

# City of New York, New York

## Flood Hazard Mapping Status Report for Property Owners

This fact sheet provides background information on the National Flood Insurance Program (NFIP) administered by the Federal Emergency Management Agency (FEMA) as well as an overview of the flood hazard mapping process being completed for City of New York, New York. The Flood Insurance Rate Maps (FIRMs) for City of New York are being revised to reflect new data so residents, homeowners, business owners, and community officials can better understand their flood risk and manage development.

### BACKGROUND

#### **What Is The NFIP?**

In 1968, Congress established the NFIP in response to escalating costs to taxpayers for flood disaster relief. The NFIP is based on the agreement that if a community practices sound floodplain management, the Federal Government will make flood insurance available. FEMA maps flood hazard areas, including the Special Flood Hazard Area (SFHA), which is the area that has a 1% or greater chance of flooding in any given year. Development may take place within the SFHA provided that it complies with local floodplain management ordinances that meet the minimum Federal criteria.

#### **What Is A FIRM?**

When FEMA maps flood hazards in a community and/or county, two products are typically produced: a Flood Insurance Study (FIS) report and a Flood Insurance Rate Map (FIRM). A FIRM illustrates the extent of flood hazards in a community by depicting flood risk zones and the SFHA, and is used with the FIS report to determine who must buy flood insurance and the floodplain development regulations that apply in each flood risk zone. FIRMs also depict other information including Base Flood Elevations (BFEs) and/or depths associated with the risk zones and floodways, and common physical features such as roads.

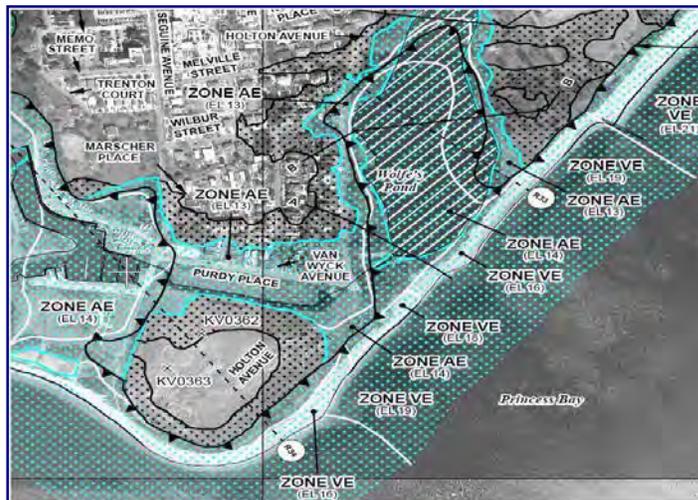
#### **What Is The Significance Of The SFHA?**

The SFHA has at least a 1% chance of flooding in any given year, and at least a 26% chance of flooding over the life of a typical 30-year mortgage. The Flood Disaster Protection Act of 1973 mandates that flood insurance must be purchased for structures located within the SFHA as a condition of receipt of Federal or federally backed financing.

### CITY OF NEW YORK'S FIS AND FIRM REVISION

The December 5, 2013 preliminary FIRM:

- Incorporates revised flood hazard analysis and mapping for the coastal shoreline of NYC
- Redelineation and mapping for 31 miles of detailed riverine analysis and approximate/regression based analysis streams
- Updates the base map to 2008 aerial photography
- Incorporates 2010 digital topographic data provided by NYC
- Incorporates validated Letters of Map Change (LOMCs).



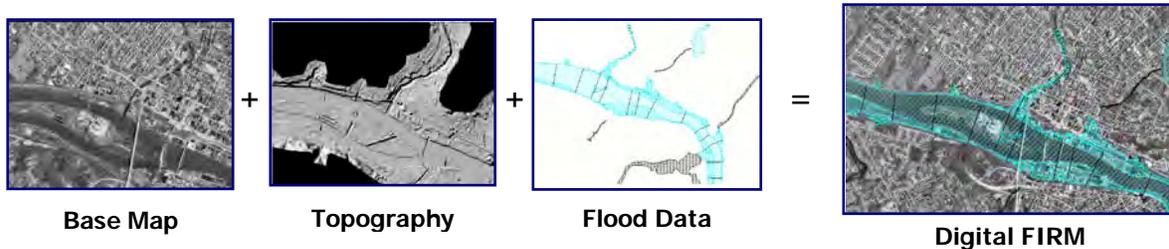
December 5, 2013

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### FLOOD INSURANCE RATE MAP

The December 5, 2013, preliminary FIRM for City of New York, incorporates a base map (2008 High Resolution Orthophotography), supplemented with stream centerlines, and political and road name data. The key components of a FIRM are shown in the figure below.



### RESTUDIES AND REDELINEATION

Revised flood hazard analysis and mapping were incorporated for the coastal shoreline of the City of New York. Redelineation was also performed for approximately 31 stream miles in the Boroughs of Bronx and Staten Island. Redelineation uses digital elevation data and effective flood elevations to revise the 1% and 0.2% annual chance flood hazard areas without conducting new hydrologic or hydraulic analyses. For more information for this revision, please see the accompanying insert “City of New York Floodplain Mapping Fact Sheet.”

### VERTICAL DATUM CHANGE

#### **What Is A Vertical Datum?**

A vertical datum is a set of constants that defines a system for comparison of elevations. In the NFIP, a vertical datum is important because all elevations need to be referenced to the same system. Otherwise, surveys using different datums would have different elevations for the same point. Historically, the FIRMs have referenced the National Geodetic Vertical Datum of 1929 (NGVD 29). Now, a more accurate vertical datum is used – the North American Vertical Datum of 1988 (NAVD 88).

#### **Why Is The Vertical Datum Changing?**

A datum needs to be updated periodically because geologic changes to the surface of the earth occur due to subsidence and uplift or changes in sea level. In addition, NGVD 29 was flawed because of erroneous assumptions that mean sea level at different tidal stations represented the same elevation (zero). We can now more accurately measure these elevation differences with an expanded geodetic network.

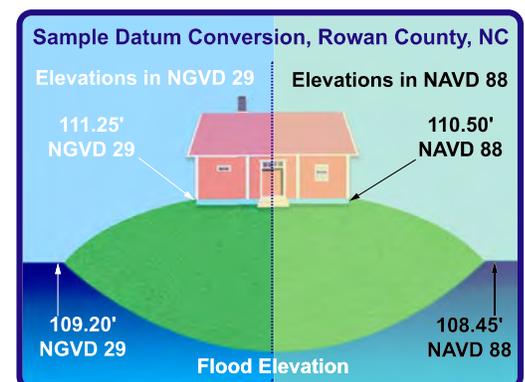
#### **Who Will Be Impacted By The Vertical Datum Change?**

Elevations in NAVD 88 should be used for floodplain management and flood insurance purposes. This change should be noted by anyone who uses the FIRM, particularly when comparing elevation data on the new FIRM with data from an old FIRM that was produced in NGVD 29.

#### **How Are NGVD 29 Flood Elevations Converted To NAVD 88?**

The difference between the two datums varies from location to location. An average offset (the difference between NAVD 88 and NGVD 29) has been computed for City of New York. To convert from NGVD 29 to NAVD 88 in the City of New York, use the following equation: **NAVD 88 = NGVD 29 – 1.081 feet**. For more information on the vertical datum change, see FEMA’s publication “Converting the National Flood Insurance Program to the North American Vertical Datum of 1988—Guidelines for Community Officials, Engineers, and Surveyors.” Note that in New York City, each borough has its own historical vertical datum. Calculations to perform conversions from these borough-specific datums to NAVD88 are located at <http://www.Region2Coastal.com>.

#### **Sample Datum Conversion**



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### FLOOD HAZARD MAPPING PROCESS

The flood hazard mapping process is divided into three major phases, each offering opportunities for community involvement:



### **Post-Preliminary Processing**

We are now entering the post-preliminary phase. FEMA will hold a Consultation Coordination Officer's (CCO) meeting to present the December 5, 2013 preliminary FIRM to the community. Following the meeting, the City of New York will be provided a 30-day comment period. A 90-day appeal period will also be initiated through publication of two notices in a local newspaper. After any concerns with the new maps are resolved, FEMA will issue a final determination. A final FIRM and FIS report will be published approximately six months after the final determination in both hardcopy (paper) and digital format.

### **What are Appeals and Comments?**

When a FIRM revision results in new, proposed BFEs and/or flood depths, the proposed addition or modification of any SFHA boundary or zone designation, or the proposed addition or modification of any regulatory floodway, community officials, or individual property owners working through community officials, may submit a formal objection to FEMA during the 90-day appeal period. These objections, which are referred to as appeals, must be supported by scientific and technical data. Alternately, objections to any proposed base map feature changes are called comments; these generally involve concerns with corporate limits, jurisdictional boundaries, and/or road names.

### PROPERTY SPECIFIC REVIEWS

#### **How Do I Find Out If A Structure Or Property Is Located In The Floodplain?**

You can find out if a property is in the SFHA by visiting <http://www.Region2Coastal.com>. For additional assistance, you can contact the FEMA Map Information Exchange (FMIX) toll-free at 1-877-FEMA MAP or visit the website at [http://www.floodmaps.fema.gov/fhm/fmx\\_main.html](http://www.floodmaps.fema.gov/fhm/fmx_main.html).

#### **What Are The Options To Improve the Precision Of The New Map?**

Although FEMA uses the most accurate flood hazard information available, limitation of scale or topographic definition of the source maps used to prepare flood hazard maps may cause small areas that are at or above the BFE to be inadvertently shown within SFHA boundaries. Such situations may exist in City of New York. For these situations, FEMA established the Letter of Map Amendment (LOMA) and the Letter of Map Revision-based on Fill (LOMR-F) processes to remove such structures from the effective SFHA.

### LOMC REVALIDATION

When a new FIRM becomes effective, it automatically supersedes previously issued LOMCs (LOMAs, LOMR-Fs, and Letters of Map Revision) that have been issued for property(ies) on the revised FIRM panels. Recognizing that some LOMCs may still be valid, FEMA has an automatic process for reviewing and revalidating LOMCs, as appropriate.

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### FLOOD INSURANCE

#### Who Should Purchase Flood Insurance?

Standard homeowners' insurance policies do *not* provide coverage against flood losses. Structures located in the SFHA that are financed by a federally-backed loan, are required to purchase flood insurance. However, FEMA recommends that all property owners in at-risk areas carry flood insurance voluntarily. In addition, the National Flood Insurance Reform Act of 1994 requires individuals in SFHAs who receive disaster assistance for flood disaster losses to real or personal property to purchase and maintain flood insurance coverage for as long as they live in the dwelling. If flood insurance is not purchased and maintained, future disaster assistance will be denied. It is prudent to protect your investment with flood insurance even in low-to-moderate risk areas. Floods occur, with all too tragic frequency in these areas as well; in fact, nearly 25% of all NFIP claims are for properties outside of the SFHA. Structures in these areas are eligible for considerably lower cost coverage.

#### Flood Insurance versus Disaster Assistance

You are in control. Flood insurance claims are paid even if a flood is not a Presidentially declared disaster. Federal disaster assistance declarations are awarded in less than 50% of damaging floods.

#### Who May Purchase A Flood Insurance Policy?

Insurance through the NFIP is available to all owners and renters (including condominium associations and condominium owners) of insurable property in a community participating in the NFIP. Insurable property includes buildings and/or the contents, such as personal property.

#### What Factors Determine Federal Flood Insurance Premiums?

A number of factors are considered when determining your flood insurance premium. These factors include: the amount and type of coverage being purchased, location and flood zone, and the design and age of your structure. For homes in high-risk areas (e.g., Special Flood Hazard Areas or AE, VE Zones) built after the first Flood Insurance Rate Maps were prepared for that community, the elevation of the building in relation to the base flood elevation is also required. For more information, visit [Flooding and Flood Risks](#) or download [Flood Insurance Basics](#) to learn more.



#### How Is Flood Insurance Purchased?

The steps to purchase flood insurance are:

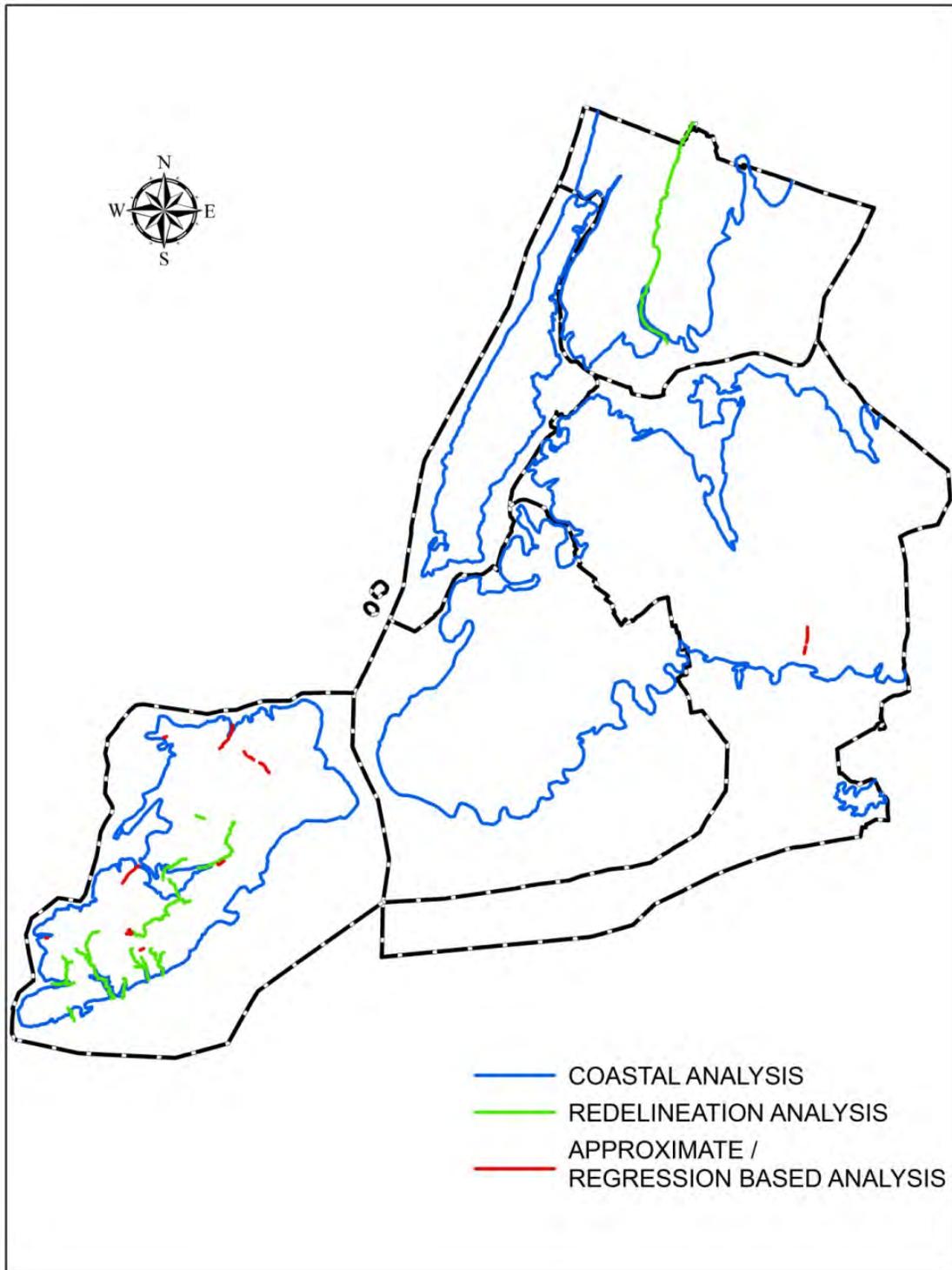
- 1) A lender extending or renewing a loan informs an owner that the building is in a SFHA and flood insurance is required; or a property owner or renter perceives a risk of flooding and elects to purchase flood insurance.
- 2) The property owner or renter contacts a licensed insurance agent or broker.
- 3) The insurance agent completes the necessary forms. In the case of a building constructed in a SFHA after the issuance of a FIRM, a certified elevation certificate must be obtained from a surveyor, engineer, or architect.
- 4) The insurance agent submits the application and premium.

#### WHERE CAN I GET MORE INFORMATION?

- For any questions concerning the City of New York, New York, flood hazard mapping, or LOMAs and LOMR-Fs, please contact the FEMA Map Information eXchange (FMIX) toll-free information line at (877) FEMA MAP (877- 336-2627).
- For more information regarding the coastal analysis and mapping visit <http://www.region2coastal.com>
- To access the NYC Preliminary FIRM Data Viewer please visit <http://apps.fema.gov/PreliminaryViewer/?appid=687703427dd347018b8fa2bb0adce979>
- For more information about LOMAs and LOMR-Fs visit [http://www.fema.gov/plan/prevent/fhm/fmc\\_loma.shtm](http://www.fema.gov/plan/prevent/fhm/fmc_loma.shtm)
- For any questions concerning flood insurance, please contact the Flood Insurance Program at (800) 638-6620 or visit <http://www.floodsmart.gov/floodsmart>

# City of New York Floodplain Mapping Fact Sheet

## SCOPE OF STUDY



# City of New York Floodplain Mapping Fact Sheet

## What was restudied?

Study Reach	Study Type	Mileage	Scope of Revision
Coast Line	Coastal Analysis	260	Coast line of the City of New York

## What streams were redelineated?

Study Reach	Borough	Study Type	Mileage	Scope of Revision
Arbutus Creek	Richmond	Detailed Riverine	1.46	From confluence with Raritan Bay to approximately 975 feet upstream of Amboy Road
Blue Heron Main Branch	Richmond	Detailed Riverine	1.23	From confluence with Raritan Bay to approximately 1,715 feet upstream of Eylandt Street
Blue Heron Tributary	Richmond	Detailed Riverine	0.44	From confluence with Blue Heron Main Branch to approximately 30 feet upstream of Koch Pond Outlet
Bronx River	Bronx	Detailed Riverine	8.40	From confluence with East River to the county boundary of Bronx/Westchester
Butler Manor	Richmond	Detailed Riverine	0.56	From confluence with Raritan Bay to approximately 127 feet upstream of Hylan Boulevard
Colon Tributary	Richmond	Detailed Riverine	0.40	From confluence with Sweet Brook to approximately 144 feet upstream of Pemberton Avenue Culvert
D Street Brook	Richmond	Detailed Riverine	0.29	From D street to approximately 433 feet downstream Forest Hill Road
Denise Tributary	Richmond	Detailed Riverine	0.38	From confluence with Arbutus Creek to approximately 1,400 feet upstream of Jansen Street
Eltingville Tributary	Richmond	Detailed Riverine	0.08	From confluence with Sweet Brook to approximately 26 feet downstream of Katan Avenue
Foresthill Road Brook	Richmond	Detailed Riverine	1.26	From approximately 1,940 feet downstream of Foresthill Road to approximately 4,273 feet upstream of Foresthill Road
Jansen Tributary	Richmond	Detailed Riverine	0.25	From confluence with Arbutus Creek to approximately 160 feet downstream of Kingdom Avenue
Lemon Creek	Richmond	Detailed Riverine	3.40	From confluence with Raritan Bay to approximately 17,570 feet upstream of Rossville Avenue
Mill Creek	Richmond	Detailed Riverine	1.67	From approximately 3,280 feet downstream of Richmond Valley Road to approximately 1,390 feet upstream of West Veterans Road
Mill Creek Tributary 1	Richmond	Detailed Riverine	0.31	From confluence with Mill Creek to approximately 200 feet upstream of West Shore Expressway

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Study Reach	Borough	Study Type	Mileage	Scope of Revision
Mill Creek Tributary 2	Richmond	Detailed Riverine	0.29	From confluence with Mill Creek to confluence with Mill Creek Tributary 3
Mill Creek Tributary 3	Richmond	Detailed Riverine	0.16	From confluence with Mill Creek Tributary 2 to approximately 1,476 feet downstream of Amboy Road
Richmond Creek	Richmond	Detailed Riverine	5.43	From approximately 532 feet downstream of Richmond Hill Road to approximately 4,554 feet upstream of Rockland Avenue
Sandy Brook	Richmond	Detailed Riverine	0.71	From confluence with Lemon Creek to approximately 1,100 feet upstream of Bloomingdale Road
Sweet Brook	Richmond	Detailed Riverine	3.36	From confluence with Richmond Creek to approximately 490 feet upstream of Sheldon Avenue
Wolfe's Pond	Richmond	Detailed Riverine	0.93	From Wolfe's Pond Outlet to approximately 200 feet upstream of Hylan Boulevard

## How can I find more information regarding the revised mapping in City of New York?

You can view the new map for your community by visiting your local map repository. The table below includes the location of the local floodplain administrator who may be able to help you locate your property on the new preliminary maps. City of New York maps are available for reference and use on-site at the map repository, but not for distribution. Copies of the preliminary FIS and FIRMs are also available for review online at:

<http://apps.femadata.com/PreliminaryViewer/?appid=687703427dd347018b8fa2bb0adee979>

Community Name	Floodplain Administrator, or POC	Phone Number	Map Repository
Bronx County	Tomasz Bielecki	718-579-2942	NYC Dept of Buildings 1932 Arthur Avenue, 5 <sup>th</sup> Floor Bronx, NY 10457
Queens County	William Hinckley	718-286-0600	NYC Dept of Buildings 120-55 Queens Blvd. Queens, NY 11424
New York County	Cheryl Leon	212-393-2914	NYC Dept of Buildings 280 Broadway, 3 <sup>rd</sup> Floor New York, NY 10007
Kings County	Carlos Pineiro	718-802-3675	NYC Dept of Buildings 210 Joralemon Street, 8 <sup>th</sup> Floor Brooklyn, NY 11201
Richmond County	Theresa Hall	718-420-5400	NYC Dept of Buildings 10 Richmond Terrace, 2 <sup>nd</sup> Floor Staten Island, NY 10301