Flood Insurance Sagas, Part 1: Why Elevate Now

Rebecca Elliott, David Gaul, and Joseph Pupello

Last week the U.S. House passed the Homeowner Flood Insurance Affordability Act (HR3370), the most recent version of a bill to delay or repeal measures passed in the Biggert Waters Act of 2012 (BW-12). Though unfortunately timed, BW-12 was a necessary and reformative piece of legislation designed to bring National Flood Insurance Program (NFIP) back from bankruptcy by transitioning flood insurance policy premiums to "actuarial" prices: prices that reflect actual flood risk levels. The mandates of Biggert-Waters promised to have sweeping effects on the New York City area, where the majority of buildings were eligible for discounted or grandfathered premium rates.

Many homeowners in the floodplain who are still picking up the pieces from Hurricane Sandy might think this new House bill will lessen drastically escalating insurance premiums. In reality, our nation's legislature is kicking the can of flood insurance reform down the road indefinitely. **Though the pressure to flood-proof, elevate, or retreat begins to die down, it is still crucial that homeowners take steps to mitigate,** or physically reduce flood hazard risk. This post will walk you through some of the political changes to the NFIP and then offer some ways to think about your future safety and security in the floodplain.

Why all the changes to the NFIP?

The NFIP underwrites the vast majority of U.S. flood insurance policies. The increased frequency of extreme weather events in the past decade, namely Hurricanes Katrina and Sandy, has put the NFIP over $24 billion in debt as of July 2013. While the NFIP was created in 1968 with the aim of remaining fiscally sound, the amount of assistance that the federal government has had to provide has increased with every recent major storm event (see table). Hurricanes Katrina and Sandy alone cost taxpayers nationwide over $150 billion. This concern led to the multi-year effort to reform the flood insurance system, culminating in the passage of BW-12 in July 2012.

The U.S. Treasury is Footing the Bill for Disaster Loss Payments
(Source: "Implementing the National Flood Insurance Reform Act In a New Era of Catastrophes," Kunreuther & Michael-Kerjan, The Wharton School at University of Pennsylvania)

Weather Event	Federal Contribution
Hurricane Sandy (2012)	>80%
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Hurricane Hugo (1989)	23%

Striking just months after the passage of BW-12, the impact of Hurricane Sandy underscored the urgency of flood insurance reform. But Sandy recovery also illuminated BW-12's unintended consequences: homeowners in New York and New Jersey began hearing that their flood insurance premiums were going to increase quickly and, in some cases, dramatically, into the tens of thousands of dollars per year.

Following a nationwide mobilization of affected policyholders, the U.S. legislature put forth two versions of a bill to delay or repeal the reforms of BW-12, out of concerns about affordability. The first, passed by the Senate on January 30th, 2013 largely delayed rate hikes for four years while the Federal Emergency Management Agency (FEMA) continues to revise its flood zone maps and draws up a plan to make insurance premiums more affordable. The House version of the bill (passed earlier in March) goes further: instead of simply delaying measures that would eventually bring the NFIP out of bankruptcy, it outright

repeals some of the much-needed provisions of BW-12. It permanently reinstates grandfathering and caps insurance premium increases to 18% per year, while also urging FEMA to "strive" to keep total premium amounts to no more than 1% of the total coverage amount (i.e., $2500 per year on a $250,000 policy).

Why is this a bad thing and why should I still elevate my home?

Zone A New York joins with the City of New York and our elected representatives in helping to protect homeowners' financial ability to respond to this crisis. We also believe that while the most important thing is restoring the livelihoods of those affected by Hurricane Sandy, the current measures in Congress ignore environmental and fiscal reality, and ultimately do not help you protect your home and your family's safety.

In the weeks between now and when the Senate votes on HR3370, consider the following reasons to mitigate and ask why your elected representatives are extending the NFIP's debt limit instead of working on getting you the help you really need, which is to get up off the ground.

1. **The price of your flood insurance premium won't change much, but the quality of your coverage could**. The NFIP (the underwriter of your flood insurance policy) is already more than $24 billion in debt, and the insurance rate caps in the current version of HR3370 will only keep it on shaky financial footing. If premiums don't rise in line with risk levels, the only solution for the NFIP is to limit coverage and increase the number of exemptions, limiting its ability to effectively respond to future extreme weather events. The next time there is a flood or weather emergency, you may find yourself with even less.

(This means that your benefits are dependent on the NFIP and your representatives' ability to lobby the federal government for emergency funding. The taxpayers pay in the end either way, but the only means of limiting the total bill is to mitigate: *to make our homes and businesses less likely to suffer flood damage in the first place.)*

2. **New Yorkers have the most to lose**. New York has the greatest flood exposure by valuation, of any coastal state in the nation. Total insured property values in the state amount to $7 trillion, a trillion and a half more than Texas, the second largest. And New York City is the largest floodplain in the nation by population. Under FEMA's new Preliminary Flood Insurance Rate Maps (FIRMs), almost 430,000 people are now living in a high-risk zone. That's more than any other city in the nation, making NYC the greatest potential liability for the NFIP. The City is also among the oldest in building stock and highest in property values, though the maximum amount of residential flood insurance coverage remains at $250,000. The NFIP can't afford saving NY again, and you can't afford to rely on it.

3. **Insurance is not an investment**. You don't take out insurance for a financial return, and you don't lose out with the non-occurrence of a hazardous event—that is, in fact, the best-case scenario. Insurance buys financial security and peace of mind. Considering the decreasing ability of the NFIP to cover disaster loss costs, ever-rising sea levels, and the possibility of another storm impacting your community before you and your neighbors have returned home, do you have peace of mind living in the floodplain?

4. **Mitigating will keep your premiums low regardless**. All insurance is meant to incentivize loss mitigation, meaning the steps you take to decrease the amount of claims money you need in the event of a disaster. If you elevate or otherwise flood-proof your home, you will qualify for lower insurance premiums. You're also less likely to file claims from the decrease of exposure to risk. Taken together, this puts you on firmer financial footing than rebuilding back to the way you were before the storm.

(Instead of backing reforms that will reduce overall flood risk, the proponents of HR3370 seem to think the citizens of the floodplain will be comforted by continuing to pay into an insurance

system that is on increasingly shaky financial footing. *This means that your maximum coverage will not be increasing, but restrictions on claims will, because the NFIP simply will not be able to afford it.* The maximum residential flood insurance policy is $250,000. Does this amount of coverage make sense for NYC? Can it replace your house and belongings and all that you hold dear? Can any amount? In an environment where you cannot be sure of how much will ultimately be covered, the only way to insure your what you own and love is to do so physically: by elevating of flood-proofing.)

5. **Lower flood insurance premiums don't protect you from unquantifiable losses**. How many times can you and your family go through rebuilding? Insured or not, the stress of seeing your home and community repeatedly inundated with flood waters is emotionally and physically traumatizing. Says one resident of Staten Island, a borough where homeowners received flood damage from storms Irene, Lee, and Sandy: "I'm tired of mucking out; I don't care who's paying for it."

6. **Who wants to deal with claims?** The red tape and delays involved in actually receiving payments on flood insurance claims are legendary. Long-time policyholders in good standing affected by Sandy have been told their homes were impacted by "earth movement" (among a growing list of exempted perils) instead of flood, even if the movement is caused by a flood. Many other claimants who successfully receive payments may still have to forfeit up to a third of the proceeds to claims adjustor fees, or find that the funds are locked by their mortgage lenders in an escrow account.

(Though FEMA doesn't keep track of the number claims that are still being disputed, Jeff Moore, president of Wright Flood, which handled more flood cases for Hurricane Sandy than any other company, estimated that 30% of his customers are still seeking a bigger settlement a year after Sandy, "an unusually high percentage, even for a major disaster." The only thing that can prevent more of these aggravating claims situations is preventing a loss in the first place, through elevating or otherwise flood proofing your home.)

7. **Sea level rise**. NYC has seen one foot of sea level rise over the last century, and the City also projects that about one quarter of the city (by area) will be in the 100-year floodplain by the 2050s. numerous interventions—berms, dunes, revetments, off-shore islands, oyster beds, and reefs—to be put in place in the coming years will only soften the impact of the next event. With rising waters, 100% of homeowners who do not elevate remain at risk for future storms.

8. **Putting the hazard blinders back on**. Insurance pricing that reflects risk can help put the NFI back in good financial condition. It is also a tool, a signal of risk to those living and working in the floodplain. HR3370 artificially subsidizes rates, effectively allowing homeowners, firms, and government to re-apply the hazard blinders, and quashes any incentive to invest in risk reduction measures.

Zone A supports a plan that is conscious of the tenuous financial condition of those still recovering from recent disasters, but the current legislation is not in the best long term interest of high-risk homeowners or the nation's taxpayers as a whole. Instead of postponing essential insurance reform for some undetermined future political term, our government should be protecting us now by helping us build up.

Conclusion

The NFIP is not only financially unsustainable—it's politically vulnerable. The program has to be reauthorized every five years, and the relief from rising premiums you're getting now may expire when the program does in 2017. Talk to your elected leaders. Tell them you need help protecting your family and your belongings. You live in a flood hazard area, not an insurance premium hazard area.

LIFT UP NY!

Flood Insurance Sagas, Part 2: Background on the National Flood Insurance Program

Rebecca Elliott

Why all the changes to flood insurance?

Now that President Obama has signed the Homeowner Flood Insurance Affordability Act (HR 3370) into law, FEMA has a new set of set of statutes and regulations to begin implementing immediately. But you may be wondering how we got to this point. For many people, flood insurance was always a routine consideration, something we thought about only when it was time to renew a policy and pay the premium. Yet over the last year, flood insurance became a national political issue. This companion piece to our earlier post, "Why elevate now?", provides deeper background on the history of flood insurance and the reasons for recent reform efforts.

How does flood insurance work?

In the U.S., the vast majority of flood insurance is provided through a federal government program called the National Flood Insurance Program (NFIP), run by the Federal Emergency Management Agency (FEMA).[1] The NFIP was established in 1968 because private insurers at that time deemed flood risk "uninsurable." Low probability, high consequence flood events are not only hard to price, but inevitably local, meaning one flood could devastate an entire insurance market. The federal government, however, was in a position to distribute that risk nationwide, as well as draw on a line of borrowing with the U.S. Treasury in the event that it needed help paying out claims.

Since 1983, the NFIP has been administered by private insurance companies through a program called "Write Your Own" (WYO); this is why when you purchase a flood policy or file a claim, you are dealing with a private company, likely the same company that sold your general hazard policy. Following federal rules, your WYO company comes up with a premium rate for your flood insurance policy (*more on how this is calculated in a later post*). These companies receive a commission from the NFIP (estimated at about 30% of the premium) for doing the administrative work of the program.

Most NFIP policyholders pay what's called an "actuarial" rate. These are premium rates generated with a formula that is meant to capture the "true risk" facing a property in a floodplain. About 20 percent of the 5.5 million policies in force nationwide pay non-actuarial rates, either subsidized or grandfathered rates. *Subsidized* rates are in place for "pre-FIRM" properties: older properties in high-risk areas that were built before their community adopted a Flood Insurance Rate Map (FIRM). In New York City, the first FIRM was adopted in 1983. Because of the older nature of the housing stock in New York City, about 85% of the buildings in the current floodplain are technically pre-FIRM. *Grandfathered* rates are in place for properties subject to a change in their FIRMs: if you built your house to code, but then FEMA updates your community's FIRM and you're now in a higher risk zone, you get to keep your old, lower premium rate (in other words, you won't be penalized by a rules change). Grandfathered rates are also passed on when properties are sold to new owners.

Crisis for the NFIP

For decades, the NFIP was a functional system. Like a private insurer it paid claims out of the premiums it collected, despite collecting non-actuarial premiums from 20 percent of policyholders. In especially bad flood years, the NFIP had to borrow from the U.S. Treasury, but it was always able to pay back that debt. Then Hurricane Katrina hit in 2005. The program was completely financially overwhelmed. The NFIP was driven $16 billion into debt from Katrina claims, and that debt increased to $18 billion after claims from the

[1] There is a private "excess" flood insurance market that serves primarily large commercial enterprises and other high value properties. Insurers in this market are quite selective, and premiums are typically quite high. The NFIP is the flood insurer of most homes and small businesses.

Midwest floods of 2008. For years after, the NFIP was only able to service interest on that debt, without paying down any of the principal.

In recent history, federal assistance to the NFIP, paid for by taxpayers at large, has also increased drastically with every recent major storm event (see table below). Combined with federal disaster relief, Hurricanes Katrina and Sandy alone cost taxpayers nationwide over $150 billion. This trend, combined with the fiscal liability of the NFIP following Katrina, made the need for flood insurance reform especially urgent.

The U.S. Treasury is Footing the Bill for Disaster Loss Payments

(Source: "Implementing the National Flood Insurance Reform Act In a New Era of Catastrophes," Kunreuther & Michael-Kerjan, The Wharton School at University of Pennsylvania)

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The legislation that established the NFIP in 1968 includes a "sunset clause," meaning that every five years, Congress has to vote to reauthorize the program. If it doesn't, all NFIP policies will immediately lapse. These moments of reauthorization have historically been used to reform the program. For example, in 1973, the mandatory purchase requirement was added, which is why now your mortgage lender requires you to carry flood insurance. When it came time to reauthorize the NFIP in the summer of 2012, members of Congress took a look at that $18 billion debt--ultimately paid for by taxpayers at large--and decided the time was right to undertake a relatively dramatic reform of the program.

In July 2012, the Biggert-Waters Flood Insurance Reform Act (BW-12) passed through bipartisan agreement as part of a larger transportation bill. BW-12 was designed to put the NFIP back on firm financial footing by transitioning *all* flood insurance policy premiums to actuarial rates: rates that reflect actual flood risk levels. This would mean the gradual phase out of subsidized and grandfathered rates. At around the same time, FEMA released a report on how climate change would affect the NFIP and found that rising sea levels would increase the risk facing policyholders and potentially further strain the program.

Implementation of BW-12 goes awry

After BW-12 passed, FEMA began implementing the law as written. Then Sandy hit, and its impact revealed some of BW-12's unintended consequences. Though the changes took effect prior to Sandy, most homeowners in New York and New Jersey began to realize that their flood insurance premiums were going to increase quickly and, in some cases, dramatically, into the tens of thousands of dollars per year, as they were simultaneously recovering from the storm. For these homeowners, many of whom had long been receiving subsidized or grandfathered rates, the "actuarial" price of flood insurance--derived

from their proximity to the coastline and probability of flooding--was financially devastating. In addition, because of map updates to the flood zones ("Special Flood Hazard Areas" or SFHAs in FEMA's terms), some homeowners that bought homes outside of the flood zone 20 years ago were now "mapped in," and subject to flood insurance requirements for the first time. Others were "remapped" to reflect higher risk from rising sea levels, and found their insurance premiums were increasing substantially because BW-12 was phasing out grandfathering. Coupled with individual costs of rebuilding their homes after Sandy, the rate increases were seen as an untimely burden and a hindrance to recovery, instead of a way to revitalize an overtapped system.

Some policyholders (starting in Sandy-affected areas, but now active nationally) organized to fight BW-12. They succeeded in getting many members of Congress, on both sides of the aisle, to take up the issue of the unaffordable rate increases, including Maxine Waters, whose name is on the original Biggert-Waters law. After some back-and-forth with different versions of a new bill in the Senate and the House, Congress passed HR3370 on March 13, 2014, and President Obama signed it on XXXXXX.

This new law, the Homeowner Flood Insurance Affordability Act, permanently reinstates grandfathering and caps insurance premium increases to 18% per year, while also urging FEMA to "strive" to keep total premium amounts to no more than 1% of the total coverage amount (i.e., $2500 per year on a $250,000 policy). Unfortunately, it leaves little to no incentive for the individual homeowner to take measures *now* to elevate or flood-proof their homes. It may also prolong the financial instability of the NFIP.

What's next?

The NFIP is politically vulnerable. As mentioned earlier, the program has to be reauthorized every five years, and the relief from rising premiums you're getting now may expire when the program does in 2017. Talk to your elected leaders. Tell them you need help protecting your family and your belongings. You live in a flood hazard area, not an insurance premium hazard area.

Zone A supports a plan that is conscious of the tenuous financial condition of those still recovering from recent disasters, but the current legislation is not in the best long term interest of high-risk homeowners or the nation's taxpayers as a whole. Instead of postponing essential insurance reform for some undetermined future political term, our government should be protecting us now by helping us build up.

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Check back for the next installment in this series, which will take you through the process of how your flood insurance bill is calculated.

Flood Insurance Sagas, Part 3: Adjust Your Claims Expectations

This is the third installment in our series about flood insurance in the United States and the impact of recent legislative changes on homeowners living in flood-prone areas. For this part, we enlist Rebecca Elliott, our Zone A New York Flood Insurance Expert, to discuss some of the issues surrounding the claims and adjustment processes. Read parts one and two here.

Rebecca Elliott

Before Sandy hit, flood insurance seemed to most like a pretty simple deal: you pay your premiums on time, you don't let your coverage lapse, and when the big storm comes, you file a claim for the resulting damage and you use that money to make yourself whole again. In the abstract, it's all very clear. But in reality, the claims process after Sandy has proven neither simple nor clear. It is instead complicated, stressful, frustrating, and some say unfair. In other words, it is to be avoided in the future. We can all avoid dealing with insurance claims by preventing losses. Mitigating your flood risk through elevation or other partial flood proofing lowers your risk of experiencing damage and makes it less likely you'll have to hope for the best from your adjusters and insurance carriers in the future. In this post, I draw on my research interviews with the experts and professionals who have helped Sandy affected policyholders navigate the claims process. I've identified some key takeaways: problems and experiences that came up again and again, which make it clear that the best claims process is no claims process.

What the overall claims situation looks like now: resolved, but insufficient?

Everyone who has flood insurance has their own tale to tell and, if you've heard even just a few of them, you know that experiences with claims vary tremendously policy-to-policy, person-to-person. Some people resolved their Sandy claims relatively quickly, while others are still waiting for checks, unable to begin or finish rebuilding. If we zoom out from these individual stories, what do we know about claims from Sandy? According to FEMA, which administers the NFIP, 99 percent of flood claims are closed. As of the end of January 2014, the NFIP had paid 127,715 losses, with an average paid loss of $59,076. It appears that no one has crunched the numbers to see how that average paid loss stacks up to the amount of overall coverage or the amount of the assessed damage. But anecdotally, many homeowners are reporting that they feel they have been underpaid, and the contractors, adjusters, lawyers, and brokers who support them attest that this is true for many of their clients. Touro Law Center's Disaster Relief Clinic has had over 2,000 households contact them since three days after the storm, the vast majority involving flood insurance claims. For a homeowner who purchased a $250,000 policy and suffered severe damage, a $59,000 claims payout may be shockingly low.

How claims work: federal money, privately administered.

Part of the confusion about flood insurance claims stems from the fact that this is a federal program, administered by private insurance companies. After a flood, you file a claim with your insurance company, which sends out adjusters to assess the damage and arrive at a claims amount. But the insurance company itself is not making the payment: they are doing the paperwork and passing it along to the NFIP, which pays claims out of its own funds. This is the "Write-Your-Own" (WYO) program. Many of the WYOs further subcontract out the adjustment, bringing in adjusters from out of state who may not understand the higher costs of living in the New York area, potentially leading to lower than desired claims. The WYOs have their own internal process for approving the claims amount, in line with federal standards and rules. There are several layers of approval involved that can slow down the process; this also means there are

multiple veto points where someone could adjust your claim down or up, and many folks have told me that they have had multiple adjusters come through their homes. (NYS Insurers, under the purview of the New York state government, has published a disaster response report card, where you can compare different insurance companies; this doesn't appear to include flood specifically, but you can get a sense of how different companies perform in terms of overall claims and complaints).

Even once the claims check is cut, getting the money isn't always easy.

If you have a mortgage, you may find that the bank will hold your insurance claims money in an escrow account, requiring additional steps to release that money to your contractors. They do this to protect their investment; the bank wants to make sure that you have a sound plan in place for rebuilding. But for the homeowner, this means additional hoops to jump through in order to get their rebuilding started, and another approval process that takes time and energy.

When you go to file a claim, you may find that you do not have the coverage you need or want.

Over and over again, brokers and lawyers have told me that people only really understood their coverage--what was included, what they were entitled to-- *after* Sandy hit and they went to file claims. The first goal of any WYO is to sell a policy, not necessarily to educate the consumer. One broker who spoke with me estimates that about half the flood policies he sees from WYOs are mis-rated. For example, a client is missing contents insurance because he/she was told it wasn't needed. This is not to say this is done maliciously; flood insurance is a complicated product, and even the WYO agent may not understand how to cover your particular situation adequately. The other issue that has come up with flood insurance claims from Sandy relates to the exclusions, such as earth movement. The NFIP policy won't pay for earth movement damages, even if that damage was caused by flood waters moving the earth under the house. In New York, the state decided to pay for those damages, but this is by no means guaranteed going forward. When you go to file a claim, you may run into these types of exclusions that leave you ineligible for a payout. To really understand what you're buying, the information requirements are high, and the burden of education falls largely on the policyholder.

Filing a claim is complicated.

Proof of loss, supplements, exclusions, extensive documentation, deadlines: smart, reasonable, responsible people have a hard time navigating the process from start to finish. And if you mess up, it can be disastrous, because policies can be interpreted quite strictly. Mistakes you make in filling out forms the first time can take months or years to correct. Missing a deadline can disqualify you from further assistance. One lawyer working pro bono on flood insurance cases described this to me as a "complicated puzzle you have to put together," often through consulting some combination of the statutes and regulations, the policy itself, the case law, FEMA/NFIP bulletins, and other experts. And it can take a long, long time.

Expertise may be required, but buyer beware.

If you feel you are being mistreated by your insurer over a claim, you can turn to public adjusters and legal services, both private and non-profit, for assistance. Often, these experts can make the difference in getting claims money more in line with what you need. But, as in any profession, there is a lot of variation in competence and commitment, and some homeowners have reported dissatisfaction with the assistance they are getting. And even a terrific adjuster or private lawyer is going to take a cut of whatever money they help you get, lowering the total amount that eventually comes your way. Non-profit legal services offer excellent advice and guidance, but may not be able to represent your specific case due to the volume of clients they see and the high demands of undertaking flood insurance litigation.

The claims process is emotionally draining.

If you've gone through it before, you know this personally. For you, this is about recovering your home and getting back to something closer to your normal life. For the insurance adjusters and agents, this is an analytical process. I've had folks tell me that dealing with insurance claims has made these past months and years some of the worst of their lives. The cost to you in time, stress, and trauma cannot be priced in dollars and cents.

The point of this post is not to dispirit and disempower you. If you experience flood damage, you can come through it with a satisfactory claim. But it's hardly straightforward. In this case, an ounce of prevention truly is worth a pound of cure: taking steps to mitigate your flood risk makes it less likely you'll have to deal with the claims process again.

Flood Insurance Sagas, Part 4: How Is My Premium Calculated?

Rebecca Elliott

All of the recent changes in and controversy surrounding flood insurance may have you wondering how your flood insurance premium is calculated to begin with. Why am I paying $1000 on my home, while my friends a few blocks over pay $700? Or $1700? In principle, the price of your yearly flood insurance premium is meant to reflect the flood risk facing your property: higher risk, higher insurance premiums. But there are a few additional factors that can impact your premium rates, leading you to pay less than a "true risk" or "actuarial" rate. This installment will explain how premium rates are calculated in general.

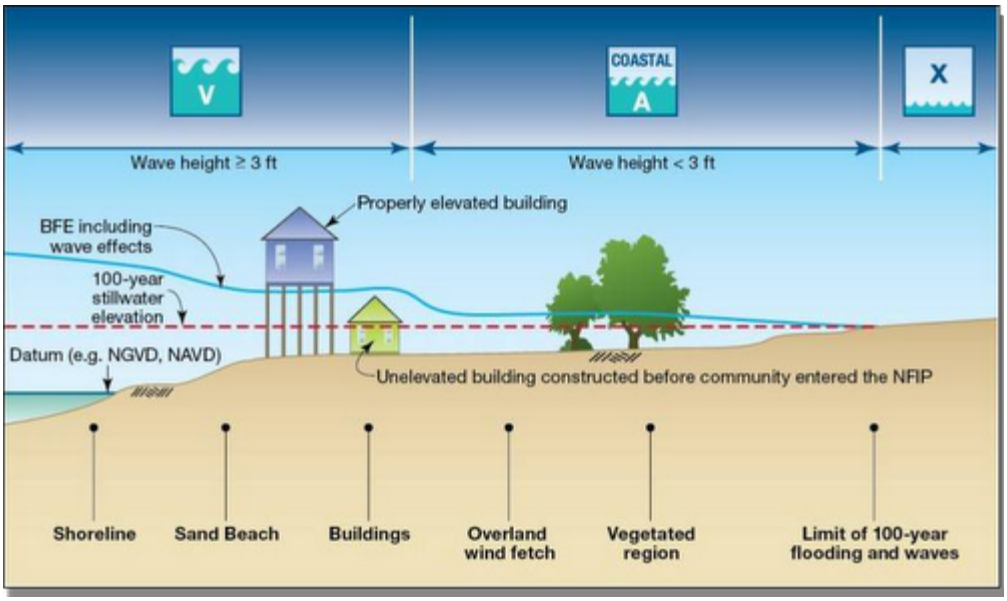
Where you are determines what you pay.

FEMA generates and updates flood zone maps for the entire country (more on this process in a later post). These Flood Insurance Rate Maps (FIRMs) depict the floodplain, what the NFIP calls "special flood hazard areas" (SFHAs). These are the areas required to carry flood insurance. If your property is in an SFHA, the three key components of your flood insurance premium are 1) the type of flood zone you're in, 2) your base flood elevation (BFE), and 3) the type of structure. First, here are the types of SFHAs:

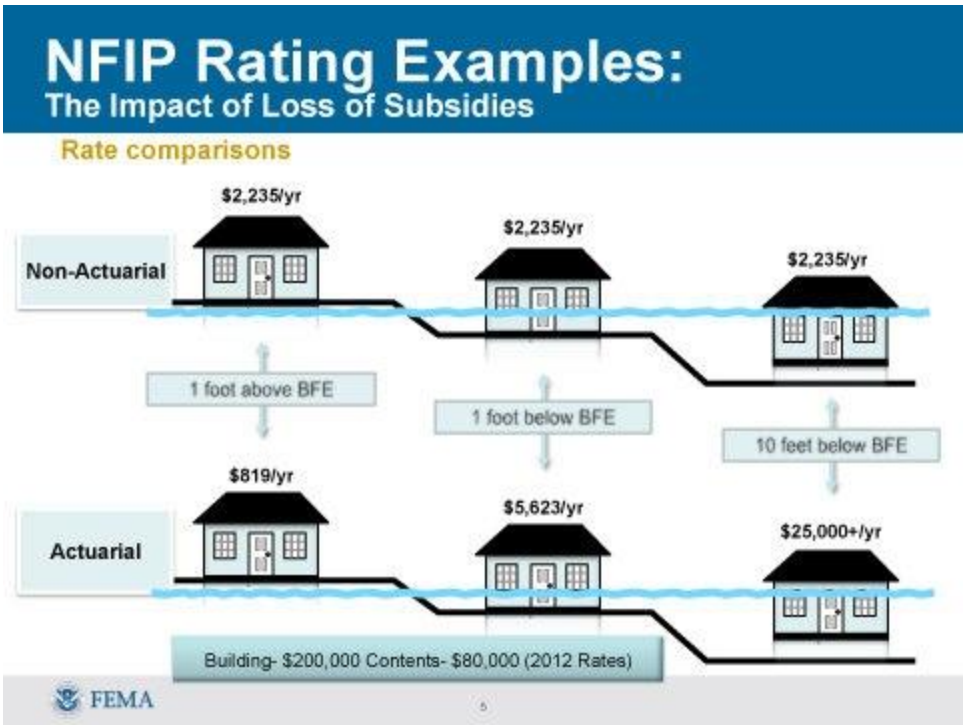
- A zone: this is an area subject to flooding by the 1-percent-annual-chance flood event. This is sometimes called the "100 year flood," but this is misleading. The NFIP is referring here to a statistical probability of a flood occurring every year, *not* the time between events. On average, this type of flood event will occur once every 100 years, but the number of such events that actually occur every 10, 20, or 50 years is highly variable. Also, "100 year flood" sounds pretty epic, so people tend to think it refers to only really devastating flooding but, in fact, this can apply to a wide range of flooding events. Note also that "A" refers to a broad class, including AE, A1 through A30, etc. If it starts with "A", it's an A zone. The different sub-classes refer to differences in topography (i.e. how steep the land is), and so forth.

- V zone: this is an area subject to flooding by the 1-percent-annual-chance flood event *and* additional hazards due to storm-induced velocity wave action. In other words, coastal areas where storm surge will push ocean water over land. Again, this includes VE zones, V1 through V30, etc. V zones are higher risk than A zones, and property owners will pay higher insurance premiums.

"Moderate" or "minimal" flood hazard areas are labeled Zone B, Zone C, or Zone X and are also shown on the FIRMs. Properties in these areas often qualify for "preferred risk rates." Though they are not required to carry flood insurance, property owners here can purchase coverage at favorable rates. Below is a helpful graphic from FEMA Region II (which includes New York):



Second, how high the lowest livable floor of your property is relative to the base flood elevation (BFE) factors into your insurance premiums. The BFE is the height the flood water is expected to rise during a typical flood event. The BFE also serves as a regulatory requirement for elevating or flood-proofing your property. Communities often also choose in include “freeboard” in setting building codes; this is an additional foot or two above the BFE that accounts for the many unknown factors that could contribute to flood heights greater than the BFE. The graphic below from FEMA helps clarify the relationship between BFE and premiums; the precise dollar figures may not be accurate for your situation, but you get the idea: if you’re paying an actuarial rate, the higher you are relative to the BFE, the lower your insurance premiums.



The insurance premium rate depends on these broad “risk classes,” which are nationally standardized, meaning, for example, that an A30 building located in Mississippi will pay the same as an A30 building in New York, provided they have the same coverage details and elevation rating relative to the BFE.

Where can you find your flood zone and BFE? New York City maps are viewable online, through a tool created by FEMA Region II, available here. You can insert your address and get your BFE requirements here. The elevation of your property relative to the BFE is established through something called an “elevation certificate.” If you are paying an actuarial rate, your property should have an elevation certificate already. If you need or want one, many surveyors can provide this service-- just be sure they are familiar with NFIP requirements.

Third, the type of structure matters. This refers to whether the property is residential or non-residential; homes get different insurance policies than businesses do. The design and age of the structure can also factor in.

Non-actuarial premium rates: when where you are does *not* determine how much you pay.

The legislation that established the National Flood Insurance Program (NFIP) in 1968 allowed for two basic types of premium rates: 1) “risk premium,” “full-risk,” or “actuarial” rates, and 2) “other than risk premium,” “discounted,” or “subsidized” rates. The existence of these discounted rates is part of what makes the NFIP different from a private insurer and much of the reform controversy surrounds what to do with these “artificially low” rates.

The two major types of non-actuarial rates are “pre-FIRM” rates and “grandfathered” rates.

- Pre-FIRM subsidized policies: These are buildings that were built before there was an effective FIRM and flood-related building codes for their area. For New York City, these are buildings built before 1983.

- Grandfathered policies: If your property is subject to a map change, you can continue to pay premiums based on your prior (lower-premium) rate class. For example, if your home was built when your block was part of an A zone, but FEMA remaps 10 years later and calls it a V zone, you get to keep your A zone rate.

Biggert-Waters was meant to convert these non-actuarial rates to actuarial ones through 25 percent annual increases. The recently enacted Homeowner Flood Insurance Affordability Act still moves non-actuarial premiums in this direction, but at a slower rate, while also reinstating grandfathering. These changes are especially important for New York City because of its older housing stock: 85 percent of buildings in the latest FIRMs were built before 1983, meaning lots of home and business owners are paying non-actuarial rates, and should expect increases in the years to come.

What else affects my insurance premium?

It doesn't have to fall on your shoulders alone to mitigate your flood risk and keep your flood insurance affordable. If your community takes steps to protect itself from flood events, such as levee construction, dune replenishment, and wetlands preservation, FEMA will reflect this in premium rates for the area. Advocacy for community-level flood resilience will become increasingly important as sea levels rise.

What you opt to purchase also affects your flood insurance premium. You can choose your coverage limit (up to $250,000 for a home), as well as how much to insure the contents of your home for (up to $100,000). Keep in mind that insurance agents are trying to sell you a product; they may find ways to keep your premium lower and therefore competitive by skimping on coverage you might really need.

Why are there non-actuarial premium rates to begin with?

The original goal of discounted rates was to encourage participation in the program, which was completely voluntary before the mandatory purchase requirement (i.e. if you have a mortgage, your lender requires you to have flood insurance) was added in 1973. In particular, the program did not want to penalize property owners whose homes and businesses were built before there was an effective FIRM for their area. Program-wide, about 20 percent of policies in force have discounted rates. Insurance experts say the existence of this 20 percent makes the program financially unsound at a structural level; it's almost designed to go broke. So why would policymakers have designed this into the program in the first place? From the point of view of the federal government in the 1960s, the most pressing issue was massive outlays of disaster relief following floods, which are the most common and destructive natural disaster in the U.S. Getting property owners to prefund even a part of that damage-- even if their rates wouldn't fully cover all of it-- represented at least some savings to the government and the taxpayer at large. The expectation was that these older, flood-prone buildings would "naturally" disappear from the program, as people left the floodplain following disasters. This has not really happened, however, meaning that the discounts have persisted and have generated some of the more recent problems facing the NFIP.

What can I do to keep my premiums affordable?

The recently enacted Homeowner Flood Insurance Affordability Act provides property owners with more time to elevate or otherwise flood-proof their homes and businesses. Bringing your property up to code, or even beyond, will generate long term savings as premiums increase, not to mention the fact that this is

the only way to preserve your physical safety and financial security in the event of future flooding. The culminating installment in this series will serve to guide you, as a homeowner, on the actions you can take to lessen your flood risk and keep your family safe and insurance premiums under control.

Flood Insurance Sagas, Part 5: Mapping the Risk

Rebecca Elliott

In the previous installment on premium rate-setting, we learned that where you live relative to the flood zone to largely determines what you pay in flood insurance. In this post, I'll go over the basic things to know about flood zone maps, explain how to find your flood zone maps, then provide some background on how the flood mapping process works in general.

What is a flood zone map and why is it important?

Flood zones are exactly what they sound like: geographic areas at risk of either coastal or riverine flooding. Some flood zones are higher risk than others. The Federal Emergency Management Agency (FEMA) is responsible for mapping the flood zones for the entire nation, and for continuing to update these flood zones as the underlying risk changes. These maps are often used by local and state governments to inform their planning and land use decisions but, more importantly for you as a homeowner, they are *regulatory products,* because they are tied directly to your flood insurance requirements. This is why FEMA calls their flood zone maps "Flood Insurance Rate Maps," or FIRMs for short-- because the boundaries of the flood zones correspond directly to insurance rates, as described in the previous post on premiums.

If your home or business appears in a Special Flood Hazard Area (SFHA, or A zone) or a Coastal High Hazard Area (CHHA, or V zone) and you have a federally backed mortgage (which the vast majority of people do), you are *required* to purchase flood insurance for your property. If you do not, your mortgage lender must purchase it on your behalf and bill you for it; this is a practice called "forced place insurance," and it often leads to homeowners paying more than they need to for flood insurance. If your home or business is in a "moderate or minimal" risk area (B, C, or X zone), and your community participates in the NFIP, flood insurance is available to you, but not mandatory.

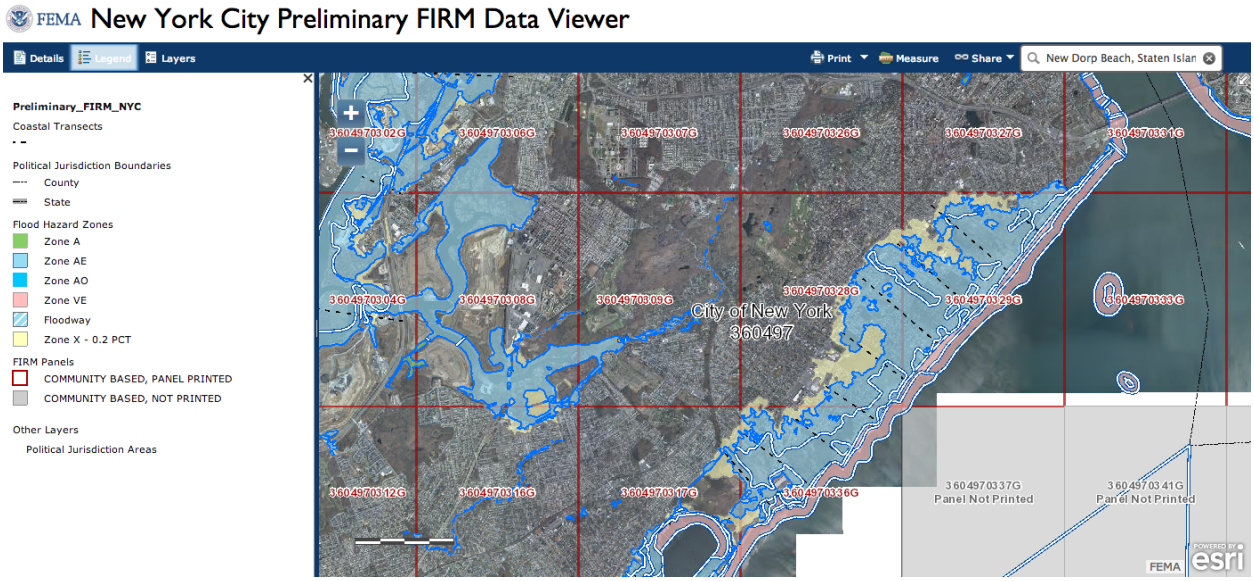
The FIRMs are also regulatory in the sense that many communities base their building and zoning codes off of them, meaning that once FEMA designates a base flood elevation (BFE, described in the post on premiums) for an area, the local government may establish elevation requirements for building and zoning, based on that BFE.

It is in your best interest to understand your flood zone map and the insurance requirements that go with it.

How do I view the FIRM for my community?

New York City maps are viewable online, through a tool created by FEMA Region II, available here. You can insert your address and get the BFE for your location here. The maps viewable online are the best available data for the area, but they are not yet "effective," meaning regulatory, FIRMs. They are currently "preliminary" FIRMs, or pre-FIRMs, meaning they could still change a bit before they are formally adopted by the City. *However, New York City has already adopted the pre-FIRMs into its building codes, meaning that if you are rebuilding or building new, you are subject to the elevation requirements in either the pre-FIRMs or the current effective FIRMs (2007), whichever of the two is higher.* This means that New Yorkers should regard the pre-FIRMs as essentially regulatory, for the purposes of construction. The City anticipates adopting the pre-FIRMs in 2015, with little if any modification, at which point they will become the effective FIRMs, and replace the older 2007 maps.

Below is an example of what some of the flood zone maps for Staten Island look like; this was produced using the tool linked above. The red-lined boxes are what FEMA calls “panels”; this is a holdover from paper maps, when you used to have to go to your local planning office or to a real estate agent and have these pulled out of a file for viewing.



How is a FIRM made?

Mapping the nation’s flood zones involves both technical and political processes. On a technical level, FEMA engages floodplain engineers and other water science experts to collect data on the area, typically using some combination of laser technology (called “LiDAR”) and “field reconnaissance,” which involves physically visiting the locations and verifying details about their topography, shorelines, vegetation, etc. For coastal areas like New York City, they plug this data into a variety of computer models that generate projections of storm surge, as well as wave conditions, movement, and height. The results of these technical processes and analyses generate the flood zones and the BFEs.

However, a community has to formally adopt its FIRM for it to become effective. In FEMA’s most recent Congressional budget hearing last month, Administrator Fugate said, “There's no such thing as a ‘FEMA flood map’," by which he meant that maps are created with the participation of local governments; they are not “imposed” from above. As FEMA undertakes its flood insurance studies, it consults with local officials. Once the pre-FIRMs are ready, they are shared with the community in a series of meetings, during which FEMA has to explain how the maps were created and what they mean. FEMA takes public feedback on the maps in two separate phases: a comments phase, and then a formal appeals phase. During the comments phase, anyone can submit feedback on things like municipal boundaries, street names, and other things that require minor correction. The 90-day appeals period is more rigorous: this is when people or groups of people have an opportunity to contest the technical data and analysis underlying the maps. The burden of proof to revise a map substantively is quite high and mounting a successful appeal typically requires scientific expertise. This makes appeals quite time consuming and expensive for those who attempt them; a recent NBC News investigation found that these appeals are

often fought and won by people with deep pockets. Once FEMA responds to and/or resolves the appeals, a “Letter of Final Determination” is issued, launching a six-month compliance period before the maps become the “effective FIRMs.”

This process repeats every time FEMA undertakes a map update, which is why the creation and adoption of new maps typically takes years. As complicated and difficult as the process is, consistent map updates are essential for assuring that local communities understand their flood risk and plan accordingly. Maps can become outdated quickly, for a variety of reasons. In some cases, the quality of the data and the technology improves from one map to the next. New York City’s current effective FIRMs were adopted in 2007, but are based on 1983 data-- both knowledge of flood risk and the tools to assess it have developed quite a bit in the last 30 years. In addition, the risk itself changes due to sea level rise, erosion, or other changes in topography created by real estate development or the construction of dunes, levees, etc. For the sake of your safety and the security of your property, it is important that all these changes are reflected in periodic map updates.

The inevitability of map changes might make you feel like someone keeps moving the goalposts and, in some sense, they are. But the maps are in some ways the best tool we have for making smarter planning and land use decisions that keep communities safe. Now, as for what this means for your insurance premiums--this was one of the big stakes of the recent controversy over flood insurance affordability (LINK HERE TO PREV POST). The law on the books, the Homeowner Flood Insurance Affordability Act, reinstates “grandfathering,” meaning that if you were mapped into an SFHA, or you went from an A to a V zone, you get to keep the lower rate to start; in other words, you won’t be penalized if you built to code, and then the codes changed. However, from that grandfathered rate, you should expect your flood insurance to increase (up to 18 percent per year) as the risk increases. Proactively managing your risk through elevation and flood-proofing helps insulate you from the effects of further map changes.

The next installment will go into detail about the map-making in New York City, which will include up-to-date information about where we are in the process and what’s to come.

Flood Insurance Sagas, Part 6: The story of New York City's FIRMs

Rebecca Elliott

In the last installment, we covered FEMA's general methods for making and approving a flood zone map, or FIRM. However, the process for releasing the latest FIRMs for New York City has differed significantly from the normal procedure. This installment will go into the specifics of where we are in the mapping process and what is to come.

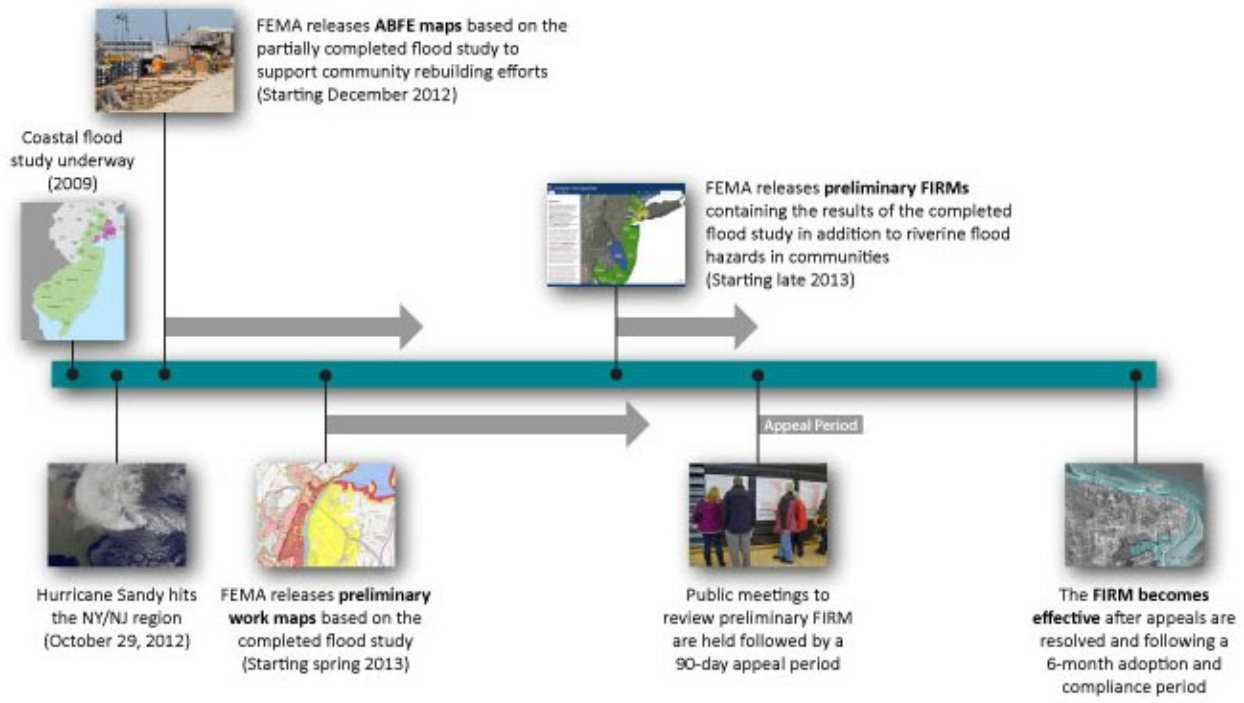
Many people think that the City was remapped *because* of Sandy; in fact, FEMA Region II (which includes New York and New Jersey, along with Puerto Rico and the U.S. Virgin Islands) was already working on its coastal flood study for the area in 2009, and presented some of its early analysis just 10 days before Sandy hit. Once the storm had devastated the region, FEMA was in a difficult position of needing to complete the coastal flood study as folks were already beginning to rebuild; FEMA had a partial picture of what the new maps would look like, and they, along with the City, wanted to get that information out to New Yorkers as soon as possible. The competing desires to equip folks with information as quickly possible, while also making sure that information was accurate and reliable for informing rebuilding decisions, has generated a lot of the confusion around the New York City FIRMs.

So where were we *before* Sandy hit, and how did Sandy change the mapping process? New Yorkers certainly faced serious misfortune with the storm, but New Yorkers are quite fortunate to have city and state officials who were trying to get a handle on coastal flood risk long *before* they were underwater. The City had actually been asking FEMA for a full remapping of its flood zones since 2007, when the area's maps were last "updated." The 2007 update had only adjusted some of the riverine areas and digitized the maps (itself a very important change in terms of risk communication). The underlying data for the coastal areas--in other words, what we know about the actual *risk*--was from 1983; it was precisely this underlying data that the City wanted to revisit and update. In 2009, FEMA secured the funding to respond to this request and the Region II office began its coastal flood study of New York and New Jersey. The City provided FEMA with the aerial LiDAR data that forms the basis of the topographical information in the maps. In 2011, the City entered into a "Cooperating Technical Partnership" with FEMA to facilitate communication and outreach around the map update process. Everything was going according to plan.

Then Sandy hit, bringing into sharp focus how inadequate the effective FIRMs (those 2007 maps, based on 1983 risk data) were for anticipating flooding in New York City. An analysis by the Natural Resources Defense Council found that nearly 290,000 New Yorkers were unexpectedly flooded by Sandy's stormwaters. Flooding covered 46.2 square miles, an area 65 percent larger than the flood-vulnerable area identified on FEMA's outdated maps. This unexpectedly flooded area was home to more than 16,000 children under five years old and 43,000 people 65 years and older. Clearly, New Yorkers needed better flood risk information, and they needed it quickly.

After the storm, FEMA worked with the City to issue a number of intermediate, non-regulatory products that were meant to get the best available data out to homeowners as quickly as possible. "Non-regulatory" in this case means that these earlier maps were not connected with flood insurance requirements. Beginning in December 2012, FEMA released "advisory BFE" maps, based on the partially completed flood study, to inform people as they began to rebuild. In June 2013, FEMA released "preliminary work maps" (PWMs), based on the completed coastal study. The PWMs were released with the understanding that the coastal areas would not change much when the pre-FIRMs were released; the City wanted residents to feel confident about the guidelines and regulations for rebuilding (PWMs are not

a normal FEMA product, but were created and distributed as part of the Sandy recovery). In December 2013, FEMA released the pre-FIRMs, which largely resembled the PWMs, but had the riverine areas updated. Below is a timeline of the NYC process, courtesy of FEMA Region II.



So where are we now? NYC has its pre-FIRMs, and we are currently in the "comments phase" (described in the last installment), with the 90-day appeals phase to follow. Initially scheduled for Spring 2014, the appeals phase is now anticipated to begin in Fall 2014, to better coordinate with other parts of New York and New Jersey that will be getting their pre-FIRMs in the coming months.

These map changes may feel disorienting; it is hard to play by the rules if the rules keep changing. But the reality is that our flood risk is changing all the time: not only from erosion and sea level rise, but also from further real estate development (which drives up surface elevations-- imagine the water in a bathtub rising as you sit down in it). Maintaining updated maps is important for guaranteeing our safety and financial security. It is wise to make sure you understand the FIRM that includes your property, so that you have the best available information as you plan for the future.

If you're rebuilding now, although the new maps aren't yet "effective", as I stressed in my last post (LINK), *New York City has already adopted the pre-FIRMs into its building codes, meaning that if you are rebuilding or building new, you are subject to the elevation requirements in either the pre-FIRMs or the current effective FIRMs (2007), whichever of the two is higher.* This means that New Yorkers should regard the pre-FIRMs as essentially regulatory, for the purposes of construction. Local officials have also told me that the City anticipates adopting the pre-FIRMs in 2015, with little if any modification, at which point they will become the effective FIRMs, and replace the older 2007 maps. We finally have a clearer picture of the risk; it's now important that we take steps to make our homes and communities safer in light of that risk.

Flood Insurance Sagas, Part 7: What New Yorkers Really Think About Floods and Flood Insurance

Rebecca Elliott

The Wharton Center for Risk Management and Decision Processes at the University of Pennsylvania employs the country's foremost experts on flood risk and insurance. These folks have just released a new study of New York City floodplain residents' perceptions of flood risk and flood insurance choices, based on survey data collected six months after Hurricane Sandy. This post will briefly summarize some of their findings, and explain how this information is relevant for building more resilient coastal communities. You can view their issue brief in full here.

The researchers surveyed 1,035 people who own a home with a ground floor in a flood-prone part of New York City—the kinds of folks in our communities who were most impacted by flooding from Sandy, and who are most at risk of future flooding (maybe you even got a call from them!). The vast majority (86 percent) of survey respondents perceive that the flood risk facing them is high, which we should expect given the recent experience of Sandy. But about 60 percent underestimate just how *high* that risk truly is, believing themselves to be at lower risk than they actually are, when compared to expert estimates. In other words, many homeowners' perception of their risk does not match up well with the FEMA flood zone classification in which they live. In addition, despite understanding ourselves to be at risk, New Yorkers tend to *underestimate the amount of damage* a flood could cause.

As for our expectations of the future, over 40 percent of respondents do not expect their flood risk to increase as a result of climate change—despite what the best science is telling us about rising sea levels. Sea levels have *already risen* about a foot in the New York City area in the last century (higher than the average nationwide), and experts have concluded that we have already "locked in" 1.3 to 2 feet of rise by 2100, even if we drastically cut emissions now.

Regarding flood insurance, here is what survey respondents reported:

- 44 percent said they purchased flood insurance because it was mandatory;
- 21 percent said they purchased flood insurance voluntarily;
- 33 percent said they did not have coverage; and
- 2 percent did not know whether they had coverage.

The good news here is that New York is doing better than the U.S. on average. A majority (65 percent) of folks carry flood insurance here, compared to just about 50 percent nationwide. But one-third of respondents reported not carrying insurance. As difficult as we know dealing with the NFIP can be, flood insurance is incredibly important for future financial security, not to mention mandatory if you have a federally backed mortgage. Of those without insurance, 29 percent reported having had flood insurance in the past, but canceling or letting the policy lapse. If you haven't experienced a flood for a couple of years, it can be easy to think that you don't need to carry insurance because the risk must not be that high. But this is wrong—your actual flood risk hasn't changed.

Risk perception is one of those tricky things, and not just where floods are concerned. We tend not to think that bad things will happen; if they do happen, we tend not to think they'll happen to us; and if they do happen to us, we tend not to think that it will be that bad. But this kind of thinking can leave us

unprepared, meaning headaches and heartaches when disaster strikes. The risk experts at Wharton provide two useful correctives to the way we all tend to understand flood risk:

1. FEMA and the NFIP use the concept of the 1-in-100 year flood event, particularly when they explain how the boundaries of flood hazard areas are set and how flood probabilities are calculated. But this is misleading. What we're really talking about is over a 20 percent chance of flooding in the next 25 years—that's well within the amount of time that you'll have a mortgage.

2. We would all be wise to keep in mind that it's not just the probability of a flood that matters, but the extent of the financial hardship when a flood – even a relatively minor one – hits our property. Floods are the most costly natural hazard in the U.S. As many New Yorkers know after Sandy, it only takes one flood to wipe out the value of a home and change the course of a family's financial future.

Improving the accuracy of New Yorkers' flood risk perception is important for informing wise flood insurance purchase decisions. But we at Zone A New York would also note that taking a clearer and closer look at our risk can keep us safer, not just financially prepared—by helping us plan better and smarter going forward. Of course, we want New Yorkers to be able to afford to pay for flood damage when it happens, but we also want to *avoid that damage in the first place*, wherever and whenever possible. This means enhancing the flood resiliency of entire communities, through better building and land-use codes, as well as investment in improvements, at the household and community level, that reduce our risk. The folks at Wharton have shown us that we have some work to do to make sure we all come to grips with the problem: how high our flood risk is in New York City and how damaging floods can be. As they say, understanding the problem is the first step in doing something about it.