

Chapter 3 Risk and NFIP

The NFIP is not an actuarially sound insurance program - Under its authorizing legislation, NFIP must offer subsidized flood insurance premiums along with its full-risk premiums. As we've noted, the subsidized premiums (which fund only about 35 to 40 percent of the cost of covering the actual risk of flood damage to the insured properties) account for almost one out of every four active residential NFIP policies.

Making matters even more difficult: the NFIP's full-risk rates are often based on outdated information and processes, so even these rates may not reflect the actual risk of flood-related loss.

So, the NFIP does not operate like most private insurance companies. From an actuarial standpoint, the biggest differences between it and conventional insurers are that the NFIP is:

1. not structured to build a capital surplus,
2. likely unable to purchase reinsurance to cover catastrophic losses,
3. unable to reject high-risk applicants, and
4. subject to statutory limits on rate increases.

That last point bears repeating: Many NFIP-insured property owners pay premium rates that do not reflect the full, long-term risk of flooding - and the law limits the NFIP's ability to correct the inefficiencies.

So, the NFIP allows some insured property owners to continue to pay rates that Plan underwriters and administrators know do not reflect reassessments of their properties' flood risk. And these aren't even what the NFIP means when it uses the term "subsidized rates," although - strictly speaking - they could be called that. (To avoid confusion, the NFIP refers to these rates as "grandfathered rates.")

FEMA documents state that properties are grandfathered in order to recognize policyholders who have complied with their original FIRM, have remained loyal NFIP customers, or both. In general, two categories of buildings may be grandfathered into the program

1. those built in compliance with the FIRM that was in effect at the time of construction and
2. those built before a FIRM was in effect or that were not in compliance at the time of construction.

For those buildings in compliance at the time of construction, property owners need to provide documentation of the date of the original FIRM and the property's flood zone, base flood elevation (BFE) and other map-related information. Properties that were not in compliance generally can be grandfathered if they have had continuous flood insurance and if the building has not been altered in certain ways.

While FEMA does not consider the premiums on these properties to be subsidized because they are based on the average risk for the whole class to which they had been assigned previously, they share two characteristics with subsidized rates:

1. rates based on new FIRMs should more accurately reflect flood risk, but grandfathered properties will not be charged those rates; and
2. the grandfathered status of a property continues indefinitely, even when the property is sold.

In most property and casualty insurance lines, state assessments are often passed through to policyholders. As a result, policyholders living in less risky locations also contribute to cover the

shortfall - a scenario known as cross-subsidization.

In those states where assessments cannot be passed through in some manner, private insurers must pay the assessments while at the same time paying large claims from their own policyholders. In such instances, some companies may be reluctant to continue offering coverage in the state or may become insolvent.

FEMA officials acknowledged that property owners that obtain grandfathered rates for their homes are being cross-subsidized by other policyholders in the same zone that are paying higher rates. For example, under grandfathering, repetitive loss properties remapped into a higher-risk zone instead would pay a rate generally charged to lower-risk properties.

These are pre-FIRM properties that were built before detailed flood hazard data and flood elevations were provided to the community and usually before the community enacted comprehensive regulations on floodplain regulation.

The officials also stated that in making this decision they took into consideration several concerns:

1. potentially higher rates that could cause property owners not to buy insurance or to lose their properties,
2. adverse reactions to FEMA as the result of these higher rates,
3. the burden on insurance agents of obtaining new map determinations and information for every policyholder, and
4. the likelihood of communities resisting new maps due to the potential for large rate increase

While grandfathered rates are used to keep existing policyholders, FEMA has not taken steps to measure the impact of these rates on the program's financial condition. FEMA officials said that they currently had limited data on new or existing grandfathered properties and are just beginning to explore ways to track these properties. For example, they had not tracked the number of grandfathered properties or calculated how much lower grandfathered premiums are than the actual rates.

As a result, they did not know the effect of grandfathered properties on the program's total premium collection and the extent to which these rates deviate from fully risk-based rates. Without this information, FEMA's ability to address the financial impact of such properties on NFIP's financial health is limited.

Why can't the NFIP charge premiums high enough to build a capital surplus for years when there are unusual or catastrophic losses? Because the program was enacted to encourage property owners in vulnerable areas to join the program and maximize the number of participants. Its "primary public policy goal" is to provide flood insurance in flood-prone areas to property owners who otherwise would not be able to obtain it.

In other words, it's designed to lose money.

Which leads to its second big problem: Unlike private insurance companies, NFIP assumes all the risk for the policies it sells.

Private insurers typically retain only part of the risk that they accept from policyholders, ceding a portion of the risk to reinsurers (insurance for insurers). This mechanism is particularly important in the case of insurance for catastrophic events, because the availability of reinsurance allows an insurer to limit the possibility that it will experience losses beyond its ability to pay.

NFIP's lack of reinsurance, combined with the lack of structure to build a capital surplus, transfers much of the financial risk of catastrophic floods to the Treasury Department and - ultimately - to the American taxpayer.

A separate - but simultaneous - problem: The NFIP is required to accept virtually all applications for insurance, unlike private insurers, which can reject applicants for a variety of reasons. Because it can't deny insurance on the basis of frequent losses, the NFIP is less able to offset the effects of

adverse selection; that is the phenomenon in which those people or entities most likely to purchase insurance are also the most likely to experience losses.

Adverse selection usually leads to market inefficiencies: such as concentrations of policyholders in the riskiest areas.

This problem is further compounded by the fact that those at greatest risk are required to purchase insurance from NFIP if they have a mortgage from a federally regulated lender.

Finally, by law, the Plan is prevented from raising rates on each flood zone by more than 10 percent each year. While most states regulate premium prices for private insurance companies on other lines of insurance, they generally do not set limits on premium rate increases, instead focusing on whether the resulting premium rates are justified by the projected losses and expenses.

These rates allow policyholders with structures that were built before floodplain management regulations were established in their communities to pay premiums that represent about 35 to 40 percent of the actual risk premium.

"Repetitive Loss" Properties

In reauthorizing NFIP in 2004, Congress noted that repetitive loss properties - those that have had two or more flood insurance claims payments of \$1,000 or more over 10 years - constituted a significant drain on NFIP resources.

According to the NFIP's own numbers, repetitive loss properties represent only about one percent of its total number of policies - but account for 25 to 30 percent of claims.

That bears repeating: approximately one percent of NFIP policies account for between 25 and 30 percent of its claims expenses.

Various individuals and organizations have made suggestions for how the NFIP might limit its exposure to repetitive-loss property claims. For example, the Government Accountability Office (GAO) has suggested that "one option for Congress would be to substantially expand mitigation efforts and target these efforts toward the highest-risk properties."

FEMA and the NFIP have experimented with a variety of mitigation efforts for high-risk properties - including elevation, relocation and demolition. As of 2010, the NFIP had five different mitigation grant programs, each with different types of requirements, purposes and appropriations:

1. Flood Mitigation Assistance (FMA),
2. Repetitive Flood Claims (RFC),
3. Severe Repetitive Loss Pilot Program (SRL),
4. Hazard Mitigation Grant Program (HMGP), and
5. Pre-Disaster Mitigation (PDM).

Despite these efforts, the inventories of repetitive loss properties and policies with subsidized premium rates have continued to grow.

Mitigation requirements criteria could be made more stringent-for example:

- requiring all insured properties that have filed two or more flood claims (even for small amounts) to mitigate,
- denying insurance to property owners who refuse or do not respond to a mitigation offer, or
- some combination of these approaches.

While these actions would help reduce losses from flood damage and could ultimately limit costs to taxpayers by decreasing the number of subsidized properties, they would require increased funding for FEMA's mitigation programs, to elevate, relocate, or demolish the properties, would be costly to taxpayers, and could take years to complete.

Congress could also consider changes to address loopholes in mitigation and repurchase requirements that allow policyholders to avoid mitigating by simply not responding to FEMA's requests that they do so. FEMA could be required to either drop coverage for such properties or use eminent domain to seize them if owners fail to respond to FEMA's mitigation requests. Moreover, Congress could streamline the various mitigation grant programs to make them more efficient and effective.

Not all repetitive loss properties are part of the subsidized property inventory, but a high proportion receives subsidized rates, further contributing to NFIP's financial risks. While Congress has made efforts to target these properties, the number of repetitive loss properties has continued to grow, making them an ongoing challenge to NFIP's financial stability.

The NFIP'S Financial Issues

The number of policies receiving subsidized rates has grown steadily in recent years and without changes to the program will likely continue to grow, increasing the potential for future NFIP operating deficits.

FEMA estimates that properties covered by policies with subsidized rates experience as much as five times more flood damage than compliant new structures that are charged full-risk rates.

The result is predictable: As of October 2008, NFIP owed interest payments of \$730 million a year to Treasury and had to borrow more from the Treasury to make these payments.

The program, "as currently designed," is not likely to generate sufficient revenue to repay this debt.

As of June 2008, NFIP's average non-catastrophic historical loss year (which excludes Hurricanes Katrina, Rita, and Wilma) is about \$1.3 billion. The combined outlays for loss and loss adjustment expenses of around \$1.3 billion, administrative expenses of approximately \$1 billion, and interest payments of approximately \$0.7 billion exceed the program's current premium collection of approximately \$2.6 billion. Under current conditions, it is unlikely that NFIP will be able to meet its interest payments in most years, and the program's debt will likely grow as the program borrows to meet the interest payments.

Because of the NFIP's financial situation, the GAO has placed the program on its high-risk list - which means it's likely to cost taxpayers significantly more than its current financial reports indicate. The GAO considered the NFIP's over financial health and prospects in a 2009 report (the full text is available [here](#):). And it didn't like what it found:

[The NFIP] likely will not generate sufficient revenues to repay the billions of dollars borrowed from the Treasury Department to cover claims from the 2005 hurricanes or future catastrophic losses.

The lack of sufficient revenues highlights structural weaknesses in how the program is funded.

Also, weaknesses in NFIP management and operations, including financial reporting processes and internal controls, and oversight of contractors place the program at risk.

The potential losses generated by NFIP create substantial financial exposure for the federal government and U.S. taxpayers. While Congress and FEMA intended that NFIP be funded with premiums collected from policyholders rather than with tax dollars, the program is, by design, not actuarially sound.

NFIP's financial condition improved slightly during the late 2000s, due to an increase in the number of policyholders and moderate flood losses. And, especially in 2009, FEMA took some steps toward improving the NFIP's financial position - including paying down its debt to Treasury by almost \$850 million. However, the program was supposed to repay some \$18.5 billion owed to the Treasury Department by the end of 2010. That didn't happen.

NFIP and private flood insurance

Of course, the government isn't the only place to go for flood insurance. Some private-sector insurance companies offer coverage. But the NFIP's subsidized rates have marginalized these carriers and set the tone for the overall flood insurance marketplace.

The private-sector market for residential flood insurance is small and focuses on homes with values over \$1 million. The private commercial market is also relatively small, focusing on larger companies that use NFIP coverage to finance the deductibles on private policies.

A 2007 Rand Corp. study commissioned by FEMA estimated that between 180,000 to 260,000 private-sector insurance policies for both primary and excess coverage were in effect. Four large insurance companies provided almost all of this private flood insurance:

- 1.American International Group,
- 2.Chubb,
- 3.Fireman's Fund, and
- 4.Lloyds of London.

(Although AIG has effectively ceased to exist after its highly-publicized financial problems in 2008, its share of the private-sector flood insurance market has been maintained by successor companies.)

Private-sector flood insurance can be significantly more expensive than NFIP insurance for similar levels of coverage. So, most often, private flood insurance policies are purchased in conjunction with NFIP policies - with the NFIP policy paying an amount equal to the deductible on the private policy.

According to anecdotal evidence gathered by the GAO and other organizations that have analyzed the NFIP's operations and finances:

- the cost for a specified level of residential coverage could be as low as \$500 from NFIP and as high as \$900 from a private insurer;
- for contents insurance, the cost averages around \$350 from NFIP but around \$600 in the private market;
- large companies are the primary purchasers of private commercial flood insurance, and "several insurers and industry officials" say that private flood insurance for small to medium-sized businesses is prohibitively expensive;
- up to 80 percent of private policies provide excess coverage above the NFIP maximum and are purchased together with NFIP policies, and the remaining 20 percent is considered "first dollar" coverage;
- generally, the NFIP policy covers the deductible on the private policy - commercial policies often set the deductible at NFIP policy limits;
- private-sector insurers also generally determine their premium rates using NFIP rates, data and flood maps as a starting point - and adjust rates (usually upward) according to their own risk analyses.

Some private-sector insurers will write residential flood coverage on a primary basis, but it is much more expensive than excess insurance because primary coverage exposes the insurer to the first loss position and most flood-related losses are less than the NFIP coverage limits. This means that excess coverage is tapped only for losses above the NFIP coverage limit.

On the commercial lines side, private insurance can be purchased alone or included as part of a multi-peril property-casualty policy. While little aggregate data is available, most industry officials agree that private flood insurance for small and medium-size businesses is prohibitively expensive in most situations.

One type of flood insurance that private-sector carriers do offer - and that the NFIP, at least currently, does not - is business interruption coverage for commercial insureds. This coverage is expensive and, generally, only large companies can afford it.

Private-sector business interruption coverage for flood losses is usually available only if the purchaser also has a property-casualty policy that includes flood coverage. So, the insureds are already paying a lot for top-of-the-line coverage.

Underwriting flood-related business interruption coverage is complex; properly pricing the risks requires an extensive evaluation of a company's business model and cash flow - to determine the kinds of losses that a business interruption might involve.

Adjusting business interruption claims is also complex and often contentious, because the extent of a loss depends on the nature of the business and the circumstances surrounding the triggering flood event.

Some experts have suggested that an NFIP-subsidized business-interruption policy could be a way for smaller businesses to obtain such coverage; but adding business interruption coverage would further strain the NFIP's human and financial resources. (And sophisticated insureds would likely use NFIP business interruption coverage to cover deductibles on private policies, as they do with property coverage.)

More importantly: Because business interruption insurance is so complex to underwrite - and unless it were sold at a price adequate to cover the expected losses - it could increase the federal government's exposure to catastrophic flood losses.

Flooding happens every day in regions all across our country. A flood can happen even in areas that might not seem at risk. Floods do not always result from hurricanes; they can happen due to extreme conditions, such as rain, rapid spring melts, or high river conditions. It is not necessary to live in a coastal area to experience a flood. In 2004, Pennsylvania, which has no ocean coastline, received more than \$175 million in flood insurance payments - second only to Florida. [3] Every property owner should consider the threat of floods when insuring their homes and businesses.

The floods we tend to read about follow such events as hurricanes or nor'easters, but more floods happen every day resulting from small, localized events. Everyone must realize that it only takes a few inches of water in a home to cause thousands of dollars in damage. In fact, flooding in the United States is the number one natural hazard.

Homeowner's insurance will not cover flooding; it is necessary to protect their home and property by purchasing a flood insurance policy separately through their local insurance agent. As long as the individual's hometown is an NFIP community, most people, including those who rent, can get flood insurance. The National Flood Insurance Program wants consumers to understand the flood insurance basics, including:

You can get flood insurance nationwide.

- You can get flood insurance if you live in a floodplain or high-flood-risk area.
- You can get flood insurance if you live outside a floodplain, or low to moderate flood risk area (and at a lower cost).
- You can get flood insurance if your property has experienced a past flood.
- You can get flood insurance from agents in your area.
- You can buy flood insurance even if your mortgage broker does not require such coverage.

What does this mean? It means that just about everyone should consider purchasing flood insurance. Over 25 percent of the NFIP claims were paid in low-to-moderate flood risk areas, such as zones B, C or X.

Mandatory Purchase of Flood Insurance in High Flood Risk Zones

The Flood Disaster Protection Act of 1973 placed the requirement on federally regulated lending institutions to ensure that loans secured by buildings located in high flood risk areas are protected by flood insurance. Lenders call these areas the Special Flood Hazard Areas (SFHA). They are

Zone A and V. The National Flood Insurance Reform Act of 1994 further strengthened the requirements. Agents may view the Mandatory Purchase of Flood Insurance Guideline booklet online at <http://www.fema.gov/nfip/mpurfi.shtm>. The booklet is a guide for lending institutions, but it can help the flood insurance agent too. Agents provide important information to lenders concerning their flood insurance needs that may go beyond meeting the minimal mandatory requirements established by law.

Recommended in Moderate and Low Flood Risk Zones

Individuals may go online to determine their personal flood risk. Floodsmart.gov provides this information to anyone wishing to access it online. By entering property information, they will show the relative flood risk, links to flood insurance resources, and a list of licensed insurance agents serving the area. As we have previously stated, flood insurance is recommended even in low to moderate flood risk zones.

Why Flood Insurance is Better Than Disaster Assistance

The President must declare a major disaster before most forms of federal assistance is available. The most common form of federal disaster assistance is a Small Business Administration (SBA) low-interest disaster assistance loan, which must be repaid with interest. The average federal Individuals and Households Program (IHU) award is around \$4,000. To qualify for federal Home Repair Assistance the individual's home must have eligible relatively minor damage that can be quickly repaired. Individuals cannot qualify for federal Rental Assistance unless their home has been heavily damaged or destroyed.

Disaster assistance loans from SBA are usually more costly than flood insurance premiums, so it makes sense to purchase flood policies.

Flood Loss Avoidance

What is a flood loss avoidance?

Flood loss avoidance is a protective action policyholders take to minimize flood damage and losses to their buildings and personal property before a flood occurs.

What's covered under a Standard Flood Insurance Policy?

National Flood Insurance Program flood policies will cover up to \$1,000 in reasonable expenses incurred to protect policyholders' insured property, and up to \$1,000 to move their insured property away from a flood or imminent danger of a flood. To be eligible for this benefit, the insured property must be located in a community where:

- A general condition of flooding in the area exists; or
- An official has issued an evacuation order or other civil order for the community requiring measures to preserve life and property from flooding.

What is eligible?

Expenses to protect your property:

- Sandbags (including the sand to fill them)
- Fill to create temporary levees
- Water pumps
- Plastic sheeting and lumber used in connection with any of these items listed above
- Labor – a policyholder may claim labor, including their own or a family member's labor, at the federal minimum wage. Labor charged by a professional may also be reimbursed.

Expenses to move your property to safety:

- Up to \$1,000 for the reasonable expense to move their insured property in order to protect it from flood, or the imminent danger of flood.

What do you need to know?

- Personal property that is moved must be placed in a fully enclosed building or

otherwise protected from the elements.

- Any property removed, including a moveable home (that meets the definition of a building in the flood policy), must be placed above ground level or outside of the special flood hazard area.
- Property removed is covered by your flood policy for 45 consecutive days from the date the move begins.
- A deductible does not apply to these limits.
- The coverage does not increase the policy limits of the liability.

Paid Receipts:

Policyholders should keep copies of all receipts and a record of the time spent performing the work.

They should be submitted to their insurance adjuster when they file a claim to be reimbursed.