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 Morris County, New Jersey. The Flood Insurance Rate Maps (FIRMs) for Morris County, New Jersey 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.

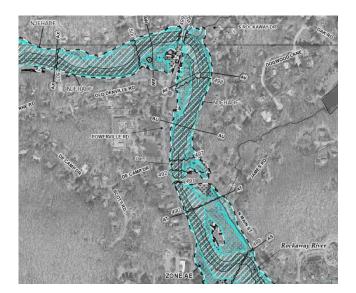
What Is The Significance Of The SFHA?

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.

MORRIS COUNTY FIS AND FIRM REVISION

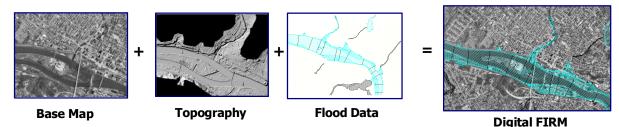
The February 26, 2016 revised preliminary FIRM:

- Incorporates revised flood hazard analysis and mapping for 95.7 miles of detailed riverine flooding in Morris County
- Updates the base map to 2012 orthophotography
- Updates the topology to 2012 USGS topography
- Incorporates New Jersey Flood Hazard Area Design Flood (NJFHADF). NJFHADF is equal to the 1-percent-annual chance flood plus an additional 25% in flow
- Reconciles mismatches in flood hazard data between contiguous communities and effective and revised flooding sources.



FLOOD INSURANCE RATE MAP

The February 26, 2016, revised preliminary FIRM for Morris County, New Jersey incorporates a base map comprised of 2012 High Resolution Orthophotography and 2012 USGS topography supplemented with stream centerlines, and political and road name data. The key components of a FIRM are shown in the figure below.



RESTUDIES

This study incorporates revised flood hazard analysis and mapping for 95.7 stream miles in Morris County based on revised hydrologic and hydraulic analysis and 2012 USGS topographic map. For more information, please see the accompanying insert "Morris County, NJ, 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?

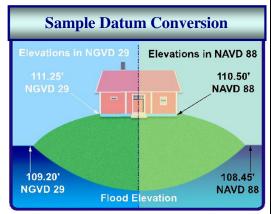
Elevations in NAVD 88 should be used for floodplain management and flood insurance purposes. This change should be noted by anyone who uses the FIRM, particularly when comparing elevation data on the new FIRM with data from an old FIRM that was produced in NGVD 29.

How Are NGVD 29 Flood Elevations Converted To NAVD 88?

The difference between the two datums varies from location to location. Therefore, an average offset (the difference between NAVD 88 and NGVD 29) has been computed for Morris County. To convert from NGVD 29 to NAVD 88 in Morris County, use the following equation:

NAVD 88 = NGVD 29 - 0.8 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."



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 February 26, 2016, revised preliminary FIRM to the community. Following the meeting, Morris County, New Jersey 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. 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 My Structure or Property Is Located in the Floodplain?

You can view the current effective maps online by visiting the FEMA Map Service Center at <u>http://msc.fema.gov</u>. You can also view paper copies of the FIRMs at your local map repository, locations of which are provided in the enclosed Floodplain Mapping Fact Sheet. For additional assistance with locating NFIP mapping products, you can contact the FEMA Map Information eXchange (FMIX) toll-free at 1-877) FEMA MAP (877-336-2627) or you may e-mail the FMIX staff at <u>FEMAMapSpecialist@riskmapcds.com</u>.

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 Morris County. 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 SFHA.

LETTER OF MAP CHANGE 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.

View the Preliminary FIRMs and FIS Online

To view the preliminary FIRMs and FIS online, please visit <u>http://www.fema.gov/preliminaryfloodhazarddata</u>. You can also view paper copies of the preliminary maps at your local map repository listed below.

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

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.

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.

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, including 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 <u>Flooding and Flood Risks</u> or download <u>Flood Insurance Basics</u> to learn more.



How Is Flood Insurance Purchased?

The steps to purchase flood insurance are:

 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.
 The property owner or renter contacts a licensed insurance agent or broker.

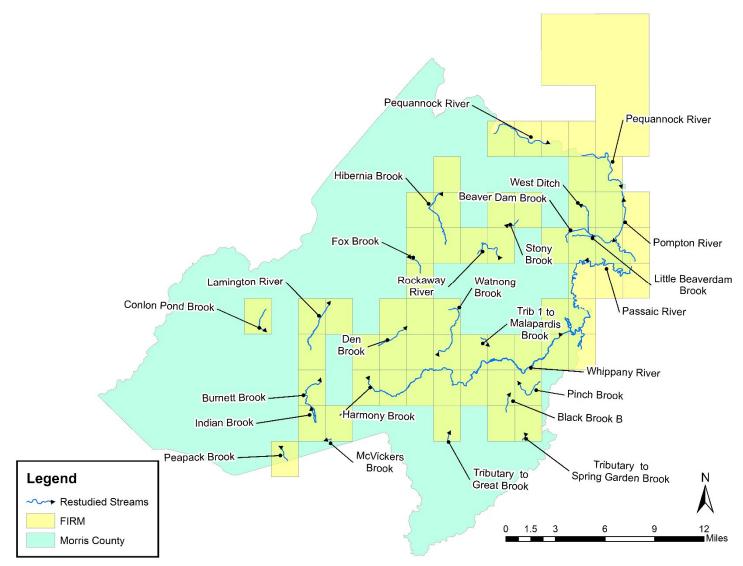
3) The insurance agent completes the necessary forms. In the case of a building constructed in a SFHA after the issuance of a FIRM, a certified elevation certificate must be obtained from a surveyor, engineer, or architect.

4) The insurance agent submits the application and premium.

WHERE CAN I GET MORE INFORMATION?

- For any questions concerning the Morris County, New Jersey, 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 about LOMAs and LOMR-Fs visit <u>https://www.fema.gov/letter-map-amendment-letter-map-revision-based-fill-process</u>
- For any questions concerning flood insurance, please contact the Flood Insurance Program at (800) 638-6620 or visit <u>http://www.floodsmart.gov/floodsmart</u>

SCOPE OF STUDY



What was restudied?

Stream	Study Type	Mileage	Scope of Revision		
Beaver Dam Brook	Riverine	4.1	from the confluence with Pompton River to		
			Waughaw Road		
Black Brook B	Riverine	1.3	from approximately 650 feet downstream of		
			Columbia Turnpike to approximately 2,000 feet		
			upstream of Park Road		
Burnett Brook	Riverine	4.3	from the confluence with North Branch Raritan		
			River to approximately 20 feet upstream of South		
			Road		
Conlon Pond Brook	Riverine	1.8	from the confluence with Drakes Brook to		
			approximately 1,340 feet upstream of Chestnut		
			Way		

Stream	Study Type	Mileage	Scope of Revision	
Den Brook	Riverine	0.9	from approximately 1,500 feet downstream of Sonugum Road to 350 feet upstream of Radtk Road	
Fox Brook	Riverine	1.4	from the confluence with Whippany River to approximately 190 feet upstream of Interstate Route 80	
Harmony Brook	Riverine	1.7	from the confluence with Whippany River to approximately 37 feet upstream Woodland Road	
Hibernia Brook	Riverine	4.4	from the confluence with Beaver Brook B to approximately 20 feet upstream of Darlington Drive	
Indian Brook	Riverine	1.1	from the confluence with Burnett Brook to the divergence from Burnett Brook	
Lamington River	Riverine	3.9	From approximately 1,400 feet downstream of Ironia Road to approximately 4,640 feet upstream of State Route 10	
Little Beaverdam Brook	Riverine	0.5	from confluence with Beaver Dam Brook to Jacksonville Road	
McVickers Brook	Riverine	14.0	 from approximately 160 feet downstream of Hillto Dam to Brookrace Drive 	
Passaic River	Riverine	3.1	from the confluence of Pompton River to Interstate 280	
Peapack Brook	Riverine	1.2	boundary to just upstream of Farm Access Road	
Pequannock River	Riverine	4.5	from the confluence with Pompton River to approximately 720 feet upstream of Berkshire Valley Road	
Pinch Brook	Riverine	2.3	from the confluence with Black Brook B to Timber Hill Drive	
Pompton River	Riverine	13.3	from the confluence with Passaic River to confluence with Pequannock River and Ramapo River	
Rockaway River	Riverine	2.8		
Stony Brook	Riverine	2.4	from Powerville Road to approximately 16,750 feet upstream of the confluence with Beaver Brook A	
Tributary 1 to Malapardis Brook	Riverine	0.7	from the confluence with Malapardis Brook to approximately 3,300 feet upstream of the confluence with Malapardis Brook	
Tributary to Great Brook	Riverine	0.7	from confluence with Great Brook to James Street	

Stream	Study Type	Mileage	Scope of Revision
Tributary to Spring Garden Brook	Riverine	0.6	from the confluence with Spring Garden Brook to approximately 3,100 feet upstream of the confluence with Spring Garden Brook
Watnong Brook	Riverine	4.0	from Hanover Avenue to Powder Mill Pond
West Ditch	Riverine	2.2	from the confluence with Beaver Dam Brook to approximately 3,950 upstream of Jacksonville Road
Whippany River	Riverine	18.5	from the confluence with Rockaway River to approximately 3,600 feet upstream of Tingley Road

How can I find more information regarding the revised mapping in Morris County?

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. Morris County, New Jersey 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://hazards.fema.gov/femaportal/prelimdownload/

Community Name	Floodplain Administrator	Phone Number	Map Repository
Morris County Planning & Preservation Division	Ms. Jennifer N. McCulloch, CFM, Flood Mitigation Program Coordinator	973-829-8120	Morris County Planning & Preservation Division 30 Schuyler Place, 4 th floor Morristown, New Jersey 07963-0900
Boonton, Town of	Mr. John Miller, Engineer	973-398-1776	Boonton Town Hall, 100 Washington Street, Boonton, New Jersey 07005
Boonton, Township of	Ms. Pat Calabrese, Construction Official	973-402-4002	Boonton Township Municipal Building, 155 Powerville Road Boonton Township, New Jersey 07005
Butler, Borough of	Mr. Paul Darmofalski, Engineer	973-838-8300	Butler Borough Municipal Building, 1 Ace Road, Butler, New Jersey 07405
Chatham, Borough of	Mr. Vincent DeNave, Engineer	973-635-0674 x270	Chatham Borough Municipal Building, 54 Fairmount Avenue, Chatham, New Jersey 07928
Chatham, Township of	Mr. Greg Impink, Construction Official	908-238-5031	Chatham Township, Municipal Building, 58 Meyersville Road, Chatham Township, New Jersey 07928

Community Name	Floodplain Administrator	Phone Number	Map Repository
Chester, Borough of	Mr. Paul W. Ferriero, Engineer	908-879-6209 x232	Chester Borough Municipal Building 50 North Road Chester, New Jersey 07930
Chester, Township of	Ms. Sarah Jane Noll, Zoning Official	908-879-5100 x823	Chester Township, 1 Parker Road, Chester Township, New Jersey 07930
Denville, Township of	Mr. John Ruschke, Township Engineer	973-625-8300 x251	Denville Township Municipal Building, Engineer's Office, 1 Saint Mary's Place, Denville, New Jersey 07834
Dover, Town of	Mr. Michael Hantson, Engineer	973-366-2200 x2115	Dover Town Water Works Building, Engineering Department, 100 Princeton Avenue, Dover, New Jersey 07801
East Hanover, Township of	Mr. Thomas Pershouse, Construction Official	973-887-5642	East Hanover Township Municipal Building, Construction Department, 411 Ridgedale Avenue, East Hanover, New Jersey 07936
Florham Park, Borough of	Mr. Michael Sgaramella, Engineer	973-410-5473	Florham Park Borough Hall, 111 Ridgedale Avenue, Florham Park, New Jersey 07932
Hanover, Township of	Mr. Gerardo Maceira, Engineer	973-428-2488	Hanover Township Municipal Building, Engineering Department, 1000 Route 10, Whippany, New Jersey 07981
Harding, Township of	Mr. Mark Fornaciari, Construction Official	973-267-8000 x1976	Harding Township Municipal Building, 21 Blue Mill Road, New Vernon, New Jersey 07976
Jefferson, Township of	Mr. Thomas Mahoney, Construction Official and Building Inspector	973-697-1500	Jefferson Township Municipal Building, 1033 Weldon Road, Lake Hopatcong, New Jersey 07849
Kinnelon, Borough of	Mr. Paul Darmofalski, Engineer	973-835-8300	Kinnelon Borough Municipal Building, 130 Kinnelon Road, Kinnelon, New Jersey 07405

Community Name	Floodplain Administrator	Phone Number	Map Repository
Lincoln Park, Borough of Long Hill, Township of	Mr. Paul Darmofalski, Engineer Ms. Shayne Daly,	973-270-2024 973-647-8000	Lincoln Park Borough Building Department, 34 Chapel Hill Road, Lincoln Park, New Jersey 07035 Long Hill Township Hall,
	Director of Emergency Management	x273	Township Clerk's Office, 915 Valley Road, Gillette, New Jersey 07933
Madison, Borough of	Mr. Robert Vogel, Engineer	973-593-3060	Madison Borough Hall - Hartley Dodge Memorial Building, 50 Kings Road, Madison, New Jersey 07940
Mendham, Borough of	Mr. Paul W. Ferriero, Engineer	973-543-7152 x16	The Phoenix House, 2 West Main Street, Mendham, New Jersey 07945
Mendham, Township of	Mr. Russ Heiney, Construction and Zoning Official	973-543-4555 x116	Mendham Township Building, 2 West Main Street, Brookside, New Jersey 07926
Mine Hill, Township of	Mr. Paul Sterbez, Engineer	908-238-0900	Mine Hill Township Municipal Building, 10 Baker Street, Mine Hill, New Jersey, 07803
Montville, Township of	Mr. Mark Mantyla, Engineer	973-331-3304	Township Municipal Building, Engineering Department, 195 Changebridge Road, Montville, New Jersey 07045
Morris Plains, Borough of	Mr. Leon Hall, Engineer	973-887-2270	Morris Plains Borough Hall, 531 Speedwell Avenue, Morris Plains, New Jersey 07950
Morris, Township of	Mr. David S. Hansen, Assistant Township Engineer	973-326-7440	Morris Township Municipal Building, 50 Woodland Avenue, Morristown, New Jersey 07960
Morristown, Town of	Mr. Anthony Devizio, Acting Engineering Director	973-292-6722	Morristown Town Hall, 200 South Street, Morristown, New Jersey 07960

Community Name	Floodplain Administrator	Phone Number	Map Repository
Mount Arlington, Borough of	Mr. Thomas Mahoney, Zoning and Construction Official	973-398-6832 x122	Mount Arlington Borough Municipal Building, 419 Howard Boulevard, Mount Arlington, New Jersey 07856
Mount Olive, Township of	Ms. Catherine Natafalusy, Planning Coordinator	973-691-0900 x7310	Planning Office, Mount Olive Township Hall, 204 Flanders- Drakestown Road, Budd Lake, New Jersey 07828
Mountain Lakes, Borough of	Mr. Rich Sheola, Manager	973-334-3131 x2006	Mountain Lakes Borough Hall, 400 Boulevard, Mountain Lakes, New Jersey 07046
Netcong, Borough of	Mr. Robert Guerin, Engineer	973-347-0252 x105	Netcong Borough Hall, 23 Maple Avenue, Netcong, New Jersey 07857
Parsippany-Troy Hills, Township of	Mr. Justin Lizza, Engineer	973-263-7286	Parsippany-Troy Hills Township Hall, 1001 Parsippany Boulevard, Parsippany, New Jersey 07054
Pequannock, Township of	Mr. Joseph Golden, Engineer	973-835-5700 x188	Pequannock Township Municipal Building, 530 Newark-Pompton Turnpike, Pequannock, New Jersey 07444
Randolph, Township of	Mr. Paul W. Ferriero, Engineer	908-879-6209	Randolph Township Municipal Building, 502 Millbrook Avenue, Randolph, New Jersey 07869
Riverdale, Borough of	Mr. Paul Darmofalski, Engineer	973-835-8300	Riverdale Borough Municipal Building, 91 Newark-Pompton Turnpike, Riverdale, New Jersey 07457
Rockaway, Borough of	Mr. Paul W. Ferriero, Engineer	908-879-6209 x232	Rockaway Borough Municipal Building, 1 East Main Street, Rockaway, New Jersey 07866
Rockaway, Township of	Mr. James Lutz, Engineer	973-983-2810	Rockaway Township Municipal Building, 65 Mount Hope Road, Rockaway Township, New Jersey 07866

Community Name	Floodplain Administrator	Phone Number	Map Repository
Roxbury, Township of	Mr. Michael Kobylarz, Engineer	973-448-2018	Roxbury Township Hall, 1715 Route 46, Ledgewood, New Jersey 07852
Victory Gardens, Borough of	Mr. Leon Hall, Engineer	973-887-2270	Victory Gardens Borough Municipal Building, 337 South Salem Street, Dover, New Jersey 07801
Washington, Township of	Ms. Barbara Margolese, Planning Board Coordinator and Secretary	908-876-3315 x1241	Washington Township Municipal Building, 43 Schooley's Mountain Road, Long Valley, New Jersey 07853
Wharton, Borough of	Mr. Scott Hutchins, Public Works Director	973-361-8444 x2758	Wharton Borough Hall, 10 Robert Street, Wharton, New Jersey 07885