

A PUBLIC POLICY MONOGRAPH

# The National Flood Insurance Program: Past, Present...and Future?

*July 2011*

American Academy of Actuaries  
Flood Insurance Subcommittee



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AMERICAN ACADEMY *of* ACTUARIES

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Developed by the Flood Insurance Subcommittee  
of the American Academy of Actuaries



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The American Academy of Actuaries is a 17,000-member professional association whose mission is to serve the public and the U.S. actuarial profession. The Academy assists public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

## 2011 Flood Insurance Subcommittee

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## 1. Executive Summary

Flood insurance in the United States primarily is provided by the federal government via the National Flood Insurance Program (NFIP), in partnership with private insurers and servicing contractors. In the aftermath of the 2004 and 2005 hurricanes that struck the East and Gulf coasts of the United States, and in consideration of the substantial losses suffered in those storms, there have been calls for reform of the program. But since the NFIP is substantively different from typical insurance, few insurance professionals and public policymakers are sufficiently familiar with the NFIP to recognize the broad consequences of changing it. This monograph is focused on the background and the current structure of the program and the primary issues surrounding the program today.

The U.S. Congress passed the National Flood Insurance Act of 1968 (NFIA) to provide a means by which the risk of flood could be insured in the United States. Private-sector insurance companies long had viewed the risk of flood events as uninsurable. This act created the NFIP, a mechanism by which the federal government could act as the insurer. The NFIP is a far-reaching program sponsored by the federal government and administered, in large part, by nearly 90 property and casualty insurers. The program connects and influences the behavior of many constituencies in the United States, including home and business owners; builders; local building permitting and flood plain management officials; lenders; insurers; state, local, and federal government officials; and regulators.

Because the NFIP is a public program that encompasses public policy as well as insurance goals, developing actuarially sound premium rate structures has been one of the program's many important objectives. The NFIP, as a public insurance program, poses some significant actuarial challenges, as the structural differences between it and private sector insurers result in differences in what constitutes an "actuarially sound" premium level. These and other key differences are outlined in this paper.

From its inception in 1968, the NFIP has been guided by its three foundations:

- Flood risk identification. Mapping the flood risks of each community and publishing the Flood Insurance Rate Maps (FIRMs);
- Flood plain management. Promulgating minimum building and flood plain management standards and encouraging communities to exceed the minimum standards;
- Flood insurance. Providing a mechanism for individuals to prefund the risk of flood losses.

In addition, a long-term goal of the NFIP has been to reduce the demand for and reliance on disaster assistance after floods.

Several issues are highlighted in this monograph:

- Pursuant to the NFIA, the enabling legislation of the NFIP, there are two basic types of premium rates: (1) “risk premium,” “full-risk,” or “actuarial” rates, and (2) “other than risk premium,” “discounted,” or “subsidized” rates. Each type presents a challenge to actuarial principles. Actuarial rates, for which expected future losses are used as a base, reflect the other costs of risk transfer differently than private sector insurance. Subsidized rates are lower than actuarial rates and thus will be inherently inadequate to fully fund future losses.
- Within the NFIA, flood risk premium rates are to be “based on consideration of the risk involved and accepted actuarial principles ... to make such insurance available on an actuarial basis ...”
- The NFIP policy form provides that all disputes arising from claims-handling are governed by federal regulations. Regarding agent activities at the point of sale, however, the NFIA states that an agent or broker is not to be held harmless for error or omission. In addition, extra-contractual causes of action have been used to file claims arising from flood policies in state court.
- A mandatory purchase requirement exists for certain property owners in special flood hazard areas (SFHAs). Since its inclusion in the Flood Disaster Protection Act of 1973, the mandatory purchase requirement has increased the market penetration rate. Despite this increase, challenges to its enforcement remain.
- The availability of assistance from disaster aid programs after a flood event does not lessen the importance of maintaining flood insurance. The viewpoint of some at-risk consumers, however, is that flood insurance is not necessary. That impression might have been exacerbated by the extent to which government aid flowed to victims in the wake of the hurricane events of 2005.
- Repetitive loss properties seem to be much more at risk than the average property insured by the NFIP. Whether the disproportionate cost to the NFIP from these properties should be addressed through pricing and/or process changes is controversial.
- Properties most at risk for flooding are those located near rivers and/or coasts. The requirements of these two groups of properties differ, and those differences can cause conflicts regarding political and funding concerns. The differences between riverine and coastal flooding also contribute to a perception that the premium rates in hurricane-prone states are subsidized by those that are not hurricane-prone.
- Flood hazard maps must be updated continually to better identify properties located within SFHAs. The Risk Mapping, Assessment and Planning (MAP) program provides digital access to and dissemination of new maps, which is expected to reduce the costs associated with such tasks. For the first time, the new flood hazard maps accurately reflect environmental changes and technological advancements.<sup>1</sup> The Federal Emergency Management Agency’s (FEMA) view is that the current Risk MAP program, like the Flood Map Modernization Program before it, will enhance the quality, reliability, and availability of the maps.

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<sup>1</sup> [http://www.dhs.gov/ynews/testimony/testimony\\_1299855117667.shtm](http://www.dhs.gov/ynews/testimony/testimony_1299855117667.shtm) (last visited on June 29, 2011).

The NFIP is dependent upon congressional action to remain operational past its statutory sunset date. The current sunset date is Sept. 30, 2011, the result of the most recent of several temporary extension bills, some of which were retroactively passed by Congress and signed by President Obama following the program's scheduled expiration. In early 2010, the NFIP was permitted to lapse three separate times before extensions were passed. In each instance, enacting legislation extending the NFIP was made retroactive to the lapse dates.

To ensure the ongoing viability of the NFIP following unprecedented loss activity in 2004 and 2005, members of Congress advanced several proposals during subsequent legislative sessions. None of the proposed reforms passed in that session of Congress or since. At the time of this publication, in the 112<sup>th</sup> Congress, neither the House nor the Senate had brought legislation to their respective floors, although such action has been anticipated. This monograph provides actuarial insights on key issues addressed by proposed reforms, as well as examination of the perspectives of several major stakeholder groups.

## 2. Purpose and Scope

This monograph is presented to inform the taxpaying public, federal and state policymakers and regulators, actuaries, agents, and other insurance professionals about the NFIP so that they may participate in and contribute to the public debate with a comprehensive, financial frame of reference. It contains discussion of the background and intent of the program, an outline of federal legislative and regulatory actions that have affected flood insurance in the United States, and an examination of how the program has evolved over time. And, perhaps most significantly, this monograph also identifies key differences between the NFIP and conventional, privately-offered insurance found in the marketplace.

In addition, there is an examination of some of the important issues that underlie recent discussions, with explanation of the background and specific considerations of each issue and a description of how it would affect the financial condition of the NFIP.

This monograph is not intended to be an in-depth examination of the actuarial soundness<sup>2</sup> of the ratemaking and financial structure of the NFIP. Rather, this paper is intended primarily to provide an educational foundation upon which to discuss the key issues affecting the NFIP. While an in-depth analysis of the ratemaking and financial structure of the NFIP from an actuarial standpoint would be a valuable study, it is beyond the scope of this monograph.

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<sup>2</sup> As used herein, *actuarial soundness* is explained in the Casualty Actuarial Society (CAS) Statement of Principles Regarding Property and Casualty Insurance Ratemaking, located at <http://www.casact.org/standards/princip/sppcrate.pdf> (last visited on June 29, 2011).

### 3. Background—History and Intent of Program<sup>3</sup>

There have been numerous changes to the program since its inception in 1968. Many of the changes were prompted by large flood-loss events, many of which triggered significant claims payments under NFIP policies. A large proportion of the payments have been made for losses caused by hurricanes, tropical storms, and major riverbank flooding. The most costly event to date was Hurricane Katrina, which made landfall on Aug. 29, 2005, and caused losses greater than the prior total amount paid out by the program.<sup>4</sup> A comprehensive summary of the background, history, and intent of the program can be found in Appendix A of this monograph.

### 4. Structure of the National Flood Insurance Program

The NFIP is administered, in large part, by nearly 90 property and casualty insurers.<sup>5</sup> A separate direct flood vendor administers policies written directly with the government. The program affects many constituencies nationwide, including home and business owners; builders; realtors; local building permitting and flood plain management officials; lenders; insurers; insurance agents; state, local, and federal government officials; and regulators.

In its role as the manager of the NFIP, FEMA identifies and maps areas of flood risk, promotes the appropriate management of the flood plain, and provides insurance for properties insured by the NFIP. These services are intended to reduce disaster aid payouts by requiring flood-exposed property owners to contribute to the cost of their potential losses through the purchase of insurance.

The structure and administration of the NFIP is complicated. The NFIP is directed by the Federal Insurance and Mitigation Administration of FEMA, which is part of the U.S. Department of Homeland Security. The insurance operations of the NFIP are carried out mostly by the participating property and casualty insurers (the write-your-own [WYO] companies), which operate under a business arrangement with FEMA governed by statute and regulation.<sup>6</sup>

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<sup>3</sup> “A Chronology of Major Events Affecting The National Flood Insurance Program,” December 2005. Completed for the Federal Emergency Management Agency Under Contract Number 282-98-0029. The American Institutes for Research, the Pacific Institute for Research and Evaluation, Deloitte & Touche LLP.

<sup>4</sup> <http://www.gao.gov/new.items/d07169.pdf> (last visited on June 29, 2011).

<sup>5</sup> <http://www.fema.gov/nfipInsurance/search.do;jsessionid=B77A973206922C733DE236E1EA5B5C6F.WorkerPublic2> (last visited on June 29, 2011); “The Choice is Yours – WYO Companies Actively Writing Flood Insurance 2010-2011,” FEMA F-073 (3/11).

<sup>6</sup> <http://www.fema.gov/library/file;jsessionid=24FA340AF1B550553838D4AD8C1F8841.Worker2Library?type=originalAccessibleFormatFile&file=guidewyo.txt&fileid=6ebef10-0941-11e0-a865-001cc4568fb6> (last visited on June 29, 2011).

Two important programmatic features of the NFIP, both of which have operational impacts, are the existence of its sunset provision and its periodic need to borrow money from the U.S. Treasury to pay claims.

*Sunset Provision:* The NFIA contains a sunset provision.<sup>7</sup> The NFIP’s expiration date has been extended from time to time by Congress, generally for five-year periods, but sometimes on a more temporary, stopgap basis. The stopgap extensions generally have been adopted when Congress was in the midst of a more comprehensive NFIP review of reauthorization, with the intention of drafting reform legislation that would extend the program for longer periods of time. The sunset provision has the potential to cause concern to NFIP stakeholders if Congress delays in setting a new expiration date as the sunset date approaches, primarily because the sunset provision leaves open the possibility of a lapse in the NFIP.

*NFIP Borrowing Authority:* The National Flood Insurance Act of 1968 contains a specific cap on the NFIP’s borrowing authority. The cap originally was \$1 billion. In 1996, Congress raised it to \$1.5 billion.<sup>8</sup> After the catastrophic claims from the 2005 hurricanes, especially Dennis, Katrina, Rita, and Wilma, Congress raised the NFIP’s borrowing authority several times. The current NFIP borrowing cap is \$20.725 billion, established in June 2010 by the National Flood Insurance Extension Act of 2010.<sup>9</sup>

The amount that NFIP borrows from the U.S. Treasury cannot exceed the existing cap. When NFIP borrowing approaches the existing cap, the NFIP warns the WYO companies and the NFIP servicing agent to be prepared to stop making claims and other payments related to their flood programs.

The sunset provision and the borrowing authority cap can be perceived at times as critical weaknesses of the NFIP. Congress can and does delay extending the NFIP or delay increasing the borrowing authority cap. If Congress were to postpone such decisions during critical times, such as after major flooding events, unfortunate dislocations could occur, such as delays in payments to claimants and discontinuation of claims-handling activities.

Additional details of the NFIP’s oversight structure are provided in Appendix B.

## **5. The Premium Rate Structure of the NFIP**

The NFIP is a public program that encompasses social goals through insurance goals. Developing actuarially sound premium rate structures has been an important consideration of the program.

<sup>7</sup> National Flood Insurance Act of 1968, Section 1319.

<sup>8</sup> US Code, Title 42, Chapter 50, Subchapter I, Section 4016, Amendments, 1996 – Subsection (a)(2).

<sup>9</sup> <http://www.gpo.gov/fdsys/pkg/PLAW-111publ196/pdf/PLAW-111publ196.pdf> (last visited on June 29, 2011).

The original NFIA established the NFIP providing for classes of business to be priced using risk premium rates (usually referred to as full-risk or actuarial rates) as well as classes that have “other than risk premium rates” (usually referred to as subsidized or discounted rates). Sections 4014 and 4015, respectively, of Title 42 of the U.S. Code provide the legislative basis for those two general premium classifications.<sup>10</sup> At times, Congress and FEMA have prioritized societal and marketing goals, such as increasing the policies in force and gaining acceptance of new FIRMs by affected communities, over developing and maintaining full-risk rates.

FEMA’s actuarial staff annually publishes an *NFIP Actuarial Rate Review* memorandum.<sup>11</sup> This memorandum describes the NFIP’s premium-rate determination methodology and provides explanations for rate changes, along with updated statistics. For example, the memo published in support of the Oct. 1, 2010, rate changes included Exhibits A and D, which are reproduced in Appendix C here. Those exhibits provide NFIP policy distribution data and other information about premiums.

Approximately 80 percent of NFIP policyholders receive full-risk rates. NFIP premium rates are reset annually by class of business, with about half of the full-risk rates determined using a hydrologic/financial model originally developed by the U.S. Army Corps of Engineers. The other half of the full-risk rate properties primarily are located outside the SFHAs, where not enough detailed information exists to use the hydrologic/financial model for rate-setting. Actuarial and engineering judgments and underwriting experience are used to set rates for those areas. The NFIP actuarial staff periodically conducts analyses of claims, trends of in force growth, and expenses by class of business to update the model. To determine rate classifications, structures are categorized by flood zone according to their location on a FIRM, their elevation relative to the base flood elevation (BFE), and by occupancy type (e.g., by residential versus non-residential), along with other specific determinants of risk.

Subsidized premium rates are determined differently than full-risk rates. Details about the NFIP’s rate-making process can be found in Appendix C.

The rationale for allowing subsidized classes of business was to permit the large inventory of structures (known as pre-FIRM structures) that were built in SFHAs prior to the general implementation (in approximately 1974) of FIRMs and flood-related building codes to be covered by flood insurance at reasonable rates. Also, a goal of the NFIP always has been one of encouraging participation, even if that meant that some property owners would pay actuarially inadequate premiums. Those subsidized property owners have been and are prefunding at least part of the cost of their flood losses. This provides additional NFIP premium reserves to fund losses as well as, ideally, lessening the public burden of providing future disaster assistance. In addition, widespread participation in the

<sup>10</sup> <http://codes.lp.findlaw.com/uscode/42/50/I/4014> (last visited on June 29, 2011).

<sup>11</sup> [http://www.fema.gov/library/file.jsessionid=A6C64BEBC128FC0F1F83DE142E0D724A.Worker2Library?type=publishedFile&file=actuarial\\_rate\\_rev2009.pdf&fileid=55182cb0-94ea-11df-a6e7-001cc4568fb6](http://www.fema.gov/library/file.jsessionid=A6C64BEBC128FC0F1F83DE142E0D724A.Worker2Library?type=publishedFile&file=actuarial_rate_rev2009.pdf&fileid=55182cb0-94ea-11df-a6e7-001cc4568fb6) (last visited on June 29, 2011).

NFIP engenders public awareness of flood dangers and encourages local officials to take the flood plain-management actions necessary to make their communities safer. The NFIP estimates that approximately one-fifth of current policyholders are paying subsidized rates.<sup>12</sup>

## 6. Actuarial Principles, Actuarial Soundness, and the NFIP

The enabling legislation that established the NFIP specifically provided for two distinct classes of business, which were differentiated by two types of premium rates:

- *Risk premium rates*, more commonly known as full-risk or actuarial rates, which would be “based on consideration of the risk involved and accepted actuarial principles,”<sup>13</sup> and
- *Other than risk premium rates*, more commonly known as subsidized rates, “which would be reasonable, would encourage prospective insureds to purchase flood insurance and would be consistent with the purposes of” the legislation.<sup>14</sup>

The enabling statute and the actions of the NFIP determined that the program would not be actuarially sound in the aggregate, because the premiums for the policies that receive subsidized rates are not expected to match their full long-term costs. In fact, even some classes of policies subject to full-risk rates may not be considered actuarially sound because of statutory requirements to provide premium rates that ignore specific known risks (sometimes temporarily), for specific groups of policyholders.<sup>15</sup> Those known inadequacies, however, can be compensated for in the aggregate by increasing the overall level of rates.

Although full-risk rates generally are intended to be calculated according to accepted actuarial principles, agreement among the various stakeholders about what accepted actuarial principles should be for a program like the NFIP remains elusive. There are many differences between the NFIP and private-sector insurance programs that affect appropriate application of actuarial principles and determination of actuarial soundness.

One key difference involves the cost of capital. Because private-sector insurance companies must prefund their losses, they place large amounts of capital at risk, and they generally must earn a profit. This creates a need for those insurers to include a risk load component that includes the cost of capital in their rates. The NFIP does not require a risk load because the federal government could, theoretically at least, provide unlimited liquidity and credit.

<sup>12</sup> <http://www.gao.gov/new.items/d11429t.pdf> (last visited on June 29, 2011).

<sup>13</sup> Title 42 of the U.S. Code, Section 4014, paragraph (a)(1)(A).

<sup>14</sup> Title 42 of the U.S. Code, Section 4014, paragraph (a)(2).

<sup>15</sup> Title 42 of the U.S. Code, Section 4014, paragraphs (e) and (f), provide that, under certain specific conditions, if a community is making “adequate progress on the construction of a flood protection system,” or if the community is actively in the process of adequately restoring such a flood protection system (primarily referring to dams or levees), the buildings so protected are eligible for flood insurance rates as if the protection system was already accredited to meet FEMA’s standards of protection.

Instead of prefunding their losses, the NFIP can handle deficits *after* major events by borrowing funds from the U.S. Treasury.

For the NFIP, the differences that affect ratemaking include mandatory purchase requirements, specific statutory items like the 10 percent cap on premium increases, the legislative mandate of FEMA, and the fact that the NFIP is not expected to hold required capital or earn a profit.

***Actuarial Standards of Practice and Statements of Principles***

There are a large number of Actuarial Standards of Practice (ASOPs), promulgated by the Actuarial Standards Board housed within the American Academy of Actuaries; and Statements of Principles (SOPs), promulgated by the Casualty Actuarial Society (CAS);<sup>16</sup> which constitute the body of currently accepted actuarial principles for property insurance ratemaking and risk classification. Much of that guidance is applied similarly by NFIP actuaries as by those in the private sector. The public nature of the program and FEMA’s public policy goals, however, sometimes conflict with the goal of achieving actuarial soundness. The following are the key standards and other resources that are particularly relevant to those sometimes conflicting goals:

- ASOP No. 30, [\*Treatment of Profit and Contingency Provisions and the Cost of Capital in Property/Casualty Insurance Ratemaking\*](#)
- ASOP No. 12, [\*Risk Classification \(for all practice areas\)\*](#)
- CAS, [\*Statement of Principles Regarding Property and Casualty Insurance Ratemaking\*](#)
- CAS, [\*Statement of Principles—Risk Classification\*](#)
- ASOP No. 41, [\*Actuarial Communications\*](#)
- ASOP No. 38, [\*Using Models Outside the Actuary’s Area of Expertise \(Property and Casualty\)\*](#)

As discussed below, the NFIP’s actuarial methodology differs from private-sector actuarial practice primarily in two areas: cost of capital; and the classification of risks.

***Actuarial Principles Regarding NFIP Rates***

Because the NFIP’s overall premiums are inadequate by design, the program should be expected in some years to produce deficits that will not be made up over time. In the early

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<sup>16</sup> The CAS’s purposes “are to advance the body of knowledge of actuarial science applied to property, casualty and similar risk exposures, to establish and maintain standards of qualification for membership, to promote and maintain high standards of conduct and competence for the members, and to increase the awareness of actuarial science.” See [www.casact.org](http://www.casact.org) (last visited on June 29, 2011).

years of the NFIP, the Federal Insurance Administration reduced rates several times to encourage participation.<sup>17</sup> Then, in 1981, the NFIP initiated a multiyear series of rate increases for all subsidized policies, which made the program more fiscally sound.<sup>18</sup> From the mid-1980s until August 2005, the NFIP essentially was self-supporting; it was able to pay back to the U.S. Treasury all loans incurred over that period.<sup>19</sup> Hurricane Katrina changed that. (During 2008 and 2009, Congress debated whether to forgive the NFIP's \$17.75 billion debt to the U.S. Treasury in the post-Katrina environment. At least in the initial period of the 112<sup>th</sup> Congress, legislative proposals did not include the disposition of the outstanding Treasury debt.)

In accordance with relevant actuarial principles, the basis for the NFIP's full-risk rates is the expected values of annual losses, including those due to catastrophic events, differentiated by rating class. Also, net premiums incorporate the expected values of all expenses of the NFIP, including the annual expenses of maintaining the FIRMs (though not the prior Map Modernization program<sup>20</sup>, which was funded by a congressional appropriation). Investment income is not considered in the rates; it is assumed to be immaterial.

In a departure from actuarial principles as recommended by ASOP No. 30, there has not historically been calculated an explicit cost of capital in the NFIP ratemaking process. It is argued that the federal government provides the capital backing of the NFIP in the form of its guarantee that all legitimate claims will be paid. But the NFIP is not expected to earn any return on capital. The NFIP does have contingency loadings in its gross premium rates.<sup>21</sup>

### *Actuarial Principles Regarding NFIP Risk Classes*

Another deviation from private-sector actuarial practices is in the classification of risks. The largest variation in practice is evidenced in the subsidized rates discussed above. The NFIP has a number of subsidized risk classes, comprising more than 20 percent of the in force policy base.<sup>22</sup>

Subsidized risk classes aside, additional deviations from typical private-sector programs regarding risk classification include:

<sup>17</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>18</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>19</sup> <http://www.fas.org/sgp/crs/misc/R40650.pdf> (last visited on June 29, 2011); see also

[http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>20</sup> Created and funded by Congress, the Map Modernization program was intended to create flood maps for use by the NFIP that more accurately reflect recent developmental and natural changes in the environment. The program utilized revised data and improved technologies to identify flood hazards and better reflect actual risk. See [http://www.fema.gov/plan/prevent/fhm/mm\\_why.shtm](http://www.fema.gov/plan/prevent/fhm/mm_why.shtm) (last visited on June 29, 2011).

<sup>21</sup> The current loadings are 20 percent of net premiums for the most risky buildings, considered to be those located in the V-zones (buildings exposed to the water velocities due to wave motion), and 10 percent for all other risks. Those loadings are primarily designed as a cushion to mitigate the extreme volatility in losses from flood events, but they also serve to compensate for possible underestimations of catastrophic losses and other assumptions that may turn out to be non-conservative in the long run.

<sup>22</sup> <http://www.gao.gov/new.items/d11429t.pdf> (last visited on June 29, 2011).

- Encouragement of sound flood plain management practices and the rapid adoption of FIRMs by local communities have led to the practice of permanently grandfathering, on a less than full-rate basis, buildings that were built in compliance with an existing FIRM at the time but are now no longer compliant, based on a subsequent FIRM. FEMA, however, compensates for the grandfathered buildings by raising rates in the B, C, and X zones, such that overall rates for those zones are actuarially adequate.
- The NFIP is subject to a statutory cap on annual premium increases of 10 percent by risk class.<sup>23</sup> That restriction may have, at times, led to inadequate premiums for certain risk classes.
- Due to market forces and the need to mitigate against adverse selection, private-sector insurance programs tend to have a large number of relatively homogeneous risk classes. As a public program, the NFIP generally is not subject to the same market forces as the private sector. To facilitate the operations of the program, and because of its unique public policy goals, NFIP risk classes therefore are very broad.<sup>24</sup> As a result, there are only five major risk classes nationally with separately differentiated rates:
  - AE zone, which describes “areas subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods.”<sup>25</sup> Rates are differentiated by elevation relative to base flood elevation (BFE)
  - VE zone, which describes “areas subject to inundation by the 1-percent-annual-chance flood event with additional hazards due to storm-induced velocity wave action.”<sup>26</sup> Rates are differentiated by elevation relative to BFE.
  - X zone, which describes “moderate flood hazard areas ... and are the areas between the limits of the base flood and the 0.2-percent-annual-chance (or 500-year) flood.”<sup>27</sup> Describes standard risks outside of special flood hazard areas (SFHA), that is, in B, C, and X-zones
  - Preferred risk policies (PRPs)—for preferred risks, located in B, C, and X zones
  - Subsidized—for pre-FIRM buildings located in SFHAs

<sup>23</sup> <http://www.cbo.gov/ftpdocs/86xx/doc8648/hr3121.pdf> (last visited on June 29, 2011).

<sup>24</sup> When the NFIP was first created, rating distinctions were much finer. For example, the AE and VE zones each were divided into separate subzones based on topographies and were refined further based on community-specific rating factors. In the late 1970s, the rating scheme was simplified to its current state.

<sup>25</sup> [http://www.fema.gov/plan/prevent/floodplain/nfipkeywords/zone\\_ae.shtml](http://www.fema.gov/plan/prevent/floodplain/nfipkeywords/zone_ae.shtml) (last visited on July 7, 2011).

<sup>26</sup> [http://www.fema.gov/plan/prevent/floodplain/nfipkeywords/zone\\_ve.shtml](http://www.fema.gov/plan/prevent/floodplain/nfipkeywords/zone_ve.shtml) (last visited on July 7, 2011).

<sup>27</sup> [http://www.fema.gov/plan/prevent/floodplain/nfipkeywords/flood\\_zones.shtml](http://www.fema.gov/plan/prevent/floodplain/nfipkeywords/flood_zones.shtml) (last visited on July 7, 2011).

For example, an AE-zone building located in a West Virginia river valley at a specific elevation would be charged the same premium as a similar AE-zone building with the same coverage details and elevation rating that was located in a flat South Carolina flood plain—regardless of whether the two buildings had significantly different flood-loss histories and assuming both had the same community rating system status.

***Actuarial Principles Regarding Actuarial Soundness***

The Casualty Actuarial Society’s [\*Statement of Principles Regarding Property and Casualty Insurance Ratemaking\*](#) sets forth the following four principles for a set of premium rates to be considered actuarially sound:

- Principle 1: A rate is an estimate of the expected value of future costs.
- Principle 2: A rate provides for all costs associated with the transfer of risk.
- Principle 3: A rate provides for the costs associated with an individual risk transfer.
- Principle 4: A rate is reasonable and not excessive, inadequate, or unfairly discriminatory if it is an actuarially sound estimate of the expected value of all future costs associated with an individual risk transfer.

It is also stated in actuarial guidance that, if a law or regulation conflicts with the provisions of an actuarial standard, the actuary should develop rates in accordance with the law or regulation.<sup>28</sup>

For policies that are subject to full-risk rates, the NFIP’s rate making process can be said to follow Principle 1 above. The lack of a cost of capital provision in the NFIP rates could be viewed as falling short of Principle 2. On the other hand, the NFIP’s unique position as an insurance program backed by the federal government could preclude the need for a cost of capital element in the premium rates.

The ubiquity of grandfathering and the NFIP’s wide rate classes could be interpreted as counter to Principle 3 because there are cross-subsidies within rating classes. On the other hand, in administering any insurance system, managers should balance the cost of estimating an individual risk transfer and the expense of maintaining a system of extensive rate classifications. Private sector insurance systems tend to have substantially more detailed data and therefore can develop more refined rate structures. Even then, most probably could be found to contain some cross-subsidies within their rate classifications. To make the NFIP rating scheme more specific, it would have to collect more refined data.

The extent to which Principle 4 may be violated depends on conclusions reached about whether the NFIP’s structure violates Principles 1-3.

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<sup>28</sup> *Introduction to the Actuarial Standards of Practice*, Section 4.6.2, [http://www.actuarialstandardsboard.org/pdf/asops/Introduction\\_113.pdf](http://www.actuarialstandardsboard.org/pdf/asops/Introduction_113.pdf) (last visited on June 29, 2011).

The administration of the NFIP involves many unique considerations that differentiate it from any private sector insurance program.

## 7. The Write-Your-Own (WYO) and Direct Programs

The NFIP's interface with insurance producers and the general public is through the WYO program and the direct program. The WYO program, a cooperative undertaking of FEMA and the private sector insurance industry, began in 1983.<sup>29</sup> Since that time, the WYO program gradually has become the dominant distributive and administrative arm of the NFIP. As a result, the WYO program accounts for a large majority of the approximately 5 million NFIP policies currently in force.<sup>30</sup> The federal government backs the insurance contracts of the NFIP entirely. Although the participating insurers have far-reaching operational involvement in the WYO program, they bear none of the underwriting risk.

In June 2010, one of the WYO companies, which handled approximately 15 percent of NFIP policies, announced its withdrawal from the WYO program, effective as of Sept. 2010. The company's stated reason for withdrawing was based in part on the numerous program interruptions caused by delays in reauthorization and reform of the NFIP. Since 2002, there have been 11 last-minute reauthorizations of the NFIP, and, on several occasions, the program was allowed to lapse. These lapses and resumptions of coverage require a large company to dedicate significant resources to coordinating communications with its customers, employees, and agents. The withdrawal could strain the resources of the NFIP Direct program, which must service the affected policyholders. This withdrawal is an example of the potential market disruptions that can result from failure to reauthorize the program for an extended period of time in a timely fashion.

The stated goals of the WYO program<sup>31</sup> are to:

- Increase the NFIP policy base and the geographic distribution of policies;
- Improve service to NFIP policyholders through the infusion of insurance industry knowledge; and
- Provide the insurance industry direct operating experience with flood insurance.

The WYO program operates within the NFIP and is subject to its rules and regulations. The WYO program allows participating property and casualty insurance companies to write and service federal flood insurance in their own names. The companies receive an expense allowance for marketing, policies written, policy administration, and claims processed, while the federal government retains responsibility for underwriting and claims policy, product design, and pricing and underwriting losses. Individual WYO companies may, to the extent possible, and consistent with WYO program rules and regulations, conform their flood business to their normal business practices for other lines of insurance. But given the differences between the rules and regulations to which the

<sup>29</sup> <http://www.fema.gov/business/nfip/wyowhat.shtm> (last visited on June 29, 2011).

<sup>30</sup> <http://www.gao.gov/new.items/d11297.pdf> (last visited on June 29, 2011).

<sup>31</sup> <http://www.fema.gov/business/nfip/wyowhat.shtm> (last visited on June 29, 2011).

WYO companies are subject and those of the rest of the NFIP, and the substantive congressional changes to the NFIP, conformity is not always possible.<sup>32</sup>

FEMA sets the rates, coverage limitations, and eligibility requirements, while the WYO companies perform all of the policy administration for their customers. Flood insurance coverage is issued by the WYO companies as a separate policy from all other coverages provided by the WYO companies. The WYO companies, essentially, are fiscal agents of the federal government, while the federal government, essentially, is the guarantor of all flood insurance coverage. The companies are directly responsible for their obligations to insureds. The federal government is precluded from being made a party to any lawsuit arising out of distributional and/or coverage disputes within the WYO program. The WYO company is responsible for administering and defending claims. But with respect to the direct program, in which flood insurance policies are placed directly with the NFIP, those flood policies are contracts directly between FEMA and the insured. FEMA would be the defendant in the case of any such direct program-related lawsuit. For further detail on how disputes are handled, please refer to Legal Issues, addressed in Section 9 below.

Each of the WYO companies is responsible for following the laws and rules set forth for the distribution and underwriting of the flood policies that it issues and for settling the claims of those policies. For these services, they are reimbursed under the terms of the Financial Assistance/Subsidy Arrangement (the standard insurance contract used by WYO companies, which is described in greater detail in Appendix A), for various expense allowances, fees, and production bonuses. The WYO companies collect premiums from policyholders. Under the Financial Control Plan, described in Appendix D, the WYO companies must keep NFIP funds separate from the rest of their accounts. In accordance with the Financial Assistance/Subsidy Arrangement, WYO companies deduct their expense allowances from the premiums, and the servicing agent deducts its agent commissions from the premiums. Other NFIP-related payables also are deducted from the premiums. When congressional authorization or appropriation of funds for the NFIP is withdrawn, a WYO company could be required to discontinue issuing new policies immediately.

There are those that have argued that the levels of expense reimbursements to WYO companies are too generous, while others have argued that the reimbursement levels are insufficient to cover all expenses associated with servicing flood policies under the rules and regulations required by Congress and FEMA. Within the past few years, proposed congressional reforms have included a requirement that the expenses of WYO companies be studied in detail.<sup>33</sup> From the perspective of stakeholders' competing interests, there is simultaneous need for WYO companies to be provided with incentives to participate in the NFIP and for the premiums to have a reasonable expense provision.

The direct program allows individual insurance producers to submit flood insurance business directly to the NFIP rather than through a WYO company. This program is

<sup>32</sup> NFIP Flood Insurance Manual, <http://www.fema.gov/pdf/nfip/manual200705/02ref.pdf> (last visited on June 29, 2011).

<sup>33</sup> <http://www.policyarchive.org/handle/10207/bitstreams/19249.pdf> (last visited on June 29, 2011).

administered by a federal contractor known as the NFIP Servicing Agent. Like the WYO companies, the NFIP Servicing Agent collects premiums from policyholders. The NFIP servicing agent is a contractor chosen through a periodic bidding process.

Further detail on the operations of the WYO companies is provided in Appendix D.

## 8. Key Differences Between Private-Sector Insurance and the NFIP

The NFIP is a public insurance program. There are significant differences between the NFIP and private sector property and casualty insurance. Key differences are outlined below.

- The goals of the NFIP are very different from the goals of private sector insurance companies. As stated previously, the purposes of the NFIP are: 1) identifying flood risk, 2) regulating flood plain management, and 3) providing flood insurance. A fourth longer-term goal of the NFIP has been to reduce federal expenditures on disaster assistance after floods.<sup>34</sup> The NFIP also has the power to require coverage in some cases and to require certain flood plain management practices for communities to participate in the NFIP.<sup>35</sup>

By contrast, a primary motivation for private sector insurance companies is to earn a profit by providing for the needs of their customers through appropriate insurance coverages. Unlike the NFIP, private sector insurance companies have no power to require that their customers buy coverage from a particular company or to take specific actions to manage their risks.

- NFIP flood policy contract language is provided by federal statute and/or regulation.<sup>36</sup> The insured may not be able to assert that he/she did not know or understand the policy in coverage disputes. The NFIP requires that coverage disputes arising under the program be litigated in federal courts.<sup>37</sup>

In the private sector insurance industry, litigation often arises over ambiguities in policy language, and, because of the general principle in contract law that a contract must be construed against the drafter, the courts interpret disputed policy

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<sup>34</sup> Aug. 1, 2002 NFIP Program Description, FEMA, page 2, [http://www.fema.gov/library/file.jsessionid=CCE6DB0C006D7874AE4633336B5A985A.Worker2Library?type=publishedFile&file=nfipdescrip\\_1\\_.pdf&fileid=e6fdab40-80bd-11db-9aa6-000bdba87d5b](http://www.fema.gov/library/file.jsessionid=CCE6DB0C006D7874AE4633336B5A985A.Worker2Library?type=publishedFile&file=nfipdescrip_1_.pdf&fileid=e6fdab40-80bd-11db-9aa6-000bdba87d5b) (last visited on June 29, 2011).

<sup>35</sup> Aug. 1, 2002 NFIP Program Description, FEMA, page 29, [http://www.fema.gov/library/file.jsessionid=CCE6DB0C006D7874AE4633336B5A985A.Worker2Library?type=publishedFile&file=nfipdescrip\\_1\\_.pdf&fileid=e6fdab40-80bd-11db-9aa6-000bdba87d5b](http://www.fema.gov/library/file.jsessionid=CCE6DB0C006D7874AE4633336B5A985A.Worker2Library?type=publishedFile&file=nfipdescrip_1_.pdf&fileid=e6fdab40-80bd-11db-9aa6-000bdba87d5b) (last visited on June 29, 2011).

<sup>36</sup> [http://www.fema.gov/good\\_guidance/download/10040](http://www.fema.gov/good_guidance/download/10040) (last visited on June 29, 2011).

<sup>37</sup> [https://www.floridabar.org/divcom/jn/jnjournal01.nsf/c0d731e03de9828d852574580042ae7a/c5c4744b3ca071088525741a004ac73d!OpenDocument&Highlight=0,\\*](https://www.floridabar.org/divcom/jn/jnjournal01.nsf/c0d731e03de9828d852574580042ae7a/c5c4744b3ca071088525741a004ac73d!OpenDocument&Highlight=0,*) (last visited on June 29, 2011).

language in favor of the insured.<sup>38</sup> Most litigated coverage disputes arising out of private sector insurance policies, unlike those pertaining to the NFIP, are heard in state courts.

- The types of coverages and insurance limits provided by the NFIP are set by statute and regulation, and they differ from coverage provided under a typical personal lines property policy in the private sector.
  - As of the time of publication, the NFIP had a maximum coverage limit (\$250,000 building/\$100,000 personal property on dwelling policies, \$500,000 building/\$500,000 personal property on non-residential buildings).<sup>39</sup> On the other hand, the limits available in the private sector insurance market are as high as any company is willing to sell.
  - The personal property coverage in the NFIP is actual cash-value coverage.<sup>40</sup> In the private market, on the other hand, replacement-cost-value coverage typically is available, at least as an option.
  - Additional living expenses are not covered by the NFIP, and business interruption coverage is not presently covered by NFIP commercial policies.<sup>41</sup> On the other hand, most private policies offer some coverage for such expenses at an additional cost.
  
- NFIP policy rates are developed differently than those in the private sector.
  - The NFIP's flood policy rates do not include a profit provision that includes the cost of capital.<sup>42</sup> Private-sector insurance policies include a profit provision sufficient to cover all costs of risk transfer. A private-sector insurance company must maintain and build capital to preserve its solvency. The NFIP can use a lower standard partly because it has the ability to avoid running a deficit by borrowing from the U.S. Treasury, when necessary.
  - NFIP's flood program rate changes do not need approval by state regulatory authorities. Conversely, in the private sector, rates are closely monitored by state regulators and are subject to filing and approval requirements that can vary by state.
  - Flood insurance rates for pre-FIRM properties are promulgated by regulation to be subsidized at a level that is below that of actuarially sound

<sup>38</sup> <http://courts.phila.gov/pdf/cpcvcomprg/sylva-dh.pdf> (last visited on June 29, 2011).

<sup>39</sup> [http://www.fema.gov/library/file.jsessionid=CF770CB79157EBBD1E5C20AE72DD4F71.WorkerLibrary?type=publishedFile&file=f679\\_sumcov0709.pdf&fileid=e0da41c0-10fb-11df-921d-001cc456982e](http://www.fema.gov/library/file.jsessionid=CF770CB79157EBBD1E5C20AE72DD4F71.WorkerLibrary?type=publishedFile&file=f679_sumcov0709.pdf&fileid=e0da41c0-10fb-11df-921d-001cc456982e) (last visited on June 29, 2011).

<sup>40</sup> Standard Flood Insurance Policy as of May 1, 2005.

<sup>41</sup> Standard Flood Insurance Policy as of May 1, 2005.

<sup>42</sup> Aug. 1, 2002 NFIP Program Description, FEMA, page 28, [http://www.fema.gov/library/file.jsessionid=CCE6DB0C006D7874AE4633336B5A985A.Worker2Library?type=publishedFile&file=nfipdescrip\\_1\\_.pdf&fileid=e6fdab40-80bd-11db-9aa6-000bdba87d5b](http://www.fema.gov/library/file.jsessionid=CCE6DB0C006D7874AE4633336B5A985A.Worker2Library?type=publishedFile&file=nfipdescrip_1_.pdf&fileid=e6fdab40-80bd-11db-9aa6-000bdba87d5b) (last visited on June 29, 2011).

rates.<sup>43</sup> In the private sector, insurers typically charge actuarially sound rates.

- There are no regulatory capital requirements in the NFIP. Flood insurance is backed by the full faith and credit of the United States.<sup>44</sup> Private-sector insurance companies, on the other hand, are monitored by state regulators for solvency and meet various capital requirements designed to maintain their standing with rating agencies.
- As noted above, significant changes to NFIP’s coverage, policy administration, and operations are accomplished largely by federal statute and/or regulation. As has been demonstrated in the past several years, the implementation of changes to the NFIP often takes a significant amount of time. In private-sector insurance, however, individual companies regularly adjust in response to the market.
- Congress provides oversight of the NFIP. The congressional committees with NFIP oversight authority are the House Committee on Financial Services and the Senate Committee on Banking, Housing and Urban Affairs. The NFIP is also overseen by the executive branch via FEMA and the Department of Homeland Security. Unlike the NFIP, private-sector companies are overseen by their boards of directors and owners as well as to state regulators.
- The NFIP is not allowed to refuse to cover an “eligible” property, regardless of the property’s loss history. Ineligible structures are few and are proscribed by the federal program. The private-sector insurance industry, on the other hand, is able to accept or reject applications for policies based on the underwriting guidelines of each individual company (subject to the constraints of applicable state statutes or regulations).
- The NFIP is not authorized to operate indefinitely. The continuation of the NFIP depends upon congressional action prior to each established sunset date. Should Congress fail to reauthorize the NFIP, it is possible that all existing flood insurance policies would cease to be enforceable, expiring policies would not be renewed, and new policies would not go into effect until the NFIP was reauthorized. Unlike the NFIP, private companies may operate indefinitely, so long as they are financially solvent.

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<sup>43</sup> Aug. 1, 2002 NFIP Program Description, FEMA, page 26, [http://www.fema.gov/library/file.jsessionid=CCE6DB0C006D7874AE4633336B5A985A.Worker2Library?type=publishedFile&file=nfipdescrip\\_1\\_.pdf&fileid=e6fdab40-80bd-11db-9aa6-000bdba87d5b](http://www.fema.gov/library/file.jsessionid=CCE6DB0C006D7874AE4633336B5A985A.Worker2Library?type=publishedFile&file=nfipdescrip_1_.pdf&fileid=e6fdab40-80bd-11db-9aa6-000bdba87d5b) (last visited on June 29, 2011).

<sup>44</sup> Aug. 1, 2002 NFIP Program Description, FEMA, page 28, [http://www.fema.gov/library/file.jsessionid=CCE6DB0C006D7874AE4633336B5A985A.Worker2Library?type=publishedFile&file=nfipdescrip\\_1\\_.pdf&fileid=e6fdab40-80bd-11db-9aa6-000bdba87d5b](http://www.fema.gov/library/file.jsessionid=CCE6DB0C006D7874AE4633336B5A985A.Worker2Library?type=publishedFile&file=nfipdescrip_1_.pdf&fileid=e6fdab40-80bd-11db-9aa6-000bdba87d5b) (last visited on June 29, 2011).

## 9. Legal Issues

As previously discussed, the NFIP is unique in that it functions as a federal program, not as a private-sector insurance program. Congress established the NFIP to share the risk of flood losses by underwriting flood insurance coverage in communities that adopt and enforce local flood plain regulations that meet or exceed NFIP criteria.

The administrator of the NFIP is FEMA, which has established a comprehensive regulatory structure setting forth the rights and responsibilities of insureds and insurers under the NFIP. The subsequent creation of the WYO program allowed private-sector insurance companies to issue standard government policies and collect policy premiums. Under the WYO program, private-sector insurance companies essentially become fiscal agents of the United States.

The federal government is not a party to any lawsuit arising out of WYO program-related distributional and/or coverage disputes. FEMA regulations require a WYO company to defend claims against it, but FEMA reimburses the WYO company for its defense costs. In the direct program, by contrast, the policy is a contract directly between FEMA and the insured, and FEMA defends in any subsequent lawsuit.

Most courts that have considered the issue have concluded that the NFIA's language confers federal district court jurisdiction on suits that are based on the handling and disposition of NFIP claims. These decisions recognize the intent of Congress to create a national program for flood insurance, noting the federal government's extensive participation in the NFIP, its administrative and financial responsibilities pursuant to the NFIA, and the absence of statutory language allowing claims under the NFIA to be brought in state court.<sup>45</sup>

The NFIP policy form provides that all disputes arising from claims handling are governed by federal regulations and the National Flood Insurance Act of 1968, as amended. Disputes alleging improper administration or adjustment of NFIP claims are governed exclusively by federal jurisdiction. Such claims are essentially breach-of-contract claims, and claimant remedies are limited therefore to those provided pursuant to the policy itself. The flood insurance policy form specifically states the following conditions for filing a lawsuit (note that the terms "us" and "we" refer to the WYO company):

You may not sue us to recover money under this policy unless you have complied with all the requirements of the policy. If you do sue, you must start the suit within 1 year after the date of the written denial of all or part of the claim, and you must file the suit in the United States District Court of the district in which the insured property was located at the time of loss. This requirement applies to

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<sup>45</sup> Craig, Lee, and Wegryzn, Lisa E., "Federal Preemption of Extracontractual Claims Under Flood Insurance Policies," *Mealey's Litigation Report: Bad Faith*, Vol. 12, #16, Dec. 15, 1998; [http://www.butlerpappas.com/showarticle.aspx?Show=534#N\\_33](http://www.butlerpappas.com/showarticle.aspx?Show=534#N_33) (last visited on July 7, 2011).

any claim that you may have under this policy and to any dispute that you may have arising out of the handling of any claim under the policy.<sup>46</sup>

Although FEMA covers the expenses of WYO insurers in paying out claims and in litigating challenges in federal court, the NFIP’s enabling legislation states a clear exception to this rule: “[t]he Director of the Federal Emergency Management Agency may not hold harmless or indemnify an agent or broker for his or her error or omission.”<sup>47</sup> Federal funds are not at stake in cases against WYO insurers in which the cause of action relates to the procurement of flood insurance. Thus, such claims have been considered state-law tort claims rather than federal-law contract claims.

Insured claimants have used various extra-contractual causes of action to file claims arising from a flood policy in state court.<sup>48</sup> Such causes of action have included bad faith, fraudulent misrepresentation, unfair trade practices, and, in some of those contexts, requests for noneconomic damages.<sup>49</sup>

Pursuant to the WYO program, FEMA has elected to have state-licensed insurance companies, agents, and brokers sell flood insurance to consumers. Private-sector insurance companies participating in the WYO program must be licensed and regulated to engage in the business of property insurance in states in which they wish to sell flood insurance.<sup>50</sup> State regulations require that insurance company agents and brokers provide NFIP customers with the same service that the states require of them in selling other lines of insurance.<sup>51</sup>

In its role as coordinator of the NFIP, FEMA must ensure, through monitoring and oversight, that its programs are implemented across the nation in accordance with statutory and regulatory requirements.

The Flood Insurance Reform Act of 2004 mandated the implementation of several NFIP management reforms intended to improve transparency for policyholders. Reforms included:

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<sup>46</sup> NFIP Standard Flood Insurance Policy, as of May 1, 2011; <http://www.fema.gov/library/file.jsessionid=AD2236DC678374257A2A6A26200BF7A5.WorkerLibrary?type=publishedFile&file=f122dwellform0809.pdf&fileid=7c7d32a0-11a5-11df-921d-001cc456982e> (last visited on June 29, 2011).

<sup>47</sup> 42 U.S.C. 4081(c), <http://codes.lp.findlaw.com/uscode/42/50/II/C/4081> (last visited on June 29, 2011).

<sup>48</sup> Craig, Lee, and Wegryzn, Lisa E., “Federal Preemption of Extracontractual Claims Under Flood Insurance Policies,” Mealey’s Litigation Report: Bad Faith, Vol. 12, #16, Dec. 15, 1998; [http://www.butlerpappas.com/showarticle.aspx?Show=534#N\\_33](http://www.butlerpappas.com/showarticle.aspx?Show=534#N_33) (last visited on July 7, 2011).

<sup>49</sup> Craig, Lee, and Wegryzn, Lisa E., “Federal Preemption of Extracontractual Claims Under Flood Insurance Policies,” Mealey’s Litigation Report: Bad Faith, Vol. 12, #16, Dec. 15, 1998; [http://www.butlerpappas.com/showarticle.aspx?Show=534#N\\_33](http://www.butlerpappas.com/showarticle.aspx?Show=534#N_33) (last visited on July 7, 2011).

<sup>50</sup> Frequently-Asked Questions About the NFIP: <http://www.floodsmart.gov/floodsmart/pages/faqs.jsp> (last visited on June 29, 2011).

<sup>50</sup> 108 U.S.C.S. 2238-16.

<sup>51</sup> *Id.*

- Addition of supplemental forms explaining the specific coverage being purchased;
- Addition of a flood insurance claims handbook describing the process for filing and appealing claims;
- Establishment of a regulatory appeals process;
- Requiring NFIP education and training for insurance agents;
- Implementation of a claims-sampling strategy that provides FEMA management with information used to assess the overall performance of the WYO companies, including the overall accuracy of the underwriting of NFIP policies and the adjustment of claims.<sup>52</sup>

## 10. Mandatory Purchase Requirement<sup>53</sup>

The Flood Disaster Protection Act of 1973 (P.L. 93-234) made the purchase of flood insurance mandatory for certain property owners and the National Flood Insurance Reform Act of 1994 (P.L. 103-325) made adjustments to that requirement.<sup>54</sup> Property owners in SFHAs who obtain loans from federally-regulated lending institutions are required to purchase and retain flood insurance for the life of their mortgage loans.<sup>55</sup> Mortgages from nonregulated lenders, typically private mortgage companies, are not subject to the requirement, unless such mortgages are issued by subsidiaries of regulated lenders or subsequently are sold to the Federal National Mortgage Association (Fannie Mae) or the Federal Home Loan Mortgage Corporation (Freddie Mac).

The NFIP is a voluntary program based on an agreement between the federal government and agents of the participating community; the community’s governing body must pass a protective land-use ordinance establishing protective floodplain development standards.<sup>56</sup> Before doing so, communities assess their flood hazard and determine whether flood insurance and flood plain management would benefit their residents and economy. If a community does not participate in the NFIP, a lender can offer only a conventional loan and is required to inspect any flood maps, determine flood hazard risk, and provide notice of such risk.

However, as noted above, the purchase of flood insurance is a mandatory prerequisite to obtaining mortgage loans from federally-regulated lending institutions on buildings located in a SFHA. GAO studies of the mandatory purchase requirement found mixed levels of compliance, although compliance appears to have increased considerably since

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<sup>52</sup> 42 U.S.C. 4011.

<sup>53</sup> “The National Flood Insurance Program’s Mandatory Purchase Requirement: Policies, Processes, and Stakeholders,” Mar. 2005. The American Institutes for Research.

<sup>54</sup> [http://www.fema.gov/library/file.jsessionid=EAB659D3BED51A78ADCF525E30295264.Worker2Library?type=publishedFile&file=frm\\_rf94.pdf&fileid=ceaa94b0-9821-11db-b057-000bdba87d5b](http://www.fema.gov/library/file.jsessionid=EAB659D3BED51A78ADCF525E30295264.Worker2Library?type=publishedFile&file=frm_rf94.pdf&fileid=ceaa94b0-9821-11db-b057-000bdba87d5b) (last visited on June 29, 2011).

<sup>55</sup> [http://www.wvdhsem.gov/WV\\_Disaster\\_Library/Library/FLOODS/NFIP%20Info%20for%20Prospective%20Buyers.htm](http://www.wvdhsem.gov/WV_Disaster_Library/Library/FLOODS/NFIP%20Info%20for%20Prospective%20Buyers.htm) (last visited on June 29, 2011).

<sup>56</sup> <http://www.commerce.state.ak.us/dca/logon/plan/planning-flood.htm> (last visited on July 7, 2011).

the passage of the 1994 act.<sup>57</sup> To address situations in which coverage is required and not purchased, lenders and servicers have several options. First, regulated lenders are obligated to refuse to extend a loan until the building that secures the loan is covered by flood insurance. Second, if a loan complies with the purchase requirement at origination but later is found to be noncompliant, lenders can purchase a standard flood insurance policy (SFIP) for the property if the property owner has not done so. Third, lenders and servicers who discover that an SFHA property lacks flood insurance can obtain coverage after loan origination through the Mortgage Portfolio Protection Program (MPPP).<sup>58</sup> FEMA created the MPPP in 1991 to facilitate lenders' and servicers' efforts to ensure that affected property owners have coverage when underwriting information is limited or unavailable. Policies purchased through the MPPP almost always are more expensive than standard flood insurance policies. The rates for MPPP policies are high due to a lack of information and the resulting unknown risk level; high rates also discourage forced placement.<sup>59</sup> Because "force-placing" a policy pursuant to the MPPP requires lenders and servicers to wait for the expiration of a mandated gap in coverage, many banks prefer lender-placed, private market flood insurance over MPPP coverage.<sup>60</sup>

Private-sector insurance can be used in lieu of NFIP coverage at loan origination to provide additional coverage when the value of a property exceeds the amount of coverage available through the NFIP or when a lender or servicer concludes that coverage through the NFIP is not commensurate with the value of the property or the law's requirements for coverage. Private-sector insurance also can be used in situations in which NFIP coverage is not available, in communities that are suspended from participation in the NFIP due to their failure to adopt or enforce flood plain management regulations, and in all units of the Coastal Barrier Resource System.<sup>61</sup>

The mandatory purchase requirement is restricted to properties in SFHAs, thus emphasizing the importance of accurate FIRMs. If SFHAs accurately identify areas of high risk, then a majority of claims should originate from within these areas. The claims history in several Eastern states displays this pattern. Across the United States and within many states, however, a different pattern emerges. Nearly 69 percent of all NFIP-insured properties are in SFHAs, but only 64 percent of claims are from these areas. A more dramatic pattern emerges in 13 states, where more than half of all claims have been from policyholders outside of SFHAs.<sup>62</sup>

These data call into question the exemption of property owners outside SFHAs from the mandatory purchase requirement, even though many of them appear to face at least as much risk as owners within SFHAs. The data also underscore the importance of FEMA's

<sup>57</sup> [http://www.fema.gov/doc/nfip/mandpurch\\_0305.doc](http://www.fema.gov/doc/nfip/mandpurch_0305.doc) (last visited on July 6, 2011).

<sup>58</sup> <http://tinyurl.com/4yfb9jm> (last visited on July 6, 2011).

<sup>59</sup> Call for Issues Status Report. Washington, DC: FEMA. Available at <http://tinyurl.com/3z2ehut> (last visited on July 6, 2011).

<sup>60</sup> <http://tinyurl.com/3aopare> (last visited on July 6, 2011).

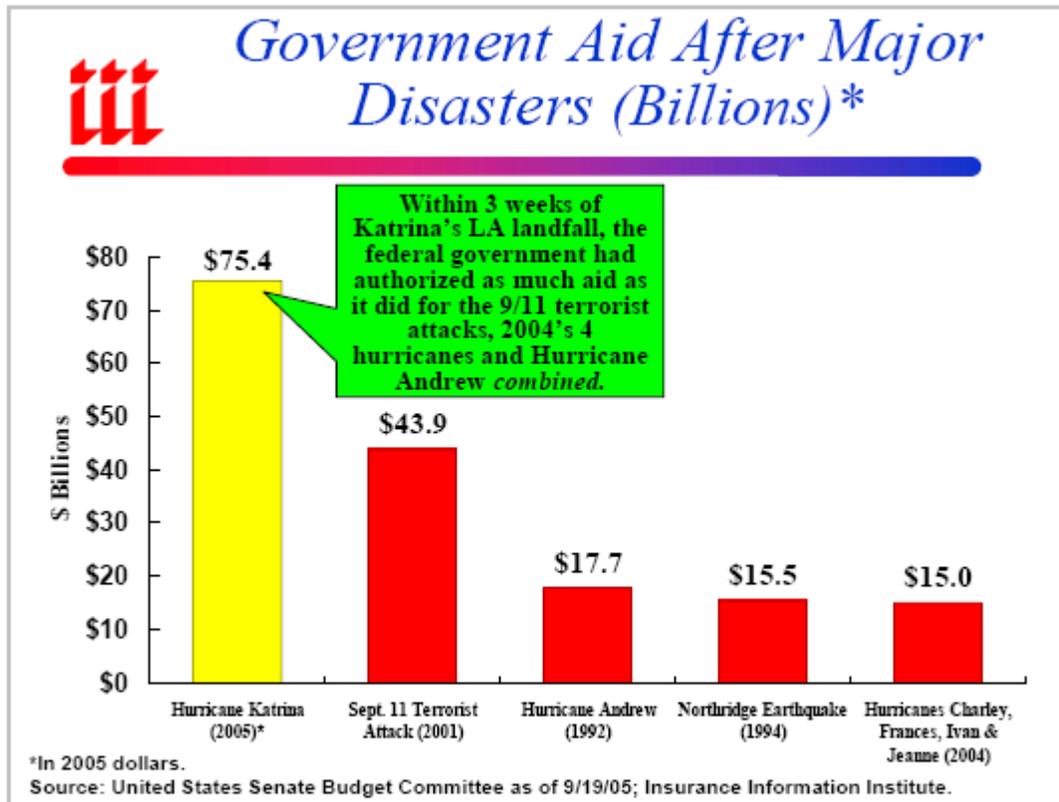
<sup>61</sup> More information on the Coastal Barrier Resource System is available in Appendix E. See <http://www.fema.gov/plan/prevent/floodplain/nfipkeywords/cbrs.shtm> (last visited on June 29, 2011).

<sup>62</sup> *The National Flood Insurance Program's Mandatory Purchase Requirement: Policies, Processes, and Stakeholders*, Mar. 2005. The American Institutes for Research, p. 58.

Risk MAP program, which could improve the delineation and understanding of areas at high risk of flooding.

## 11. Interactions Between Federal Disaster Aid and Flood Insurance

At times, government emergency aid is available to disaster victims after a flood event. As a result, a misconception arises in the public’s perception that the purchase of flood insurance is not necessary because money from disaster aid programs will be available to bail them out. That viewpoint may have been burnished further, in part, by the widely publicized large amounts of government aid made available to victims in the wake of hurricane events that have occurred since Hurricane Katrina made landfall in 2005.



Source: Hartwig, Robert P. Written testimony delivered to the United States Senate Committee on Banking, Housing and Urban Affairs, Oct. 18, 2005.

But the availability of assistance from disaster aid programs does not lessen the importance of maintaining flood insurance. Pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121-5207), before federal disaster assistance can be offered, the president must declare the area a major disaster.<sup>63</sup> The Stafford Act authorized FEMA to create a Federal Response Plan (FRP) to address the provision of federal aid after disasters. The FRP subsequently was superseded, first by the National Response Plan and, later, by the National Response Framework.

<sup>63</sup> [http://training.fema.gov/EMIWeb/downloads/is7unit\\_3.pdf](http://training.fema.gov/EMIWeb/downloads/is7unit_3.pdf) (last visited on June 29, 2011).

A disaster declaration only can come in response to a request by the governor of the state affected by the disaster. A gubernatorial request typically is based on a damage assessment to determine loss and recovery needs. The gubernatorial request is evaluated by a group of regional FEMA representatives, which makes a recommendation to the President. Localized flooding usually does not qualify as a major disaster. Flood insurance policyholders are eligible to receive government aid, but that aid typically is reduced by the amount of any insurance proceeds a claimant receives. Assistance from FEMA may be provided to cover losses that are uninsured and are otherwise eligible for aid. But insurance deductibles, paid for by insureds, are not covered under FEMA's programs. If a claimant does not have NFIP flood insurance, and he/she receives government aid for flood damage, he/she is required to obtain flood insurance coverage for the future.

Excluding the aid available through the NFIP's enabling statute and the statutes that have modified it since, other government assistance, when and if available, comes primarily in the form of low-interest loans that must be repaid.<sup>64</sup> The U.S. Small Business Administration may make federally subsidized loans to repair or replace homes, personal property, or businesses that sustained damages not covered by insurance. Disaster grants and housing from FEMA might be available to meet serious disaster-related needs that are not met in other ways, including but not limited to:

- Temporary housing,
- Repairs to or replacement of damaged property,
- Medical costs,
- Clothes and household items,
- Limited disaster grants.

Only a relatively small fraction of overall disaster assistance overlaps with the insurance coverage available from the NFIP. Outright grants, provided by FEMA's Individuals and Households Program, usually are small and intended to meet only essential needs that are not otherwise covered.<sup>65</sup> Financial assistance to repair property damage is limited to an amount that will make a home inhabitable as quickly as possible. Replacement of damaged personal property is limited to "items or services that help prevent or overcome a disaster-related hardship."<sup>66</sup>

There is no focused, institutionalized oversight or accountability for the money made available by the federal government for post-disaster assistance. The Government Accountability Office (GAO) recommends that Congress identify and track the types and amount of federal assistance provided for addressing catastrophic events and develop metrics to inform its oversight.<sup>67</sup>

<sup>64</sup> <http://www.iii.org/media/updates/archive/press.739566> (last visited on June 29, 2011).

<sup>65</sup> [http://www.fema.gov/pdf/assistance/process/help\\_after\\_disaster\\_english.pdf](http://www.fema.gov/pdf/assistance/process/help_after_disaster_english.pdf) (last visited on June 29, 2011).

<sup>66</sup> [http://www.fema.gov/assistance/dafaq.shtm#qd\\_15](http://www.fema.gov/assistance/dafaq.shtm#qd_15) (last visited on June 29, 2011).

<sup>67</sup> <http://www.gao.gov/new.items/d07235r.pdf> (last visited on June 29, 2011).

## 12. Multiple-Loss Properties

One area of controversy involves NFIP coverage of properties that have suffered multiple flood losses. These properties have shown that they are at greater risk than the average risk insured by the NFIP. These properties, known as severe repetitive-loss (SRL) properties, have been defined in various ways.

SRL properties currently are defined as properties that have experienced:

- Four or more paid NFIP losses, with the amount of each exceeding \$5,000 and the total exceeding \$20,000 or
- At least two such claims, with the cumulative amount exceeding the value of the property<sup>68</sup>

In its 2004 report on the subject, the GAO looked at all locations that had two or more claims over the past 10 years.<sup>69</sup> These properties had accounted for some 38 percent of all claim dollars since 1978. But about half of them were still insured, amounting to only about 1 percent of the then-insured properties. From 1978 to 2003, the total cost of multiple-loss properties' claims was approximately \$4.6 billion.

There are two major concerns with this situation. One, obviously, is the cost to the program. The other is the question of whether the NFIP should continue to insure properties that are likely to have further losses and whether these properties are being subsidized by the rest of the NFIP insureds. The NFIP currently cannot refuse to cover an eligible property, and ineligible properties are few.

The 1994 NFIP Reform Act authorized mitigation grants and post-flood insurance as part of the standard flood insurance policy. This means that if a home or business is damaged by a flood, the property owner may be required to meet certain building requirements in the community to reduce future flood damage before repairing or rebuilding. To help cover the costs of meeting those requirements, the NFIP includes Increased Cost of Compliance (ICC) coverage for all new and renewed Standard Flood Insurance Policies. It was expected that this increased cost of compliance built into the standard flood insurance policy would encourage post-flood mitigation. Some argue, however, that ICC methods have not been utilized as effectively as anticipated to increase post-flood mitigation. ICC claimants must have received substantial damage declarations from their communities, and the ICC benefit only can be used to bring structures into compliance with existing building code flood requirements.

While there have been proposals in the past to impose a surcharge on multiple-loss properties, Congress has not chosen to approve any surcharges except those in the 2004

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<sup>68</sup> As set forth in the Flood Insurance Reform Act of 2004; applies to one in four family residential properties.

<sup>69</sup> "National Flood Insurance Program, Actions to Address Repetitive Loss Properties," testimony before the Subcommittee on Economic Policy, Committee on Banking, Housing and Urban Affairs, U. S. Senate, Mar. 25, 2004, Statement of William O. Jenkins Jr., director homeland security & justice issues, U. S. GAO.

NFIP Reform Act, which dealt with the disproportionate cost of insuring SRL properties in a limited way. FEMA accordingly asserts that it is somewhat limited in its ability to help mitigation of SRL properties without congressionally mandated changes like the 2004 Act.<sup>70</sup> FEMA does have several mitigation grant programs that provide funding to reduce the flood-risk profiles of eligible buildings. One such program, the Severe Repetitive Loss (SRL) Pilot Program, specifically targets SRL structures.<sup>71</sup>

The SRL pilot program assists communities in acquisition, elevation, relocation, demolition, and flood-proofing of these properties. Owners who refuse mitigation assistance could have their flood premiums increased 150 percent. In addition, each future claim in excess of \$1,500 may trigger an additional rate increase of 150 percent, though this option is limited to properties that are subject to nonsubsidized full-risk rates. The results of this pilot program may help determine future actions on other repetitive-loss properties.

Properties identified as severe repetitive loss properties are handled by the NFIP Special Direct Facility, not a WYO company. This allows NFIP to supervise these properties more closely and make appropriate mitigation decisions.

### **13. Riverine and Flash Flooding Issues Versus Coastal Flooding**

Properties at greatest risk of flooding are those located near rivers or coasts. Many other types of properties are at risk of flash flooding. Several issues arise because of the differences between properties near coasts and other properties.

- Riverine flooding occurs when rivers and streams overflow their banks, breach levees, or breach dams and flood adjacent land. Flash floods occur when very heavy rainfall overwhelms storm drainage systems, causing localized but very heavy storm flooding. Flash floods inundate buildings with water, typically causing damage to first floors and below-ground floors. Floods in narrow valleys occasionally can carry enough force to destroy entire buildings, but such areas are typically small, with relatively few buildings at risk.
- Coastal storm surge accompanies intense ocean storms and damages buildings within the run-up of the surge. Storm surge destroys buildings on coasts by the combined force of the inundation topped with damaging waves while undermining the ground beneath buildings. With the dense concentration of high-valued structures along most of our hurricane-exposed coasts, high claims payouts are a virtual certainty.

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<sup>70</sup> “The NFIP and Repetitive Loss Properties: Issues, Strategies and Proposed Actions,” testimony before the Subcommittee on Economic Policy, Committee on Banking, Housing and Urban Affairs, U.S. Senate, Mar. 25, 2004, presented by Chad Berginnis, chair, Association of State Floodplain Managers, Inc.

<sup>71</sup> The SRL Pilot Program provides funds to NFIP-participating communities to reduce or eliminate long-term flood risks to SRL properties, in turn reducing expenditures by the NFIF. Additional information about these and other programs is available at [http://www.fema.gov/government/grant/mit\\_grant\\_fact\\_sheet.shtm](http://www.fema.gov/government/grant/mit_grant_fact_sheet.shtm) (last visited on June 29, 2011).

- There is a large difference in market penetration between areas with riverine flooding exposure and those on the coast. Recent NFIP statistics show that 69 percent of policies are in the 10 hurricane-exposed states between Virginia and Texas. (Florida alone has 38 percent of the policies.) Those policies account for 60 percent of the in force premium for the NFIP; those same states have accounted for 80 percent of the losses paid from Jan. 1, 1978 through April 30, 2011. Another 11 percent of the policies come from the nine Northeast coastal states between Maryland and Maine. The rest of the country, therefore, accounts for only 20 percent of the policies.<sup>72</sup>

## 14. Map Modernization<sup>73</sup>

Flood Map Modernization (Map Mod) was a multiyear initiative that concluded in 2010. Map Mod was designed to improve and update flood hazard identification maps. The successor program to Map Mod is Risk Mapping, Assessing and Planning (MAP). FEMA's flood maps have been produced and used for 35 years in identifying flood hazard areas and setting flood insurance rates. The maps also have been more widely used for other purposes, including community planning and emergency preparedness.

The flood hazard identification maps originally were created using traditional paper mapmaking methods. The modernization of the maps was first addressed in the National Flood Insurance Reform Act of 1994. Over the years, changes in mapmaking technology and in flood hazard conditions, along with increased knowledge of those conditions, resulted in the near-obsolescence of many of the NFIP maps. These maps are relied upon for proper risk classification and assessment of community risk levels. Inaccuracies in the maps could lead to premium inequities and flawed community decisions.

Updated maps will account for revised data and use improved technologies to identify flood hazards. The quality, reliability, and availability of the maps are to be increased through improved methodologies and technology.

FEMA also developed a five-year plan called the Multi-Year Flood Hazard Identification Plan (MHIP) for providing periodically updated digital flood hazard maps. The plan's funding expired in 2010, though the opportunity to comment on its efficacy remains available on the FEMA website.<sup>74</sup>

<sup>72</sup> See <http://www.fema.gov/business/nfip/statistics/pcstat.shtml> (last visited on June 28, 2011; data as of Apr. 30, 2011).

<sup>73</sup> Information in this section was provided by [www.fema.gov](http://www.fema.gov).

<sup>74</sup> [http://www.floodmaps.fema.gov/fhm/scripts/mh\\_surv.asp](http://www.floodmaps.fema.gov/fhm/scripts/mh_surv.asp) (last visited on June 29, 2011).

## 15. FEMA Evaluations

### The NFIP Evaluation

The Evaluation of the National Flood Insurance Program was a major project initiated by FEMA in 2000 to review the progress of the NFIP in working toward achieving its legislative mandate and to obtain recommendations for future actions and policies that would enhance the NFIP. It was completed in 2006, and all of the evaluation research papers are publicly available online.<sup>75</sup>

According to the Evaluation's final report:

One purpose of the National Flood Insurance Act of 1968 was to authorize “continuing studies of flood hazards...in order to provide for a constant reappraisal of the flood insurance program and its effect on land-use requirements.” This clear call for evaluation and the fact that the NFIP had never been the subject of a comprehensive evaluation led FEMA in 2000 to contract with the American Institutes for Research (AIR), an independent, not-for-profit corporation, to design, lead, and manage the Evaluation of the NFIP.

The Evaluation consisted of more than a dozen individual research studies, using widely varying methods, that focused on a range of subjects determined to be critical to assessment of the NFIP's progress ...<sup>76</sup>

The Evaluation includes 15 reports, including 13 major research papers. The totality is a compilation of research and data that comprises more than 1,500 pages and more than 200 recommendations.

One item of interest is contained in NFIP Evaluation Report 14, *The National Flood Insurance Program's Market Penetration Rate: Estimates and Policy Implications*, by the RAND Corp., presents a wealth of data, much of which is based upon the RAND Corp.'s intensive study of a sample of 100 NFIP communities. NFIP coverage is greatly concentrated in the Gulf Coast states—38 percent of NFIP policies are in Florida alone. That is partly due to the heavy concentration of buildings in SFHAs in the South. For example, based on the 100-community sample, nearly 60 percent of single-family residences within SFHAs are located in the South.

But even after taking that into account, the Midwest and the Northeast are two regions in which the market penetration within SFHAs is markedly low. The paper examines many factors that affect market penetration, including the cost of flood insurance, differences between inland and coastal communities, differences in enforcement of the mandatory purchase requirement, size of communities, number and percentage of communities' structures located in SFHAs, value of homes, and years since the last major flooding event. Because of the RAND study's limited sample size, the fact that it was limited to

<sup>75</sup> <http://www.fema.gov/business/nfip/nfipeval.shtm> (last visited on June 29, 2011).

<sup>76</sup> *The Evaluation of the National Flood Insurance Program – Final Report*, p. ix.

single-family homes, and the difficulty in obtaining valid data about the number of structures in SFHAs, solid inferences about the drivers of market penetration cannot be made. But the study demonstrates that the NFIP would be financially improved with a more geographically diversified policy base. The study suggests a number of areas worthy of further inquiry, including the lower rates of penetration in inland communities, collection of more data on compliance with mandatory purchase, and extension of the study to other types of structures and occupancies beyond single-family homes.

Relevant findings from the Evaluation's Final Report include:

In general, the Evaluation concludes that the NFIP is moving towards achievement of its goals. The progress made to date is impressive compared with the state of knowledge about and management of floodprone areas in 1968, although it has perhaps been slower than had been anticipated at the outset. Two notable trends have contributed to this progress: there is more widespread acceptance by local governments of the need for land use management to minimize flood damage; and there is broader support for various measures aimed at protecting and preserving natural resources, including streams, wetlands, and other floodplain features. In the face of the considerable accomplishments of the NFIP, noted below, it is nevertheless clear that the future will require even more strenuous efforts to combat flood losses. Past strategies are unlikely to remain adequate to the challenge of the increased losses expected to occur as a result of population growth and movement and the pressure to build in even more hazardous and sensitive areas, such as the coastal zone...<sup>77</sup>

When analyzing the future of the NFIP, changes in orientation, differing perceptions, and the management of the program must be considered. Many specific and detailed recommendations are made in the Evaluation's Final Report and in the 13 evaluation sub-studies. Some of those recommendations include:

- Revision of the NFIP flood-hazard-mapping criteria to identify natural functions worthy of preservation, high hazard areas that should be avoided, areas protected by flood control structures, and areas of known flood hazard, as well as to reduce the need to revise the maps over time;
- Revision of the NFIP flood plain management criteria by adding stronger provisions that have been proven to be effective and by encouraging local programs to adopt other, higher regulatory standards;
- Devotion of more resources to improving state and local flood plain management programs;
- Refinement of the tools for, and full funding of, a comprehensive strategy to reduce losses to existing buildings;
- Revision of insurance procedures to encourage greater coverage and take steps to increase compliance with the mandatory purchase requirement;

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<sup>77</sup> Ibid., p. x; <http://tinyurl.com/692h4rg> (last viewed on July 6, 2011).

- Implementation of known techniques that protect natural functions while also reducing damage, offering a variety of resource-protection incentives, and coordinating more closely with other federal and state resource protection programs; and
- Gathering and maintenance of needed data, use of it to measure progress towards the goals of the program, and sharing of it with Congress and the NFIP's other stakeholders.<sup>78</sup>

## 16. Potential Congressional Reforms

As mentioned above, the NFIP depends upon action by the legislative and executive branches to remain operational past the current sunset date of Sept. 30, 2011. As a result of unprecedented loss activity in 2004 and 2005, some members of Congress advanced proposals during that and subsequent legislative sessions, intended to ensure the ongoing viability of the NFIP. The proposed reforms have attempted to address key issues and considerations from the perspectives of a variety of major stakeholder groups, including:

### Adequacy and Availability of Funds

- Increase FEMA's borrowing authority to pay claims from the 2005 catastrophic hurricanes as well as other ongoing obligations and/or forgive the debt that the NFIP has incurred as a result of these storms.
- Phase out subsidized rates for flood insurance policies on certain vacation homes, second homes, and non-residential buildings constructed before applicable maps went into effect.
- Increase annual limitation on premium increases from 10 percent to 20 percent.<sup>79</sup>
- Require that expenses of the program for WYO companies be studied in detail (as discussed in Section 7 above).

Without a change in law, the NFIP might not be able to pay future flood claims promptly. FEMA, WYO companies, and policyholders face uncertainty about the availability of funds for future claims and program expenses. As of the time of publication, Congressional action was uncertain about possible re-authorization of and future substantial borrowing by NFIP and subsequent forgiveness of such borrowing.

### Adequacy of Coverages

- Increase existing flood insurance coverage limits, which have not changed since 1994. Currently they are \$250,000/\$100,000 (structure/contents) for residential buildings and \$500,000/\$500,000 for non-residential buildings.
- Introduce coverage for additional living expenses, business interruption, basements, and replacement cost of contents.

<sup>78</sup> Ibid., p. xiii.

<sup>79</sup> <http://www.gpo.gov/fdsys/pkg/BILLS-112hr1309ih/pdf/BILLS-112hr1309ih.pdf> (last visited on June 29, 2011).

- Notify tenants of availability of contents coverage.
- Clarify replacement cost provisions, forms, and policy language.
- Reduce the required waiting period from 30 days to 15 days before flood insurance takes effect.
- Remove the waiting period for the effective date of policies on a home being purchased or transferred when purchase of coverage is made within 30 days.

Many policyholders would like higher coverage limits and/or broader coverage options. But these changes may necessitate higher premiums or further financial strains on the program. WYO companies are concerned that changes be administratively manageable. WYO companies also expect to be compensated for additional costs resulting from any changes. Some members of Congress have expressed concerns about their constituents' desire for broader coverage availability, the effect on their constituents of higher rates, and additional exposure to the program.

### Wind/Flood

- Direct the NFIP to offer optional coverage for wind events. Requirements for the availability of wind coverage could include risk-based premiums and the agreement of local governments to adopt and enforce building codes designed to minimize wind damage, in addition to the existing NFIP requirements for flood plain management.
- Require NFIP participation in state mediation in claims involving both a flood component and a wind component (in situations in which wind coverage is secured in the private market).

A proposal to add wind coverage to the NFIP has been controversial. The Flood Insurance Subcommittee of the American Academy of Actuaries commented on H.R. 3121, the 2007 NFIP reform bill, in a letter to the Speaker of the House of Representatives. The Academy Subcommittee identified several financial issues that its members believed should be taken into account when assessing that bill. Its concerns included:

- The increased potential for further large losses in excess of available funds;
- Political pressure on Congress to suppress rates;
- Effects of high loss severity and loss volatility on pricing, particularly the need for a large contingency load;
- Potential issue of cross-subsidies between properties immediately along the coast and those inland, and the effect of cross-subsidization on collected premiums; and
- A requirement that the NFIP cease issuing and renewing policies if the NFIP borrows funds from the U.S. Treasury and until that loan is repaid.

### Increased Participation in the NFIP

- Establish a grant program for communities that sign up homeowners for non-mandatory purchase of flood insurance.

- Request GAO study of methods to increase flood insurance program participation among low-income families.
- Request GAO study to review mandatory flood insurance purchase requirements, their effects on properties in areas protected by levees, and the effects of expanding the purchase requirements to non-federally regulated lenders.
- Increase penalties for lender noncompliance with mandatory purchase requirements.

Many property owners are unaware of their flood exposure and the availability of coverage. NFIP's financial health would be improved by having a wider geographic spread of policies across the country.

## **17. Summary and Conclusions**

Because the peril of flood was deemed uninsurable by the private sector insurance market, the federal government established the National Flood Insurance Program to provide flood insurance coverage to property owners. The NFIP is a federal government/private sector program. The NFIP has many stakeholders, and the policies associated with it greatly affect certain categories of people in the United States.

The NFIP has provided communities and property owners with a better understanding of how to evaluate their flood risks and protect against the volatile nature and potentially devastating consequences of flood events. The NFIP also has focused attention on how to better protect and use the flood plains throughout the United States. It has created a successful working partnership between the federal government and private sector insurance companies in marketing and administering an insurance program for the American public.

The complexity of the NFIP, combined with the perception of its selective impact, creates a dilemma. Critical factors such as coastlines, rivers and streams, building construction and the use of land, the scientific understanding of hydrology, and the technologies used to measure and address flood risk constantly are changing, creating opportunities for constructive NFIP reform.

The significant losses suffered in the 2004, 2005, and 2008 hurricanes prompted a flurry of proposals to modify the NFIP. It is important for policymakers to understand the issues involved in, and potential consequences of, possible revisions to the NFIP. The authors hope that this monograph helps readers develop a clearer overall view of the NFIP and provides a context for evaluating the complex issues surrounding it.

## Appendix A

### Background—History and Intent of Program<sup>80</sup>

#### Early History

Several important federal actions preceded the 1968 establishment of the NFIP. In 1917, Congress approved a Flood Control Act.<sup>81</sup> By appropriating \$45 million for a long-range and comprehensive program of flood control for the lower Mississippi and Sacramento rivers, Congress accepted federal responsibility for flood control.<sup>82</sup> Congress then passed the Flood Control Act of 1936, which provided for the construction of approximately 250 projects.<sup>83</sup> The Act used funds for work relief. It established a two-pronged attack on the problem of reducing flood damages: the Department of Agriculture would develop plans to reduce runoff and retain more rainfall and the U.S. Army Corps of Engineers would develop engineering plans for downstream projects.<sup>84</sup> The Act represented the initial steps toward the development of a national flood-control program.

By 1929, the private sector insurance industry had stopped covering flood losses.<sup>85</sup> Based on data from floods that occurred between 1951 and 1954, a 1956 study on floods and flood losses for the American Insurance Association provided further reinforcing data to illustrate the insurance industry’s conviction that flood insurance products were not commercially feasible.

In response to the 1933 Long Beach, Calif., earthquake, and contrary to its past decisions, Congress passed legislation to provide direct assistance to private citizens suffering from disaster damage by issuing federal loans through the Reconstruction Finance Corp.<sup>86</sup>

Nearly 20 years later, the Disaster Relief Act of 1950 created the first permanent system for disaster relief.<sup>87</sup>

Following massive flooding in 1951, President Harry Truman recommended the creation of a “national system of flood disaster insurance.”<sup>88</sup> The following year, he submitted a proposal to Congress to establish a national system of flood-disaster insurance.<sup>89</sup>

<sup>80</sup> *A Chronology of Major Events Affecting The National Flood Insurance Program*, December 2005. Completed for the Federal Emergency Management Agency Under Contract Number 282-98-0029. The American Institutes for Research, The Pacific Institute for Research and Evaluation, Deloitte & Touche LLP.

<sup>81</sup> <http://www.mvd.usace.army.mil/mrc/history/AppendixD.htm> (last visited on June 29, 2011).

<sup>82</sup> *Id.*

<sup>83</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>84</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>85</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>86</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>87</sup> The Disaster Relief Act of 1950 created the first disaster relief system that did not require a Congressional act to serve as its trigger. See

[http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>88</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>89</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

Early Federal Actions

Despite President Truman’s early efforts, no law providing a federal source of flood insurance was enacted until the Federal Flood Insurance Act of 1956, which directed the Housing and Home Finance Agency to establish a program of federal insurance and reinsurance against the risks of losses resulting from floods and tidal disasters.<sup>90</sup> The Housing and Home Finance Agency created the Federal Flood Indemnity Administration to carry out the tasks set forth in the Federal Flood Insurance Act of 1956.<sup>91</sup> No technical studies were undertaken to determine the costs of starting a federal program for flood insurance, however, and Congress did not appropriate any funds for the Federal Flood Indemnity Administration.<sup>92</sup> As a consequence, it ceased to exist.<sup>93</sup>

The National Flood Insurance Act of 1968 (Title XII of the Housing and Urban Development Act of 1968) created the NFIP and the Federal Insurance Administration (FIA), within the Department of Housing and Urban Development, to provide flood insurance in communities that voluntarily adopted and enforced flood plain management ordinances that met minimum NFIP requirements.<sup>94</sup> The premiums of policyholders of structures in flood-plains were subsidized.<sup>95</sup> Occupants of structures built in flood plains after the Act’s passage were to pay actuarially based premiums.<sup>96</sup> Section 1302(c) states, “The objectives of a flood insurance program should be integrally related to a unified national program for flood-plain management.”<sup>97</sup> The NFIP was authorized to borrow up to \$1 billion from the U.S. Treasury to cover losses that exceeded the program’s revenues.<sup>98</sup>

In late 1968, the industry’s flood insurance pool, the National Flood Insurers Association (NFIA), was created in accordance with sections 1331 and 1332 of the National Flood Insurance Act.<sup>99</sup> The NFIA was administered by the Insurance Services Office. Membership in the NFIA was open to all qualified companies licensed to write property insurance under the laws of any state.<sup>100</sup> The companies would sell and service policies written as part of the NFIP.

Six months later, the Department of Housing and Urban Development and the NFIA signed an agreement for the marketing of flood insurance policies and the adjustment of

<sup>90</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>91</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>92</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>93</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>94</sup> <http://www.gao.gov/htext/d05532t.html> (last visited on June 29, 2011).

<sup>95</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>96</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

The law ultimately defined subsidized pre-FIRM buildings as those on which “construction or substantial improvement ... started on or before December 31, 1974, or before the effective date of the **initial** Flood Insurance Rate Map (FIRM) of the community, whichever is later.” [emphasis added]

<sup>97</sup> <http://codes.lp.findlaw.com/uscode/42/50/4001> (last visited on June 29, 2011).

<sup>98</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>99</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>100</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

claims.<sup>101</sup> Pursuant to the agreement, the NFIA would appoint a servicing company, generally on a statewide basis, to disseminate information to the public and insurance agents about the insurance aspects of the program, to process all insurance policies, and to handle the adjustment of claim payments for losses.<sup>102</sup>

Throughout the early 1970s, NFIP's subsidized rates for flood insurance were lowered several times to encourage participation in the program.<sup>103</sup>

The Flood Disaster Protection Act of 1973 amended the National Flood Insurance Act of 1968.<sup>104</sup> Among other provisions, the new Act included the following:

- A requirement that property owners in participating communities purchase flood insurance as a condition of the receipt of federal or federally related financial assistance for the acquisition, construction, or improvement of structures in special flood hazard areas (SFHAs). In addition, property owners had to purchase flood insurance to be eligible to obtain federal disaster assistance for construction or reconstruction purposes.<sup>105</sup>
- A requirement stating that, as a condition of future federal financial assistance, states and communities “participate in the flood insurance program and ... adopt adequate flood plain ordinances with effective enforcement provisions consistent with federal standards to reduce or avoid future flood losses.”<sup>106</sup>
- A provision for grandfathering, for purposes of determining insurance rates, of structures built in flood-hazard areas before the areas were so identified.<sup>107</sup>
- A mandate that federally regulated lending institutions cannot make, increase, extend, or renew any loan on a property located in an SFHA in a participating community without requiring flood insurance.<sup>108</sup>

The Housing and Community Development Act of 1974 amended the National Flood Insurance Act to require federally regulated lenders to notify prospective borrowers of a property's location in an SFHA.<sup>109</sup>

In January 1978, the federal government assumed the direct insurance writing and claims handling operation of the NFIP, using an NFIP Servicing Agent to handle the sales and servicing responsibilities.<sup>110</sup> Prospective policyholders continued to use local agents and

<sup>101</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>102</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>103</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>104</sup> <http://www.federalreserve.gov/boarddocs/rptcongress/flood/default.htm> (last visited on June 29, 2011).

<sup>105</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>106</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>107</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>108</sup> <http://www.federalreserve.gov/boarddocs/rptcongress/flood/default.htm> (last visited on June 29, 2011).

<sup>109</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>110</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

brokers to obtain their policies.<sup>111</sup> The FIA and the NFIP were transferred in 1979 to the newly created FEMA.<sup>112</sup>

In January 1983, the GAO found that, due to data and methodological weaknesses in determining the rate structure, the NFIP had not collected sufficient premiums to cover the cost of providing insurance to nearly 2 million policyholders.<sup>113</sup> As a result, the FIA had to borrow \$854 million from the U.S. Treasury between 1970 and 1980.<sup>114</sup>

In October 1983, some private-sector insurance companies entered into an arrangement with the FIA to sell and service flood insurance under the newly created WYO program.<sup>115</sup> During the WYO program's first year, 48 companies agreed to become WYO participants.<sup>116</sup> The first WYO policies were sold in November 1983.<sup>117</sup> This dramatically increased insured participation. WYO companies eventually would become the principal source of flood insurance.

### Later Federal Actions

In 1990, the Community Rating System (CRS) was created. It is a voluntary program intended to recognize and encourage NFIP communities that implement flood-prevention and flood plain management measures that go beyond the basic standards required by the NFIP.<sup>118</sup>

Under the CRS, communities receive credit for more restrictive regulations; acquisition, relocation, or flood proofing of flood prone buildings; preservation of open space; and other measures that may reduce flood damages or protect the natural resources and beneficial functions of flood plains.

Flood insurance premium rates for structures located in CRS communities are adjusted to reflect the reduced flood risk resulting from community activities, such as those listed above, that meet the three goals of the CRS:

- Reduce flood losses to insurable property,
- Strengthen and support the insurance elements of the NFIP, and
- Encourage a comprehensive approach to floodplain management.

There are 10 CRS classes, ranging from Class 1, which obtains the most credit points and receives the largest premium reductions, to Class 10. A Class 10 community is not very active in CRS and receives no premium reduction. CRS premium discounts range from 45 percent for Class 1 communities to 5 percent for Class 9 communities for structures

<sup>111</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>112</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>113</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>114</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>115</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>116</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>117</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>118</sup> [http://www.wvdhsem.gov/nfip1\\_CRS.htm](http://www.wvdhsem.gov/nfip1_CRS.htm) (last visited on June 29, 2011).

located within the flood plain. Lower discounts are provided for structures outside the flood plain. The CRS recognizes 18 creditable activities, which are organized into four series: Public Information, Mapping and Regulations, Flood Damage Reduction, and Flood Preparedness.<sup>119</sup>

About two-thirds of structures covered by the NFIP are within the approximately a thousand participating CRS communities.

The Community Development and Regulatory Improvement Act, also known as the National Flood Insurance Reform Act of 1994, included the most comprehensive changes to the NFIP since the Flood Disaster Protection Act in 1973.<sup>120</sup> Revised provisions included:

- Non-waiver of the requirement that flood insurance is purchased by recipients of federal disaster assistance.<sup>121</sup>
- Expanded requirements for lenders when making loans, and a requirement that coverage is maintained for the life of the loan.<sup>122</sup>
- Codification of the community rating system, and direction that credits may be given to communities that implement measures to protect natural and beneficial flood plain functions and manage erosion.<sup>123</sup>
- An increase in the maximum coverage amounts available and a requirement to review and assess every five years the need to update and revise Flood Insurance Rate Maps (FIRMs).<sup>124</sup>
- Requirement of an economic impact study on the effect of charging actuarial rates for pre-FIRM structures.<sup>125</sup>
- Prohibition on disaster assistance to individuals in a SFHA who previously received disaster assistance and did not maintain flood insurance.<sup>126</sup>

The Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004 included reforms to address repetitive loss properties and constituted a reauthorization of the NFIP until Sept. 30, 2008.<sup>127</sup> Additional funding mechanisms focused mitigation efforts on “severe” repetitive loss structures that resulted in a disproportionate number of claims to the NFIP.<sup>128</sup> The goals of the 2004 Act were to provide people who have experienced serious and repetitive flood damage with financial assistance from the NFIP, communities, and states; to end the abuses by those who misuse the program; and to improve consumer understanding of the rights of NFIP policyholders.<sup>129</sup>

<sup>119</sup> <http://www.fema.gov/pdf/nfip/manual200805/19crs.pdf> (last visited on June 29, 2011).

<sup>120</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>121</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>122</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>123</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>124</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>125</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>126</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>127</sup> [http://www.floods.org/PDF/ASFPM\\_FIRA2004\\_070804.pdf](http://www.floods.org/PDF/ASFPM_FIRA2004_070804.pdf) (last visited on June 29, 2011).

<sup>128</sup> [http://www.floods.org/PDF/ASFPM\\_FIRA2004\\_070804.pdf](http://www.floods.org/PDF/ASFPM_FIRA2004_070804.pdf) (last visited on June 29, 2011).

<sup>129</sup> [http://www.floods.org/PDF/ASFPM\\_FIRA2004\\_070804.pdf](http://www.floods.org/PDF/ASFPM_FIRA2004_070804.pdf) (last visited on June 29, 2011).

In July 2004, FEMA issued an interim final rule in the *Federal Register* to amend the FIA, the Financial Assistance/Subsidy Arrangement (the standard insurance contract used by WYO companies), and the related regulations regarding issues of federal jurisdiction (the applicability of federal law to lawsuits involving WYO companies, and the applicability of reimbursement to WYO companies for the cost of litigation).<sup>130</sup> In addition, FEMA amended the procedures necessary for companies seeking to obtain or suspend their status as WYO companies.<sup>131</sup>

### Financial Actions

The intent of the NFIP was to generate premiums sufficient to cover at least expenses and losses relative to what is called the historical average loss year, which differs from the traditional insurance definition of solvency.<sup>132</sup> Throughout the 1980s, FEMA initiated extensive rate increases and coverage changes designed to place the NFIP on sound fiscal ground.<sup>133</sup> During fiscal year 1986, no taxpayer funds were required to meet the NFIP's flood insurance expenses, meaning that, for the first time, the NFIP was self-supporting.<sup>134</sup> In addition, at the beginning of the fiscal year, the NFIP was required, for the first time, to pay all program and administrative expenses with funds derived from insurance premiums.<sup>135</sup> Before that time, program costs for administrative expenses, surveys, and studies were financed through congressional appropriations.<sup>136</sup>

In the Budget Reconciliation Act of 1990, Congress required policyholders to pay for expenses beyond the insurance costs of the NFIP, such as mapping, flood studies, and flood plain management activities.<sup>137</sup> This legislation was controversial because the benefits of those activities are enjoyed by all communities and residents in the flood plains, not just NFIP policyholders.

In fiscal year 1992, the NFIP experienced losses that were more than twice its historic loss level, and, in 1993, it had to borrow \$100 million from the U.S. Treasury.<sup>138</sup> This was the first time since 1984 such borrowing had been necessary.<sup>139</sup> The borrowed funds were repaid in fiscal year 1994.<sup>140</sup>

<sup>130</sup> <http://www.epa.gov/fedrgstr/EPA-IMPACT/2003/October/Day-14/i25905.htm> (last visited on June 29, 2011).

<sup>131</sup> <http://www.epa.gov/fedrgstr/EPA-IMPACT/2003/October/Day-14/i25905.htm> (last visited on June 29, 2011).

<sup>132</sup> [http://www.fema.gov/library/file;jsessionid=E9F9828C0A315EFF418280AE4E944244.WorkerLibrary?type=publishedFile&file=rate\\_rev04.pdf&fileid=e60f7330-abc9-11db-b560-000bdba87d5b](http://www.fema.gov/library/file;jsessionid=E9F9828C0A315EFF418280AE4E944244.WorkerLibrary?type=publishedFile&file=rate_rev04.pdf&fileid=e60f7330-abc9-11db-b560-000bdba87d5b) (last visited on June 29, 2011).

<sup>133</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>134</sup> <http://www.fas.org/spp/crs/misc/R40650.pdf> (last visited on June 29, 2011).

<sup>135</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>136</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>137</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>138</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>139</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>140</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

In September 1996, the NFIP experienced losses that were much higher than its historic loss levels and the NFIP borrowed \$626 million in Treasury Department funds.<sup>141</sup> The NFIP borrowed an additional \$192 million over the next six months.<sup>142</sup> In October 1996, Congress approved a supplemental request to increase the NFIP's borrowing for fiscal year 1997 to \$1.5 billion from \$1 billion.<sup>143</sup> By September 1997, the U.S. Treasury had loaned the NFIP \$917 million.<sup>144</sup> This had been repaid by June of 2001.<sup>145</sup> Tropical Storm Allison made landfall that year, and the borrowing resumed.<sup>146</sup> Allison resulted in more than 30,000 claims and approximately \$1 billion in claim payments.<sup>147</sup> By late 2002, the NFIP had paid the final \$10 million installment on the \$650 million it had borrowed to pay claims arising from Tropical Storm Allison.<sup>148</sup>

In 2004, FEMA paid out \$1.8 billion in claims, or approximately two and a half times the amount paid out in 2003.<sup>149</sup> FEMA used \$225 million in NFIP borrowing authority to pay 2004 flood loss claims.<sup>150</sup>

In July 2005, Hurricane Dennis hit the Florida panhandle in the same area that had been affected by Hurricane Ivan the previous year.<sup>151</sup> Ivan had cost the NFIP approximately \$1.5 billion, with Dennis adding another \$100 million plus.<sup>152</sup> Later in the season, Hurricane Katrina struck Louisiana and Mississippi, resulting in floodwall and levee failures that caused up to 80 percent of the city of New Orleans to flood.<sup>153</sup> Hurricane Rita then struck the Gulf Coast along the western Louisiana and eastern Texas shores, causing the city of New Orleans to suffer new levee breaches and additional flooding.<sup>154</sup> In response to the losses associated with hurricanes Katrina and Rita, President George W. Bush signed H.R. 3669, which increased the NFIP's borrowing authority from \$1.5 billion to \$3.5 billion.<sup>155</sup>

The Congressional Budget Office (CBO) later estimated that FEMA probably would not be able to repay the funds borrowed under H.R. 3669 within the "next 10 years," that Katrina-related claims would "exceed the total resources that will be available to FEMA under H.R. 3669," and that "repayments of borrowed funds would not occur until after

<sup>141</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>142</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>143</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>144</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>145</sup> [http://www.dhs.gov/xlibrary/assets/privacy/privacy\\_pia\\_mip\\_apnd\\_h.pdf](http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_mip_apnd_h.pdf) (last visited on June 29, 2011).

<sup>146</sup> <http://www.fema.gov/news/newsrelease.fema?id=3565> (last visited on June 29, 2011).

<sup>147</sup> <http://www.fema.gov/news/newsrelease.fema?id=4918> (last visited on June 29, 2011).

<sup>148</sup> <http://www.fema.gov/news/newsrelease.fema?id=3565> (last visited on June 29, 2011).

<sup>149</sup> See <http://www.gao.gov/new.items/d06119.pdf> (last visited on June 29, 2011).

<sup>150</sup> <http://financialservices.house.gov/media/pdf/102005dm.pdf> (last visited on June 29, 2011).

<sup>151</sup> See <http://www.cnn.com/2005/WEATHER/07/10/tropical.weather/index.html> (last visited on June 29, 2011).

<sup>152</sup> <http://www.fema.gov/business/nfip/statistics/sign1000.shtm> (last visited on June 29, 2011).

<sup>153</sup> [http://www.dhs.gov/xfoia/archives/gc\\_1157649340100.shtm](http://www.dhs.gov/xfoia/archives/gc_1157649340100.shtm) (last visited on June 29, 2011).

<sup>154</sup> [http://www.pbs.org/newshour/updates/rita\\_09-24-05.html](http://www.pbs.org/newshour/updates/rita_09-24-05.html) (last visited on June 29, 2011).

<sup>155</sup> See <http://www.senate.gov/~budget/republican/pressarchive/2005/2005-11-18Hurricanes.pdf> (last visited on June 29, 2011).

2015.”<sup>156</sup> In October 2005, David Maurstad, acting director of the FEMA Mitigation Division and federal insurance administrator, testified before the Senate Committee on Banking, Housing and Urban Affairs on the future of the National Flood Insurance Program.<sup>157</sup> Maurstad reported to the committee that the magnitude and severity of flood losses caused by Hurricanes Katrina and Rita were “unprecedented in the history of the NFIP.”<sup>158</sup> He predicted that Katrina and Rita-related flood claims would “result in flood insurance claims that significantly exceed the highest number of claims filed from any single event in the NFIP’s history, and well more than triple the total number of claims filed in 2004.”<sup>159</sup> He also predicted that Katrina and Rita-related NFIP claims could exceed \$22 billion and noted that, in its entire history, the NFIP had paid out only \$15 billion total.<sup>160</sup>

In March 2006, President Bush signed S. 2275, which authorized the NFIP to increase its borrowing authority to \$20.775 billion.<sup>161</sup> In June 2010, the National Flood Insurance Program Extension Act of 2010 lowered the NFIP’s borrowing authority to \$20.725 billion.

The most recent large events for the NFIP occurred in September 2008, when hurricanes Gustav and Ike made landfall near the Texas-Louisiana border. As a result of those two hurricanes, the NFIP handled more than 50,000 claims and paid out nearly \$3 billion.

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<sup>156</sup> <http://www.cbo.gov/showdoc.cfm?index=6658&sequence=0> (last visited on June 29, 2011).

<sup>157</sup> <http://banking.senate.gov/public/ files/maurstad.pdf> (last visited on June 29, 2011).

<sup>158</sup> <http://banking.senate.gov/public/ files/maurstad.pdf> (last visited on June 29, 2011).

<sup>159</sup> <http://banking.senate.gov/public/ files/maurstad.pdf> (last visited on June 29, 2011).

<sup>160</sup> <http://banking.senate.gov/public/ files/maurstad.pdf> (last visited on June 29, 2011).

<sup>161</sup> <http://www.thomas.gov/cgi-bin/bdquery/z?d109:SN02275:@@ @L&summ2=m&> (last visited on June 29, 2011).

## Appendix B

### Oversight of the NFIP

The NFIP is a large federal program with more than 5 million policies in force<sup>162</sup> and annual written premiums of approximately \$3.4 billion as of April 2011.<sup>163</sup> It has an especially large impact on specific communities, businesses, and individuals in the United States, particularly on those communities and individuals that are located within the flood plains, known as special flood hazard areas (SFHAs). As a result, many different constituencies are invested in the work of the NFIP. Those constituencies include policyholders/homeowners, business owners, community officials, community and state flood plain professionals and managers, insurance agents, insurance industry professionals and managers, commentators, banking and mortgage officials, state and federal regulators, the administration, and, of course, Congress.

Congress has an extensive oversight responsibility for the NFIP, primarily through the Senate Banking, Housing & Urban Affairs Committee and the House Financial Services Committee. Those committees and their predecessors were the authors of the original NFIP legislation and all NFIP-altering legislation promulgated since then. Major changes to the NFIP are accomplished by legislation originating from those two committees. Less significant reforms can be made through regulatory modifications sponsored by FEMA. Such regulatory modifications must go through the federal rulemaking process. That process, including public comment periods, generally takes one to two years.

FEMA is part of the executive branch of the federal government. It is housed within the Department of Homeland Security (DHS).<sup>164</sup> Oversight of the NFIP, therefore, also comes from DHS and the Office of Management and the Budget (OMB). In addition, Congress often assigns studies of the NFIP and its operations to the Government Accountability Office, the Congressional Research Service, and the Congressional Budget Office, which usually respond with detailed analyses and commentary.<sup>165, 166</sup> The Inspector General of DHS and FEMA's Office of the Chief Financial Officer also periodically review various aspects of the NFIP's operations. In addition, the inspector general conducts an annual financial audit of the NFIP.

<sup>162</sup> <http://www.fema.gov/business/nfip/statistics/pol.shtm> (last visited on June 29, 2011).

<sup>163</sup> <http://bsa.nfipstat.com/reports/1011.htm> (last visited on June 29, 2011).

<sup>164</sup> [http://www.dhs.gov/xabout/structure/editorial\\_0644.shtm](http://www.dhs.gov/xabout/structure/editorial_0644.shtm) (last visited on June 29, 2011).

<sup>165</sup> See <http://www.gao.gov/new.items/d06174t.pdf> (last visited on June 29, 2011).

<sup>166</sup> See <http://www.cbo.gov/ftpdocs/82xx/doc8256/06-25-FloodInsurance.pdf> (last visited on June 29, 2011).

## Appendix C

### Premium Rate Structure of the NFIP

There are a number of classes of risks that include special considerations in their rate determination beyond the standard ratemaking process of using the hydrologic/financial model.

- **Preferred Risk Policy**

One key and increasingly important class of business is the **Preferred Risk Policy (PRP)** business. PRP risks are charged full-risk (more commonly known as actuarial) rates, which are based on consideration of the risk involved and accepted actuarial principles. The eligibility qualifications for PRP are primarily (1) that the location of the structure is outside of any special flood hazard area (SFHA) on the current flood insurance risk maps (FIRMs) and (2) the structure has a favorable loss history. PRPs comprise the lowest risks in the NFIP and therefore receive the most favorable premium rates. The PRP program is important for the NFIP in helping to meet one of its current goals—increasing the NFIP market penetration of properties outside the special flood hazard areas (SFHAs). The number of PRP policies has been growing rapidly in recent years.

The **Preferred Risk Policy (PRP) Eligibility Extension** became effective on Jan. 1, 2011. The Flood Map Modernization and the Risk MAP programs have caused many areas to be recategorized from moderate-to-low risk to high-risk. For the properties within those areas, this could mean a significant increase in rates. To help ameliorate any potential hardship to property owners, FEMA has introduced a new process to allow those owners to continue to buy the lower-cost PRP policy for two years, at which time they are required to buy the policy at standard rates.

- **Properties with Flood Map Grandfathering**

**Flood Map Grandfathering** is an NFIP administrative procedure that allows properties that have experienced changes to their FIRMs to continue to pay premiums based on their prior (lower-premium) rate classes.<sup>167</sup>

The NFIP continually makes changes to FIRMs for various reasons, including new development and construction projects within a community that change the flow or retention of flood waters or reconsideration of the risks presented by an existing flood plain. A new FIRM could affect premium rates for buildings within its boundaries. The NFIP has set certain criteria for negatively affected buildings to qualify for grandfathering. The NFIP compensates for the grandfathered policies within each

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<sup>167</sup>

[http://www.fema.gov/library/file;jsessionid=412F42857F2B3889B72BDE6C854E8897.Worker2Library?ty=pe=publishedFile&file=map\\_changes\\_and\\_insurance\\_savings.pdf&fileid=66669c00-d232-11db-866c-000bdba87d5b](http://www.fema.gov/library/file;jsessionid=412F42857F2B3889B72BDE6C854E8897.Worker2Library?ty=pe=publishedFile&file=map_changes_and_insurance_savings.pdf&fileid=66669c00-d232-11db-866c-000bdba87d5b) (last visited on June 29, 2011).

class of business by aiming to set premium rates for the whole class, including grandfathered and non-grandfathered buildings, at an actuarially adequate level. According to the NFIP, the number of buildings with grandfathered rates is relatively low. As the Risk MAP project continues, however, the number of buildings eligible for grandfathering is likely to increase.

- **Pre-FIRM Properties**

The rationale for allowing subsidized classes of coverage was to permit the large inventory of structures that were built in SFHAs prior to the general implementation (circa 1974) of FIRMs and flood-related building codes (known as pre-FIRM structures) to obtain flood insurance at “reasonable” rates.<sup>168</sup>

The subsidized pre-FIRM rates are determined such that, when considered with all other policies in the program, the overall premium level for the program is sufficient to meet or exceed the historical average loss year. Not all pre-FIRM SFHA structures receive subsidized rates. Those property owners have a choice of either subsidized rates or full-risk rates. The full-risk rates for SFHA buildings with reference levels above the base flood elevation (BFE) are often less than the subsidized rates. By providing appropriate documentation, many pre-FIRM property owners are eligible for cheaper full-risk rates.

- **Pre-1981 V Zone areas**

“Velocity,” or “V” Zones, are primarily coastal areas subject to the risk of wave action in addition to flood waters reaching and exceeding the BFE.<sup>169</sup> Prior to 1981, NFIP building standards accounted for still water elevations but not associated wave action. In October 1981, the NFIP promulgated new, more stringent standards based on new engineering developments and studies. Subsequently, a decision was made, however, to grandfather the 1975 to 1981 construction and allow less than full-risk premium rates.<sup>170</sup>

- **Areas protected by flood-protection systems**

For the most part, flood-protection systems refer to levees. The flood legislation allows for buildings in such areas to receive X-zone rates, including PRP eligibility, if the flood protection system meets explicit standards promulgated by FEMA and the U.S. Army Corps of Engineers and the structures’ reference levels are at BFE or above.<sup>171</sup> The statute also allows X-zone rates in certain cases even for systems not

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<sup>168</sup> <http://www.fas.org/sgp/crs/misc/RL32972.pdf> (last visited on June 29, 2011).

<sup>169</sup> [http://www.fema.gov/plan/prevent/floodplain/nfipkeywords/zone\\_v.shtm](http://www.fema.gov/plan/prevent/floodplain/nfipkeywords/zone_v.shtm) (last visited on June 29, 2011).

<sup>170</sup> [http://www.fema.gov/library/file.jsessionid=E9F9828C0A315EFF418280AE4E944244.WorkerLibrary?type=publishedFile&file=rate\\_rev04.pdf&fileid=e60f7330-abc9-11db-b560-000bdba87d5b](http://www.fema.gov/library/file.jsessionid=E9F9828C0A315EFF418280AE4E944244.WorkerLibrary?typ e=publishedFile&file=rate_rev04.pdf&fileid=e60f7330-abc9-11db-b560-000bdba87d5b) (last visited on June 29, 2011).

<sup>171</sup> See [http://www.fema.gov/plan/prevent/fhm/fq\\_genin.shtm#in8](http://www.fema.gov/plan/prevent/fhm/fq_genin.shtm#in8) (last visited on June 29, 2011).

meeting the standards if there is a project underway to construct or improve the system to meet those standards. Those areas that do not yet meet standards are designated as “A99” or “AR” Zones on the FIRMs.<sup>172</sup> Such designations apply to policies that receive rates for their respective classifications as if the levees provided 100-year protection or better.

- **The D Zone**

The D Zone is a FIRM category for areas within NFIP-participating communities in which the flood hazard has not been determined; i.e., the areas have not been mapped. The mapping process in developing the FIRMs is accomplished in order of priority. There are some large geographical areas with tiny population densities, and in which future development is unlikely. Those areas are considered low priority with respect to mapping. The D Zone premium rates are estimated using average rates across a spectrum of classes.

- **Areas of Residual Risk**

Certain flood risks, such as levee failure and coastal erosion, are not currently recognized on the FIRMs or within the actuarial rating structure.<sup>173</sup> In the future, those areas may be mapped specifically and given premium rates.

In addition, there are a number of NFIP special-purpose programs, under which buildings can be insured using rates that are not or cannot be actuarially calculated. These include:

- The **emergency program** allows property owners in communities that are in the process of applying for NFIP participation to obtain coverage.<sup>174</sup> As a general rule, those communities do not yet have FIRMs in effect. While the premium rates are low, the allowed coverage is limited and temporary. The emergency program generally has accounted for a tiny proportion—currently less than 1 percent—of the in force policy base.
- **Group flood** contracts are issued by the NFIP in response to presidential disaster declarations.<sup>175</sup> States may apply for a group NFIP policy, under which property owners who are disaster recipients may apply for a variety of limited coverage options with low premium rates. Group flood contracts have three-year policy terms and are the only non-one-year policy contracts within the NFIP. Such contracts generally cannot be renewed.

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<sup>172</sup> [http://www.fema.gov/plan/prevent/fhm/fq\\_genin.shtm#in8](http://www.fema.gov/plan/prevent/fhm/fq_genin.shtm#in8) (last visited on June 29, 2011).

<sup>173</sup>

[http://www.fema.gov/library/file?type=publishedFile&file=fema549\\_apndx\\_e\\_ra8.pdf&fileid=143da3a0-0316-11dc-a1f1-000bdba87d5b](http://www.fema.gov/library/file?type=publishedFile&file=fema549_apndx_e_ra8.pdf&fileid=143da3a0-0316-11dc-a1f1-000bdba87d5b) (last visited on June 29, 2011).

<sup>174</sup> [http://www.fema.gov/plan/prevent/floodplain/nfipkeywords/emergency\\_program.shtm](http://www.fema.gov/plan/prevent/floodplain/nfipkeywords/emergency_program.shtm) (last visited on June 29, 2011).

<sup>175</sup> <http://www.fema.gov/business/nfip/19def2.shtm#G> (last visited on June 29, 2011).

The **mortgage portfolio protection program (MPPP)** was introduced on Jan. 1, 1991, as a tool to assist the mortgage lending and servicing industries in bringing their mortgage portfolios into compliance with the Flood Disaster Protection Act of 1973, which established mandatory purchase requirements.<sup>176</sup> The MPPP is intended to be used by lenders as a last resort to force-place coverage when a borrower cannot or will not purchase the policy directly.

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<sup>176</sup> <http://www.fema.gov/pdf/nfip/manual200510/10mppp.pdf> (last visited on June 29, 2011).

FLOOD INSURANCE SUBCOMMITTEE MONOGRAPH

NFIP Actuarial Rate Review

Supporting October 1, 2010, Rate Changes

Exhibit A  
Page 1

NATIONAL FLOOD INSURANCE PROGRAM

Effects of Rate Revision on Average Annual Written Premium (plus FPF) per Policyholder\*  
Based on Projected Distribution of Business and Projected Amounts of Insurance

	Distribution of Business	Average Annual Premium with October 2010 Rates	Increase over Annual Premium with Current Rates
REGULAR PROGRAM - ACTUARIAL RATES			
AE	28.9%	498.87	5.9%
A	1.7%	816.70	5.3%
<u>AO, AH, AOB &amp; AHB</u>	<u>8.1%</u>	<u>387.76</u>	<u>1.1%</u>
ZONES AE, A, AO, AH, AOB, AHB	38.7%	489.36	5.0%
POST-81 V, VE	0.9%	2,806.86	9.2%
B, C, X (Standard)	7.7%	611.74	7.4%
<u>PRP</u>	<u>31.3%</u>	<u>343.65</u>	<u>0.0%</u>
TOTAL ZONES B, C, X	39.0%	396.52	2.1%
SUBTOTAL ACTUARIAL	<u>78.5%</u>	<u>469.10</u>	<u>4.0%</u>
REGULAR PROGRAM - SUBSIDIZED RATES			
Pre-FIRM AE	16.2%	1,166.27	2.6%
Pre-FIRM V, VE	0.7%	1,806.75	3.4%
<u>Pre-FIRM Other</u>	<u>3.8%</u>	<u>1,068.81</u>	<u>2.6%</u>
PRE-FIRM SUBSIDIZED	20.8%	1,176.41	2.7%
75-81 POST V, VE	0.1%	1,468.36	9.5%
A99 & AR	0.5%	895.95	9.0%
EMERGENCY	0.0%	402.20	0.0%
SUBTOTAL SUBSIDIZED	<u>21.5%</u>	<u>1,170.07</u>	<u>2.9%</u>
TOTAL	<u>100.0%</u>	<u>619.79</u>	<u>3.6%</u>

\*Computations are based on counting and pricing units insured under Condo Master Policies separately.

\*\* Includes all other Pre FIRM zones, including AO, AH, AOB, AHB, D, AR, and A99.

Exhibit A. Effects of Rate Revisions on Written Premium, Page 1

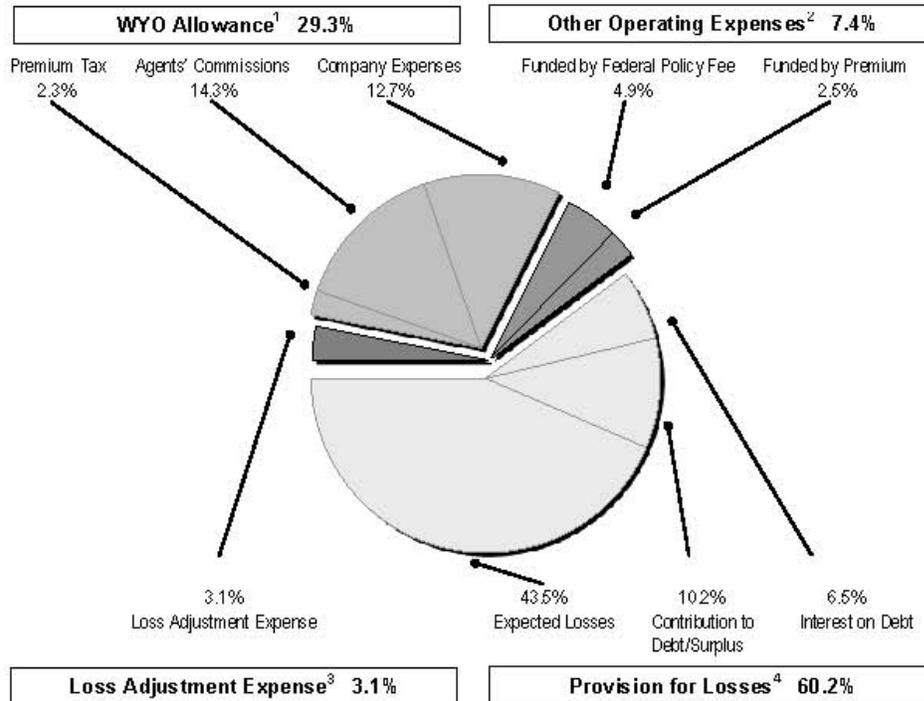
FLOOD INSURANCE SUBCOMMITTEE MONOGRAPH

NFIP Actuarial Rate Review

Supporting October 1, 2010, Rate Changes

EXHIBIT D

Federal Emergency Management Agency  
National Flood Insurance Program  
**Analysis of the Components of Premium and Federal Policy Fee**



The chart above shows the prospective expenses and losses associated with the average premium resulting from the October 1, 2010, rate changes.

<sup>1</sup> **WYO Allowance** (29.3%) consists of three components. Premium Tax (2.3%) and Agents' Commissions (14.3%) are pass-through costs incurred by the WYO (Write Your Own) companies. The remaining amount, Company Expenses (12.7%), is retained by the WYO companies to cover their expenses.

<sup>2</sup> **Other Operating Expenses** (7.4%) consists of the Federal Policy Fee (4.9%), which covers salaries, mapping, mitigation grants, etc. and Fixed Expenses (2.5%), which covers such items as contractor costs and the NFIP FloodSmart marketing and advertising program.

<sup>3</sup> **Loss Adjustment Expense** (3.1%) includes compensation to adjusters and claims office overhead.

<sup>4</sup> **Provision for Losses** (60.2%) is the portion of premium available, after all expenses, to current and former losses. If losses during the 12 months these rates will be in effect are equal to the historical average loss year (discussed on pages 5-6), then current losses will equal 43.5% of premium, and interest on current debt will equal 6.5% of premium, leaving 10.2% to pay down the current debt or to build a cash reserve that would be used to pay claims during future heavy loss years.

**Exhibit D.** Analysis of NFIP Projected Income and Expenses, October 1, 2010 – October 1, 2011

## Appendix D

### WYO and Direct Programs

The operations of the WYO companies' flood businesses are governed primarily by Code of Federal Regulations Title 44, Part 62, Subpart C.<sup>177</sup> Subpart C contains the terms and conditions for property and casualty companies participating in the WYO program. Additional elements of the WYO program are contained in Part 62's Appendix A (the Financial Assistance/Subsidy Arrangement), which spells out the expense allowances and responsibilities of the WYO companies,<sup>178</sup> and Appendix B (the Financial Control Plan), which lists the financial, audit, examination, and data requirements for WYO companies.<sup>179</sup> The direct program's operations are governed by Subpart B of the above regulation.

#### Qualifications as a WYO Company

The Code of Federal Regulations (Title 44, Part 62, Subpart C) sets forth the requirements of the WYO program.

To qualify as a WYO company, a company must:

- Be a licensed property insurance company.
- Have at least five years of history writing property coverage.
- Disclose any legal proceedings or other formal proceedings regarding the company's business practices to which it has been subjected with any state or federal governmental agencies in the past five years.
- Submit its most recent annual statement.
- Show that it meets or exceeds the National Association of Insurance Commissioners' standards for risk-based capital and surplus.
- Submit its last audit, which should contain no negative findings.

The company must provide evidence that it can process flood insurance and meet the requirements of the financial control plan. The company also must submit its plans for producer training, marketing plans, sales targets, claims handling, and plans for handling disasters.

#### Financial Transactions<sup>180</sup>

WYO companies collect flood premiums separately and place these funds, less the companies' expenses as discussed below, into an NFIP-specific restricted account. Any

<sup>177</sup> [http://edocket.access.gpo.gov/cfr\\_2008/octqtr/44cfr62AppB.htm](http://edocket.access.gpo.gov/cfr_2008/octqtr/44cfr62AppB.htm) (last visited on June 29, 2011).

<sup>178</sup> [http://www.fema.gov/library/file;jsessionid=182C99427CAE7C33E557E4E3A6D9D48E.WorkerLibrary?type=publishedFile&file=woarrg2010\\_rev.pdf&fileid=ddf19180-b5d2-11df-97ce-001cc4568fb6](http://www.fema.gov/library/file;jsessionid=182C99427CAE7C33E557E4E3A6D9D48E.WorkerLibrary?type=publishedFile&file=woarrg2010_rev.pdf&fileid=ddf19180-b5d2-11df-97ce-001cc4568fb6) (last visited on June 29, 2011).

<sup>179</sup> [http://edocket.access.gpo.gov/cfr\\_2010/octqtr/pdf/44cfr62AppA.pdf](http://edocket.access.gpo.gov/cfr_2010/octqtr/pdf/44cfr62AppA.pdf) (last visited on June 29, 2011).

<sup>180</sup> Federal Regulations (Title 44, Part 62, Subpart C).

excess over the amounts required for the administration of their NFIP policies is then remitted to the U.S. Treasury.

WYO companies may withhold operating, administrative, and production expenses from the premium collected. The amount to be withheld for operating and administrative expenses is determined by FEMA based on average industry expense ratios, as detailed in the regulation. WYO companies also may retain 15 percent of written premium for commissions to producers. An additional amount, up to two percentage points, may also be awarded by FEMA based on a company's achievement of the marketing goals of the NFIP for the year.

Loss payments are made from federal funds retained in the account. Loss-adjustment expenses (allocated and unallocated) also are drawn from this account. Unallocated loss-adjustment expenses and allocated loss-adjustment expenses are reimbursed subject to a fee schedule.<sup>181</sup> If the funds in the account are not sufficient to pay all losses, a company may draw from the federal flood fund using a letter of credit (LOC) procedure.<sup>182</sup> As described in the financial control plan and the WYO Accounting Procedures Manual, a company can request funds by providing specific required documentation in an LOC application.<sup>183</sup> LOC applications are reviewed on a daily basis in the Risk Insurance Branch, which then authorizes specific amounts to be placed in WYO companies' "accounts" at the Treasury. The WYO companies then can draw from those accounts as needed and deposit the funds in their restricted accounts.

#### Financial Controls<sup>184</sup>

To ensure that taxpayer funds are spent appropriately, WYO companies are subject to the financial control plan.<sup>185</sup> WYO companies are also subject to audits, examinations, and the regulatory controls of the states in which they operate, as well as internal company audits. FEMA may use findings from such activities to monitor WYO companies.

Under the financial control plan, a WYO company will be subject to an audit of flood insurance financial statements every two years by a CPA firm at the company's expense. The financial audits are intended to evaluate each WYO company's financial statements, internal controls, and compliance with laws and regulations. In addition, transactional records are reconciled monthly with financial statements.

FEMA also conducts reviews of each WYO's claims, underwriting, customer service, marketing, and litigation activities at least every three years. None of these reviews limit the authority of the GAO or FEMA to further review a WYO company's activities at any time.

<sup>181</sup> <http://edocket.access.gpo.gov/2008/pdf/E8-18176.pdf> (last visited on June 29, 2011).

<sup>182</sup> [http://edocket.access.gpo.gov/cfr\\_2002/octqtr/44cfr62.24.htm](http://edocket.access.gpo.gov/cfr_2002/octqtr/44cfr62.24.htm) (last visited on June 29, 2011).

<sup>183</sup> [http://bsa.nfipstat.com/manuals/acctproc\\_200510.pdf](http://bsa.nfipstat.com/manuals/acctproc_200510.pdf) (last visited on June 29, 2011).

<sup>184</sup> Federal Regulations (Title 44, Part 62, Subpart C); The Write Your Own Financial Control Plan Requirements and Procedures.

<sup>185</sup> <http://bsa.nfipstat.com/manuals/fcp99jc.pdf> (last visited on June 29, 2011).

## Appendix E

### Glossary

#### **Actuarial rate**

Term frequently used to describe NFIP full-risk rates.

#### **Actuarially sound premium rate**

Premium rates calculated such that they return to the insurer the expected value of all future costs associated with an individual risk transfer, plus an additional margin or contingency loading.

#### **Additional living expenses**

Extra charges covered by homeowners' policies above policyholders' customary living expenses. Additional living expenses apply, where applicable, to situations in which the insured requires temporary shelter because damage by a covered peril has rendered the home temporarily uninhabitable. Examples include costs for hotel or motel, costs for restaurant meals, and costs for clothes-laundry service.

#### **Borrowing authority**

Statutory authority that permits a federal agency to incur obligations and make payments for specified purposes with money loaned by the U.S. Treasury.

#### **Business interruption coverage**

Commercial coverage that reimburses a business owner for lost profits and continuing fixed expenses during the time that a business must remain closed while the premises are being restored after physical damage from a covered peril. Business interruption insurance also may cover financial losses incurred when civil authorities limit access to an area after a disaster and such actions prevent customers from reaching the business premises.

#### **Claims**

A demand for payment for a loss incurred from a potentially insured peril under the terms of a plan or insurance contract.

#### **Coastal Barrier Resource System**

Coastal areas, e.g., certain barrier islands, designated by Congress in the Coastal Barrier Resources Act (Pub. L. 97- 348) and the Coastal Barrier Improvement Act of 1990 (Pub. L. 101-591). These federal laws were enacted on Oct. 18, 1982, and Nov. 16, 1990, respectively. The laws were implemented as part of a Department of the Interior initiative to minimize loss of human life by discouraging development in high-risk areas, reduce wasteful expenditures of federal resources, and preserve the ecological integrity of areas designated by statute as Coastal Barrier Resources Systems and Otherwise Protected Areas. The laws provide protection by prohibiting all federal expenditures or financial

assistance, including flood insurance, for residential or commercial development in areas so identified.<sup>186</sup>

**Contingency provision**

A provision for the expected differences, if any, between estimated costs and average actual costs that cannot be eliminated by changes in other components of the ratemaking process.

**Federal disaster assistance**

Money or direct assistance provided by agencies of the federal government (notably FEMA) to individuals, families, and businesses in an area in which property has been damaged or destroyed and for which losses are not covered by insurance. It is meant to help with critical expenses that cannot be covered in other ways. This assistance is not intended to restore damaged property to its condition before the disaster.

**Federally regulated lending institutions**

Loans issued by the VA and FHA are subject to the supervision of federal institutions and are federally backed. Mortgage loans bought by Fannie Mae and Freddie Mac are considered federally backed, too, since the two organizations are federally chartered. These two entities buy more than 40 percent of all the conventional mortgages issued every year.

**Flood Insurance Rate Map (FIRM)**

Produced by FEMA, an official map of a community that delineates both the special hazard areas and the risk premium zones applicable to the community.

**Flood plain**

Any land area susceptible to being inundated by flood waters from any source. For NFIP purposes, flood plains are equivalent to Special Flood Hazard Areas (SFHAs).

**Government Accountability Office**

The Government Accountability Office (GAO) is the nonpartisan audit, evaluation, and investigative arm of Congress and an agency in the legislative branch of the U.S. government.

**Historical average loss year (HALY)**

A concept used by the NFIP beginning in the 1980s to establish a benchmark by which to judge the level of premium rates for subsidized policies. The HALY concept was developed to determine how much of a discount subsidized policies should receive. HALY is the mean of all the NFIP annual losses and loss-related expenses for a specific period of years (e.g., 1978 to the present), after trending (for inflation and flood policies' distributional changes) each year's losses to the present. HALY, therefore, is the average of the estimate for each historical loss year of what those storms would produce in losses in current dollars and assuming a current distribution of policies by rating class. While premiums for post-FIRM full-risk rated policies have always contemplated the full range

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<sup>186</sup> Flood Insurance Manual, May 2007, Page: CBRS 1.

of loss probabilities, the concept of HALY has been used to assure that the NFIP's aggregate premium (the sum of both full-risk and subsidized premiums) generates sufficient income after operating expenses to pay for the typical non-catastrophic-loss year that had been the NFIP's experience prior to Katrina. The NFIP incorporates Katrina experience in the HALY average by weighting the 2005 accident year one percent and all other years 99 percent. HALY has helped determine a minimum for subsidized premiums. Subsidized premiums through the years, however, have reached levels well above that minimum. While even the non-catastrophic-loss years of the NFIP vary greatly, HALY is the center around which those loss years will vary. (See the discussion of the "NFIP Actuarial Rate Review Memorandum in Support of the May 1, 2010 Rate and Rules Changes" on Page 6 for a more complete description of issues surrounding the HALY concept.<sup>187</sup>)

### **Insurance Services Office**

A corporation headquartered in Jersey City, N.J., that provides data, analytics, and decision-support services for professionals in several fields, including insurance. Its services include the calculation of property and liability insurance loss costs and the development of insurance policy forms.

### **Mandatory purchase**

Pursuant to the provisions of the Flood Disaster Protection Act of 1973, individuals, businesses, and others buying, building, or improving property located in identified areas of special flood hazards within NFIP-participating communities are required to purchase flood insurance as a prerequisite for receiving any type of federal financial assistance (e.g., any loan, grant, guaranty, insurance, payment, subsidy, or disaster assistance) when the building or personal property is the subject of or security for such assistance.

### **Mitigation practices**

In the context of flood risk emergency management, mitigation efforts attempt to prevent hazards from developing into disasters and to reduce the effects of disasters when they occur. Mitigation focuses on long-term measures for reducing or eliminating risk. The implementation of mitigation strategies can be considered a part of the recovery process if initiated after a disaster occurs. Mitigative measures can be structural or non-structural. Structural measures use technological solutions, such as flood levees; nonstructural measures include legislation and land-use planning.

### **Profit provision**

The provision for underwriting profit in an actuarially developed rate, typically expressed as a percentage of the rate.

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<sup>187</sup>

[http://www.fema.gov/library/file?type=publishedFile&file=actuarial\\_rate\\_rev2009.pdf&fileid=55182cb0-94ea-11df-a6e7-001cc4568fb6](http://www.fema.gov/library/file?type=publishedFile&file=actuarial_rate_rev2009.pdf&fileid=55182cb0-94ea-11df-a6e7-001cc4568fb6) (last visited on June 28, 2011).

**Return on capital**

A financial measure that quantifies how well a company generates profit relative to the capital it has invested in its business. It is defined as net operating profit divided by invested capital and usually is expressed as a percentage.

**Special Flood Hazard Area**

An area having special flood, mudflow, or flood-related erosion hazards. Each such area is shown on a Flood Insurance Rate Map as Zone A, AO, A1-A30, AE, A99, AH, AR, AR/A, AR/AE, AR/AH, AR/AO, AR/A1-A30, V1-V30, VE, or V.<sup>188</sup> Under NFIP mapping standards, those zones comprise areas having a “100-year flood risk,” i.e., their probability of inundation in any year is 1 percent.

**Subsidized rates**

NFIP subsidized rates are national rates set by broad occupancy type classifications, which produce a premium income less than the expected expense and loss payments for the flood insurance policies issued on that basis. The difference between the full-risk premiums for these policyholders and the subsidized premiums they actually pay is revenue foregone by the National Flood Insurance Fund.<sup>189</sup>

**Sunset provision**

In public policy, a provision in a statute or regulation that terminates or repeals all or portions of the law after a specific date, unless further legislative action is taken to extend it. Not all laws have sunset clauses; in the absence of a sunset clause, the law remains in effect until repealed.

**Underwriting**

Examining and accepting or rejecting insurance risks and classifying the ones that are accepted to charge appropriate premiums for them.

**Underwriting gain or loss**

The difference between the premium income and the claims and expenses incurred; excludes any investment gains or losses.

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<sup>188</sup> NFIP Flood Insurance Manual, May 2007. Page DEF 8.

<sup>189</sup> NFIP Actuarial Rate Review Memorandum in Support of the May 1, 2006 Rate and Rules Changes, p. 9.