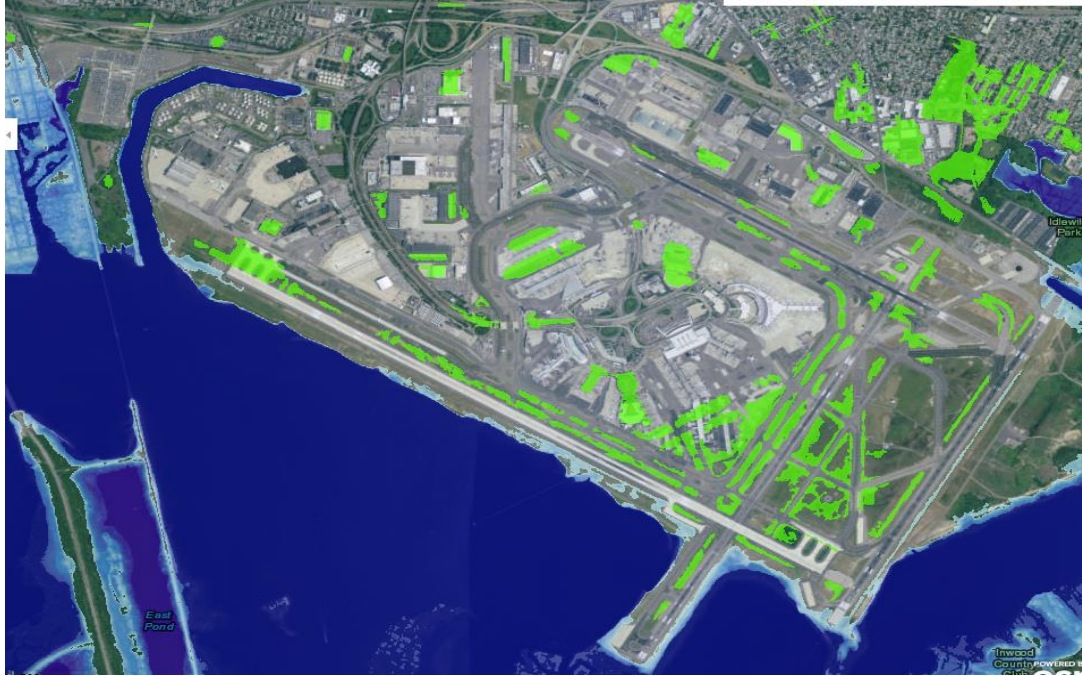


[Rockaway Beach, Queens](#) –

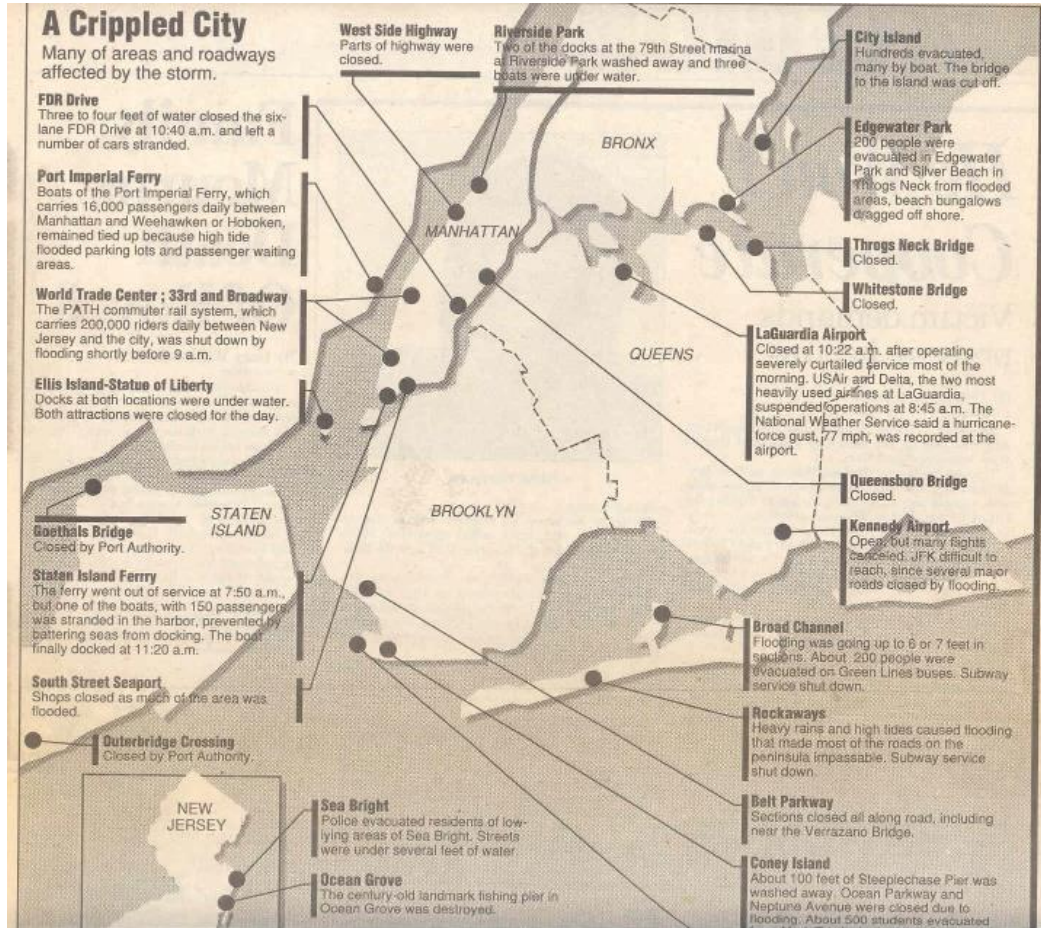


**Between 11.8-12.3 ft MLLW / 9.5-10 ft NGVD / 5.3-5.8 ft MHHW**

[JFK Airport](#)- Several portions of the airport taxiways and runways begin to flood. Picture below is at 6ft MHHW. Green areas may flood hydrostatically (from below), while blue areas are directly inundated.



At 11.2 ft MLLW / 8.9 ft NGVD / 5.0 ft MHHW (Dec 1992 Nor'Easter)



[Broad Channel](#) – Flooding up to 6 to 7 ft in sections. Subway service shut down. Over 200 people evacuated.



[Rockaways](#) – Flooding made most of the roads on the peninsula impassable



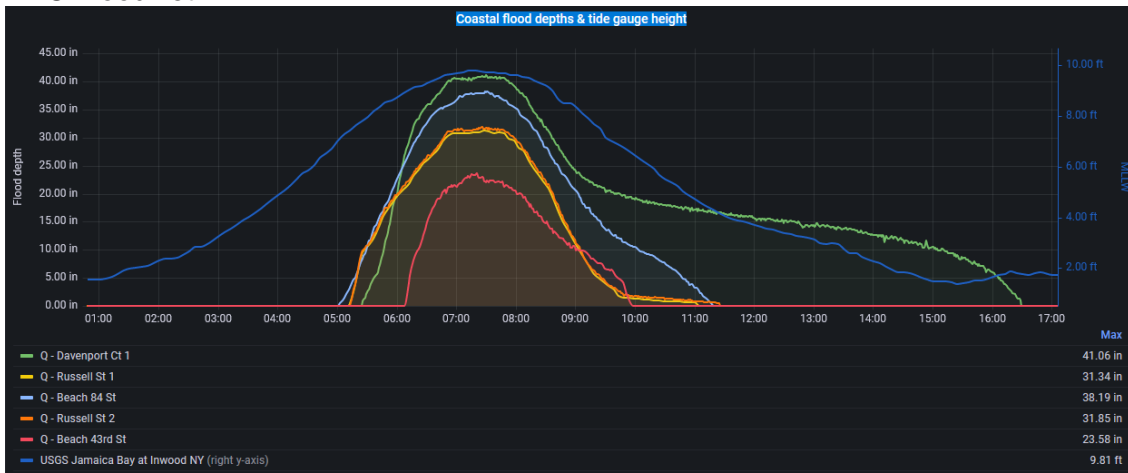
[JFK](#) – Open but several roads leading to the airport were impassable.

At 10.6 ft MLLW / 8.3 ft NGVD / 4.4 ft MHHW (March 14 1993 Superstorm)

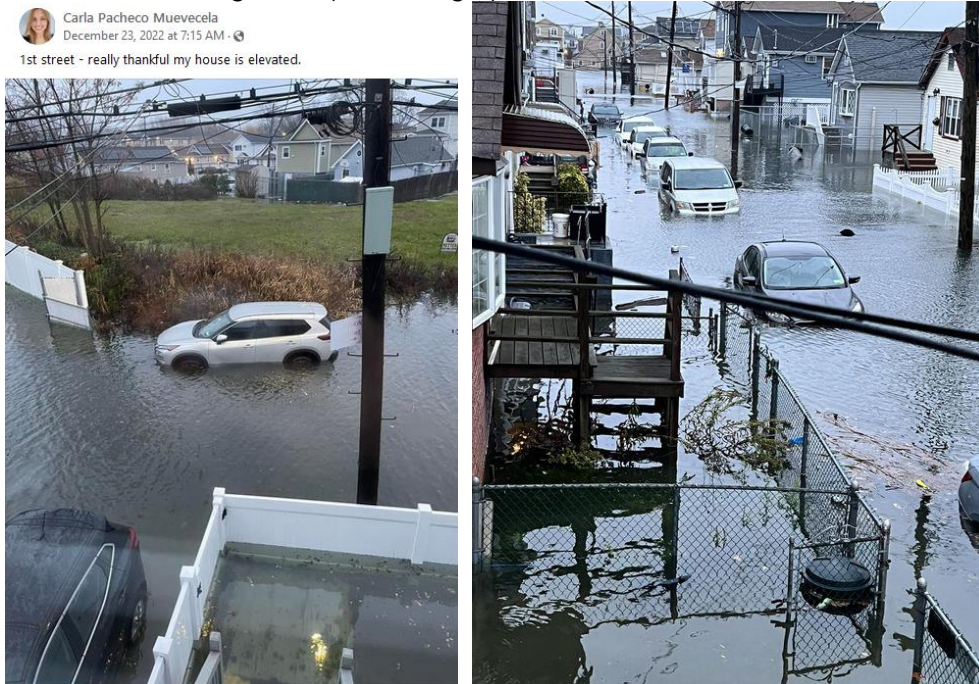
**At 10.2 ft MLLW / 7.9 ft NGVD / 4.0 ft MHHW (12/23/2022 South'Easter)**

A storm surge of 3 ft (locally 4 ft in back bays), coinciding with an astronomically high tide (perigean spring tide) on the morning of Dec 23rd. This resulted in widespread moderate to major coastal flooding along our coast, with communities in and around Jamaica Bay in southern Queens approaching water levels reached during TS Irene! Widespread inundation of 2 1/2 to 3 1/2 ft was experienced in these areas, resulting in numerous impassable roads, basements of homes flooded, and water damaged cars.

**NYC FloodNet**



**Hamilton Beach** – Up to 31/2 ft inundation and basement flooding along all the inlets. 1st street (left) , 163<sup>rd</sup> rd (right), Davenport Ct (middle), Rau Ct (bottom left), Davenport Ct 7.5 hrs after high tide (bottom right)





[Old Howard Beach](#) - Up to 31/2 ft inundation and basement flooding along all the inlets. 159th ave & 95th street (upper left), 98<sup>th</sup> Street (upper right), 101 and 160<sup>th</sup> st (lower left), Basement on 95<sup>th</sup> st (lower right)





Inwood, Queens  
Bayview and Cerro Street

1weathermedic  
@1weathermedic

@CraigAllenWx @NWSNewYorkNY @LeeGoldbergABC7 Inwood Nassau  
County tidal flooding



Arverne, Queens  
Beach 69<sup>th</sup> St



Rosedale, Queens  
Hungry Harbor Rd, from 148rd southward



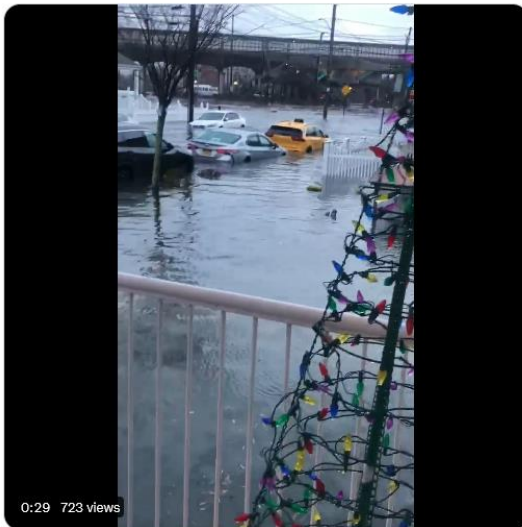
Several cars were stuck in flood waters after Hungry Harbor Road flooded out from 148th Road southward in Queens on Friday. (Theodore Parisienne/for New York Daily News)

Far Rockaway – Along bay front



**Matt Caraballo** @caraballomj · 10h  
Replying to @staceysager7 @BrittanyBabc7 and 2 others  
Flooding in Far Rockaway as well!

...





**At 10.0 ft MLLW / 7.7 ft NGVD / 3.8 ft MHHW (TS Irene)**

[Broad Channel, Queens](#) -

Several ft of inundation across many streets...with people rowing down streets in boats. Many residents said their basements had been flooded when the high tide came in between 7:30 a.m. and 8 a.m. Sunday.

Two bungalows that could only be reached by a damaged pier off of [12th Road](#) were destroyed, leaving a pile of wood and personal items floating in the water. The neighborhood was completely cut off during the storm as both the Addabbo Bridge to Howard Beach and Cross Bay Bridge to Rockaway were closed. (730-800am 8/28/2011)

[East New York, Brooklyn \(Gateway Mall\)-](#)

[Erskine St](#) flooding in right lane. (Freshwater/Coastal) (830-930am 8/28/2011)

[Inwood, Queens](#)

Several feet of inundation on [Brookville Blvd from 149<sup>th</sup> Street to Rockaway Blvd.](#) (830-930am 8/28/2011)

[Howard Beach, Queens](#)

Hawtreek and Shellbank Basins over their banks, flooding [Cross Bay Boulevard for a short time around 161st Avenue.](#) [First Street in Hamilton Beach](#) bore the brunt of the floodwaters and the streets around

[Coleman Square and the Howard Beach subway station](#) were also flooded. (830-930am 8/28/2011)

**At 9.6 ft MLLW / 7.3 ft NGVD / 3.4 ft MHHW (10/29/2012 9-10am)**

[Meadowmere, Queens](#) – Widespread 1 to 2 ft of inundation along Jamaica Bay.

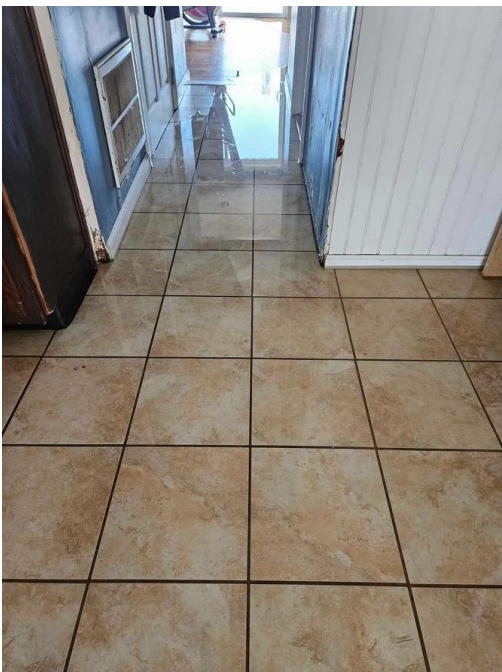
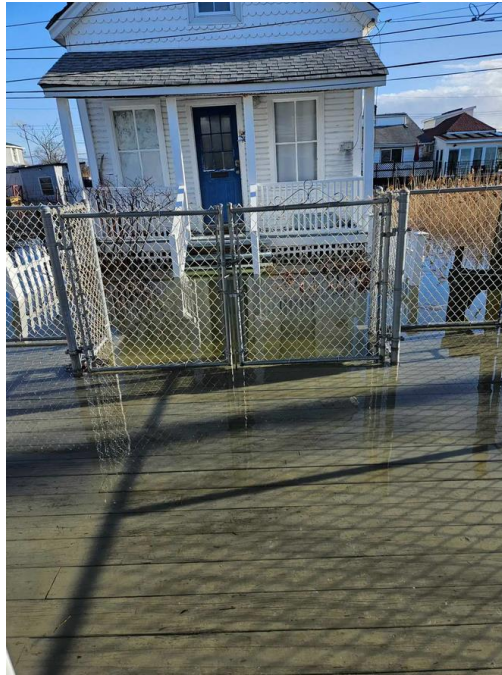
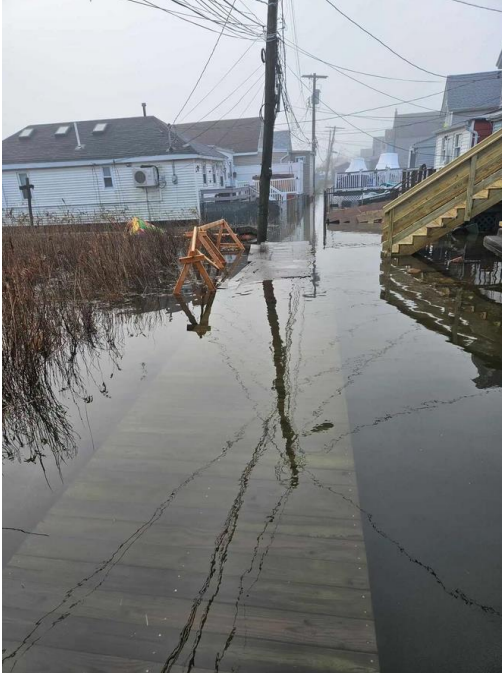


JFK Airport – Inundation of [far south end of runways 22/04 begins](#)

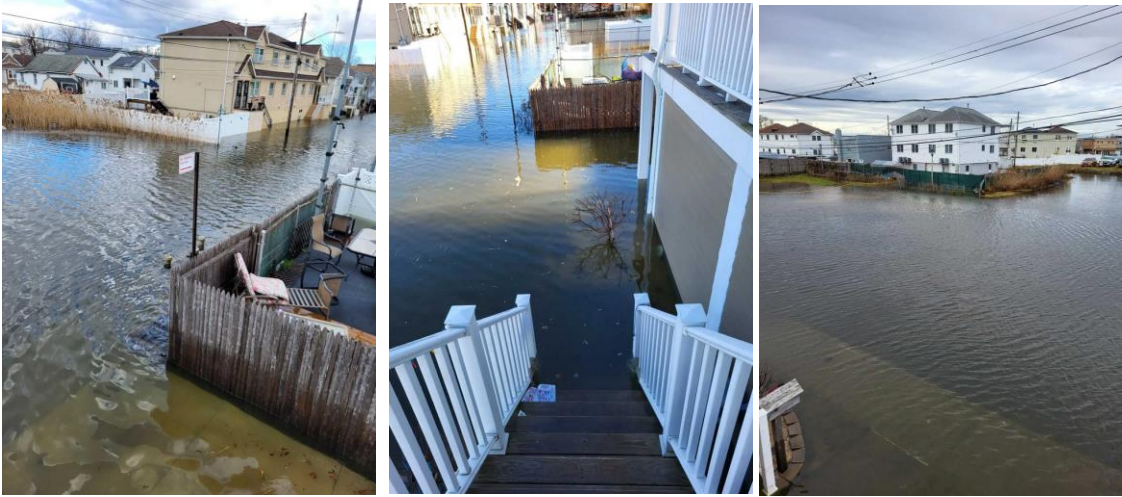


At 9.3 ft MLLW / 7.0 ft NGVD / 3.1 ft MHHW  
(01/13/2024 – SE gales > S/SW SCA + 1 to 2" of rain)  
Hamilton / Howard Beach –

- [Bayview Ave](#) (MyCoast)



- [Davenport Court](#) – (MyCoast)



- [160<sup>th</sup> Ave](#) – (MyCoast)



- [99<sup>th</sup> St](#) – (MyCoast)



Broad Channel –

- [East 6<sup>th</sup> St](#) -Among the streets flooded the worst on Saturday was East 6th Road, which was swamped with 3 feet of water.



*A truck drives through flooding at East 6th Road in Broad Channel. Photo courtesy of Dan Mundy Jr.*

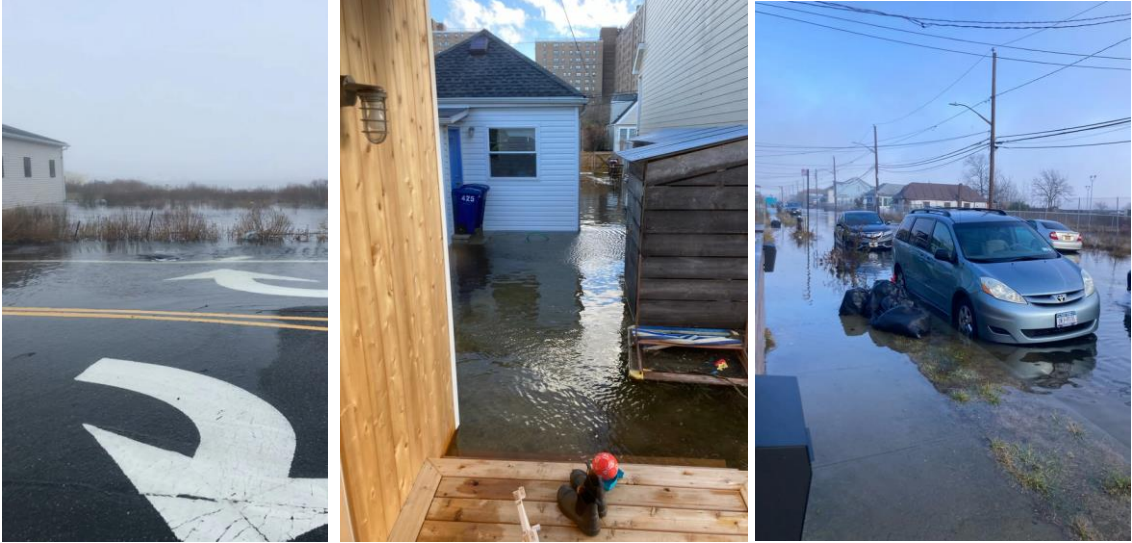
- [East 16<sup>th</sup> Road](#)



*Flooding on East 16th Road in Broad Channel. Photo by John Schilling.*

Rockaways - 1 to 3 ft of flooding to Beach Channel Drive, Rockaway Beach Boulevard, and Newport Avenue.

- Edgemere – [Beach 43<sup>rd</sup> St](#) (MyCoast)



- Rockaway Beach Blvd (MyCoast)



- [Beach 31st St](#) (MyCoast)



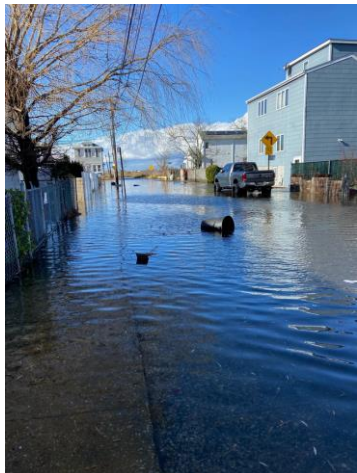
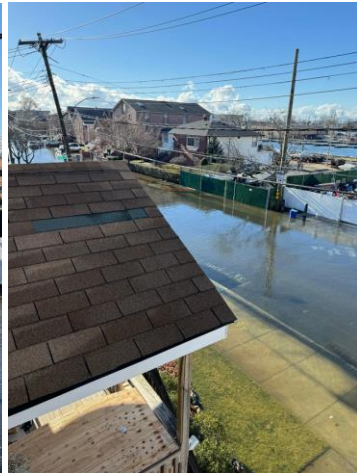
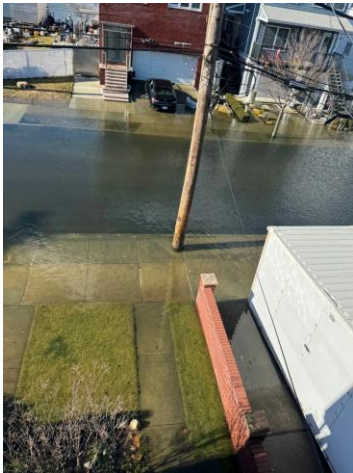
- [Beach Channel Dr and Beach 87<sup>th</sup> St](#) (MyCoast)



- [Beach Channel Dr and Beach 69<sup>th</sup> St \(MyCoast\)](#)



- [Bayfield Ave \\_ \(MyCoast\)](#)



- [Seagirt Blvd and Beach 20s](#) (MyCoast)



- [Arverne - Beach 72<sup>nd</sup> St and Thursby St](#) - While much of the flooding subsided by noon, water continued to inundate Beach 72nd Street and Thursby Avenue in Arverne.



*Flooding at Beach 72nd Street and Thursby Avenue in Arverne. Photo by John Schilling.*



## Major Flood Stage-

At **9.1 ft MLLW / 6.8 ft NGVD / 2.9 ft MHHW**

2 to 3 Ft of inundation in the most vulnerable sections of Brookville/Rosedale, Arverne/Edgewater, Howard Beach, Old Howard Beach, Far Rockaway, Hamilton Beach and Broad Channel. (Morning high tides of 2/8/2016)

In Brookville/Rosedale: Moderate flooding on [Rockaway Blvd](#) and [Brookville Blvd](#)

In Rosedale: Moderate Flooding on [Hungry Harbor Road](#) and [Hook Creek Boulevard](#)

In Bayswaters: [Norton Drive from Westbourne Ave to Healy Ave.](#)

In Far Rockaway: Flooding on [Beach 26th and Seagirt Blvd](#)

In Edgemere/Arverne:

Minor Flooding on Beach 38th-60<sup>th</sup> and 67-72nd streets

Moderate Flooding on [Beach 58th Street](#) and [Rockaway Beach Boulevard](#)

Moderate Flooding on [Beach 59th Street](#) and [Rockaway Beach Boulevard](#)

In Broad Channel: Flooding [on Crossbay Blvd and East 9th Street](#)

In Howard Beach: Flooding on [102nd St and 160<sup>th</sup> Avenue](#)

### [Broad Channel](#)

Water 2 ft deep on sidewalk on [14<sup>th</sup> Road in Broad Channel](#)





[Arverne/Edgemere](#) in Rockaways



[Beach 72<sup>nd</sup> Street and Almeda Avenue](#)



[102nd St and 160<sup>th</sup> Avenue](#) in Howard Beach



[Old Howard Beach](#)

[Far Rockaway](#)



**Major Flood threshold (ft above datum)**

- MLLW / NGVD / MHHW / NAVD88
- 9.3' / 7.0' / 3.1' / 5.9'

**At 8.9 ft MLLW / 6.6 ft NGVD / 2.7 ft MHHW**

2 to 2 1/2 Ft of inundation in the most vulnerable sections of Howard Beach, Old Howard Beach, Hamilton Beach, and Broad Channel. (Morning high tides of 2/9/2016)

[Broad Channel](#)



[Beach 36<sup>th</sup> Street](#)



[Old Howard Beach](#)



**At 8.8 ft MLLW / 6.5 ft NGVD / 2.6 ft MHHW**

A few feet of inundation in Rosedale section of Queens at [Brookville Blvd from 149<sup>th</sup> Street to Rockaway Blvd](#) with several stuck automobiles and even a City Bus for a period of time in the elevated coastal flood waters. (900-930pm 6/4/2012)

A few feet of inundation in Arverne section of Queens at [Beach 72nd street and Thursby Avenue](#) with stuck automobiles. (900-930pm 6/4/2012)

Tidal flooding occurring between [59th and 56th streets on Beach Channel drive down to Rockaway Beach Boulevard](#) (1 to 2 ft). Worst near the 60<sup>th</sup> Ave A train stop. (4/16/07)

[Hamilton Beach](#) (12/17/2020)- 1-2 ft inundation on [Davenport Court](#). (Credit Roger Gendron for report and pic)



[James Court](#) (credit Roger Gendron and Kelli Butler)



[164<sup>th</sup> Ave](#) (credit Roger Gendron, Buster Cerillo, and Bruce Bubba Stock)



Howard Beach – (12/17/2020) 1 ft inundation on [80-27 Shore Pkwy](#) (Credit Report/Pics to SJRIB Community Flood Watch Project)



Far Rockaway/Edgemere – (12/17/2020) 1 ft inundation on [Beach 39th Street](#). Hydrostatic inundation. (Credit Report/Pics to SJRIB Community Flood Watch Project)



Broad Channel - (12/17/2020) 1 ft of inundation on [6th Road in Broad Channel](#). (Credit report/pics to Michelle Kenny to SJRIB Community Flood Watch Project)



**At 8.7 ft MLLW / 6.4 ft NGVD / 2.5 ft MHHW**

Hamilton Beach - Every block in Hamilton Beach has flooded with some being higher than others. [Davenport Court](#) still has about 3 feet of water in the street. Being one of the lowest



points in Hamilton Beach, it takes on water from the adjoining blocks and will remain flooded until after midnight when water levels on the other blocks drop down enough to stop flowing onto Davenport Court. The [intersection of First Street, 104th Street & Russell Street \(the bend\)](#) is completely under water. As this is the only way emergency vehicles, other than our own volunteers, can enter Hamilton Beach, this is a big cause for concern.



**At 8.6 ft MLLW / 6.3 ft NGVD / 2.4 ft MHHW**

In South Queens, Hamilton Beach and [Broad Channel](#) both experienced significant flooding, and Old Howard Beach had some flooding as well near the Basins, on Sunday morning (8:15 high tide with 2 foot tidal height departure). (1/10/2016)

[Broad Channel at West 12<sup>th</sup> Road](#)



[Hamilton Beach at Calhoun Rd and Hawtree Basin](#)



[Hamilton Beach at Davenport CT and Hawtree Basin](#)



[Hamilton Beach at Rau CT](#)



[Howard Beach 98 St and 162 Ave](#)

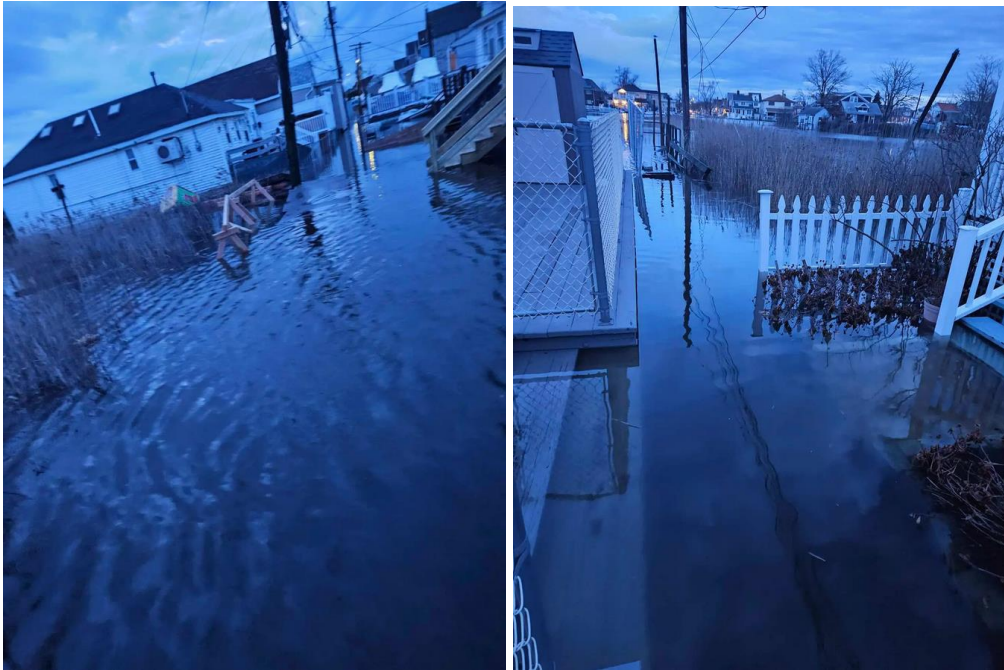


**At 8.5 ft MLLW / 6.2 ft NGVD / 2.3 ft MHHW (1/10/2023) (1/9-10/2024)**

In Broad Channel: Flooding [on Crossbay Blvd and East 9th Street](#)

In Howard/Hamilton Beach: Flooding on [102nd St and 160th Avenue](#)

- 2 ft of flooding on [Davenport Court](#) (NYC Floodnet)
- [Bayview Ave](#) (MyCoast):



- [160th Ave](#) (MyCoast):



**Moderate Flood thresholds (ft above datum)**

- MLLW / NGVD / MHHW / NAVD88

- 8.5' / 6.2' / 2.3' / 5.1'

**At 8.4 ft MLLW / 6.1 ft NGVD / 2.2 ft MHHW**

Minor coastal flooding again in the area of [Rockaway Boulevard and Brookville Boulevard](#) (known flood prone location) down near John F. Kennedy International Airport. A few vehicles were stuck in flood waters around 0855 hours that morning. Once again there were a few calls placed to 911 for assistance. No injuries were reported and the coastal flooding resulted in a temporary road closure until the waters receded. (12/27/2012)

**At 8.3 ft MLLW / 6.0 ft NGVD / 2.1 ft MHHW**

Storm force southeast winds late Sunday Night into Monday morning pushed surge to 4 to 5 ft, before fortunately subsiding to 2 to 3 ft in most spots in coincidence with the Monday afternoon high tide as winds subsided and shifted to the west. The result was widespread minor to moderate coastal flooding for most of our coast. The storm force winds also generated a battering surf along our ocean beachfront, with breaking surf estimated in excess of 15 ft on top of the Monday afternoon high tide, causing widespread dune erosion, scattered overwashes, and even localized dune breaches. A wave height of 26.5 ft was recorded at Buoy 44025 (20 nm south of Fire Island) at 8 am on Monday morning, before it was unmoored at midday. This is the highest wave height recorded since Sandy in Oct 2012! (12/18/2023)



Howard Beach - Backyard at the time of high tide It shows the extent of the tidal flooding at my location at 159-54 95 St in Howard Beach. The rain has pretty much stopped so there was no street flooding by me from rainwater during the time the duckbill in 160 Ave at Shellbank Basin was closed. However, there was rainwater ponding in the roadway of 95 St north of 160 Ave.

Hamilton Beach - [12.3 inches of flooding on Russell Street](#). (NYC Floodnet)

Rockaways – [21" of flooding on Beach 84th Street](#) (NYC Floodnet)

Rockaway Beach - Moderate sand erosion, with no notable structural damage. The highest tide came pretty much to the toe of the dune (at the new USACE design profile). The west end of the beach, bordering Jacob Riis (NPS) saw the largest effects with more dune erosion and displacement of mobi-mats (the mats appear to have mostly lifted from wind rather than floating up or catching the tide).

Just off NYC Parks property, Jacob Riis boardwalk was underwater at high tide (noon) on Monday.

**At 8.2 ft MLLW / 5.9 ft NGVD / 2.0 ft MHHW**

Tidal surge inundated the corner of [101st Street and 160th Avenue in Howard Beach](#) in Queens as well as [Cross Bay Blvd. between West 19th and 20th Streets in Broad Channel Queens](#) between 10:00 pm and 11:00 pm EST on the evening of May 16th.

**At 8.1 ft MLLW / 5.8 ft NGVD / 1.9 ft MHHW**

Minor coastal flooding in the area of [Rockaway Boulevard and Brookville Boulevard](#) (known flood prone location) down near John F. Kennedy International Airport. A few vehicles were stuck in flood waters between 1739 and 1800 hours that evening. Three calls were placed to 911 for assistance. No injuries were reported and the coastal flooding resulted in a temporary road closure until the waters receded. (10/4/2010)



**At 8.0 ft MLLW / 5.7 ft NGVD / 1.8 ft MHHW**

Minor coastal flooding in the area of [Rockaway Boulevard and Brookville Boulevard](#) (known flood prone location) down near John F. Kennedy International Airport. One vehicle stuck in flood waters around 10 am. (12/9/2014)

**At 8.0 ft MLLW / 5.7 NGVD / 1.8 ft MHHW + Heavy rain at time. 4-6 inches 36 hr rain total**  
[Howard Beach – 79th street](#) flooded and impassable with an estimated 2 ft of water on the road. A car was submerged in flood waters at [78th street between 155 and 156th avenue](#).

**Minor Flood threshold (ft above datum)**

- MLLW / NGVD / MHHW / NAVD88
- 7.8' / 5.5' / 1.6' / 4.4'

**At 7.8 ft MLLW / 5.5 ft NGVD / 1.6 ft MHHW**

Minor coastal flooding in the area of [Rockaway Boulevard and Brookville Boulevard](#) (known flood prone location) down near John F. Kennedy International Airport. A telephone call was placed to 911 at 0928 hours by a concerned citizen reporting a flooding condition at the location. We have no reports of any stuck vehicles or other impacts at this time. (12/22/2010)

**At 7.7 ft MLLW / 5.4 ft NGVD / 1.5 ft MHHW**

[Hamilton Beach](#) - [7.1 inches of flooding on Russell Street](#) (NYC Floodnet)

**At 7.5 ft MLLW / 5.2 ft NGVD / 1.3 ft MHHW**

Rockaways - 6.6 inches of flooding at Beach 84th St (NYC Floodnet)