THE NATIONAL FLOOD INSURANCE PROGRAM: Challenges and Solutions

American Academy of Actuaries
Flood Insurance Work Group

Capitol Hill Briefing— June 26, 2017

American Academy of Actuaries

The American Academy of Actuaries is a 19,000-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted 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.

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THE NATIONAL FLOOD INSURANCE PROGRAM:
Challenges and Solutions

- Today's briefing is based on the Flood Insurance Work Group of the American Academy of Actuaries' monograph released in April 2017, *The National Flood Insurance Program: Challenges and Solutions.*

  http://www.actuary.org/files/publications/FloodMonograph.04192017.pdf

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Today's Agenda

- Overview of flood insurance market
- Overview of the National Flood Insurance Program
- Private coverage
- Other issues to be addressed
  - Trade-offs
  - Other benefits
  - Mega-storms
  - Long-term concerns
- Legislation

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Flood Insurance—Overview

- Standard insurance policies (homeowners and commercial) do not include flood risk
- The National Flood Insurance Program (NFIP) was created to fill the void and to pre-fund some or all of the risk
- There are about 5.2 million flood insurance policies in force

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Flood Insurance—Overview, cont.

- Private insurance accounts for less than 1 percent of the market
- Most policies are concentrated in flood-risk areas, with very little coverage outside of flood zones
- Current flood mapping and risk-rating are based on c. 1970 technology and methods

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NFIP—Multiple Goals

- Encourage floodplain management
- Provide affordable flood insurance coverage
- Foster widespread participation
- Reduce public reliance on post-event assistance
- Limit U.S. Treasury exposure to unfunded losses

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Create a unified foundation for floodplain management	Encourage effective land use; reduce exposure to flooding	Facilitate prefunding and sharing the challenges of disaster recovery	Deliver coverage at affordable and reasonable rates while meeting solvency goals

- NFIP goals sometimes are in conflict with one another
- Example: covering full cost of the program through premiums makes flood insurance unaffordable for some
- See the April 2017 Government Accountability Agency report *Flood Insurance: Comprehensive Reform Could Improve Solvency and Enhance Resilience*, GAO-17-425
  http://www.gao.gov/products/GAO-17-425

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NFIP—Sunset Provision

- The NFIP’s authorization typically is renewed in five-year increments
- Failure to fully reauthorize would cause disruption to housing/lending/real estate markets in areas where flood insurance is required
- Current authorization expires September 30, 2017

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NFIP—Beyond Insurance

- In addition to providing insurance coverage, the NFIP also:
  - Provides flood maps of coastal areas and inland flood plains (partially funded by surcharges on NFIP flood insurance premiums)
  - Encourages local communities to develop land-use and building plans for flood-prone areas
  - Encourages mitigation of flood risks

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NFIP—Losses/Debt

- The NFIP originally was designed to run at a deficit, with rates set low in order to bring in new policyholders
- Some premium income was better than no premium income to offset government outlays for post-storm recovery
- In recent years, rates have risen and premiums cover “normal” losses

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NFIP—Losses/Debt, cont.

- The NFIP borrows from the Treasury when there are surges in claims due to mega-storms
- Surcharges are added to pay off debt from past events
- Rates now and in the foreseeable future are not sufficient to cover both normal-year losses and repayment of debt from mega-storms
- See the Congressional Budget Office April 19, 2017, report *Preliminary Results from CBO's Analysis of the National Flood Insurance Program*

  https://www.cbo.gov/publication/52638

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NFIP—Losses/Debt, cont.

- Current debt (owed to Treasury):

  Approximately $24.6 billion

- Annual debt service (also paid to Treasury):

  Approximately $400 million

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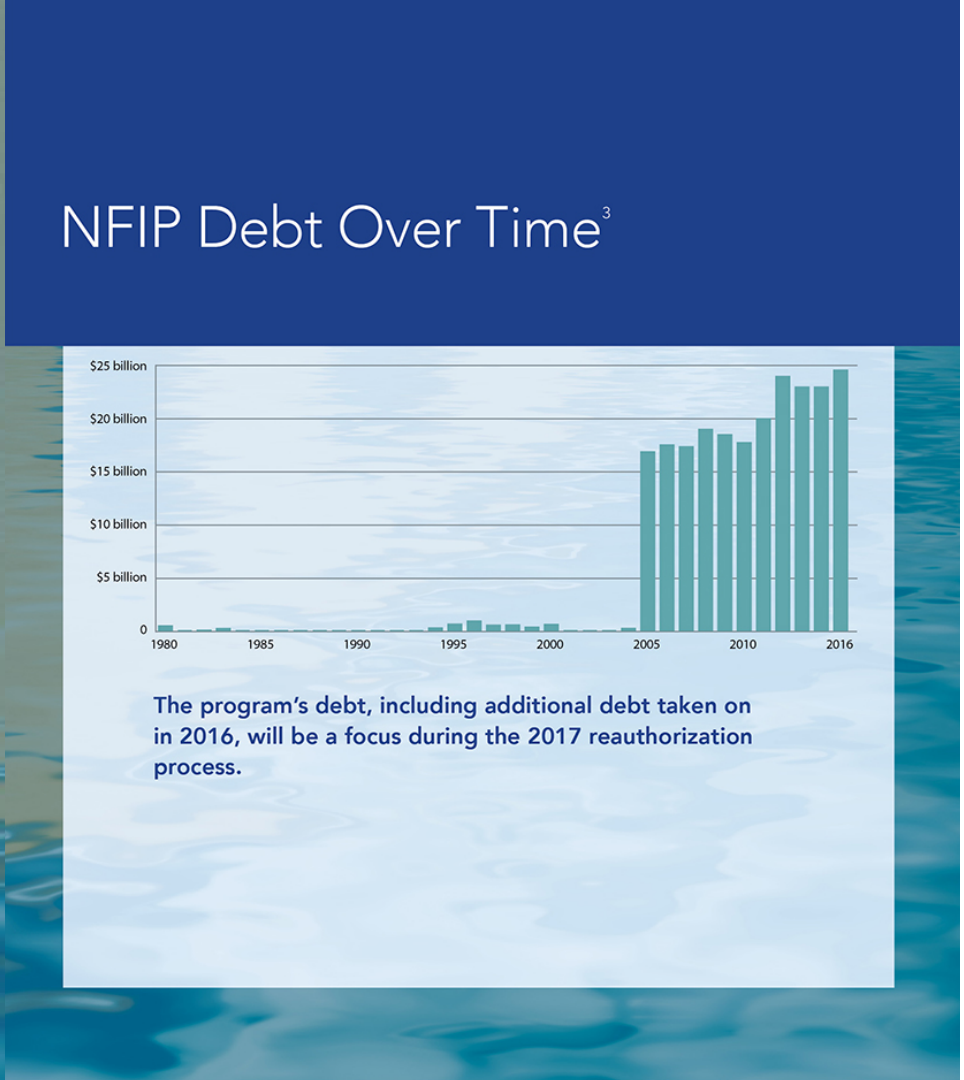

NFIP—Losses/Debt, cont.

- NFIP's current debt is almost entirely attributable to losses from Hurricane Katrina (2005), Superstorm Sandy (2012), and Hurricane Matthew (2016)

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Private Coverage—Overview

- Private insurers currently collect less than 1 percent of premiums
- NFIP and private insurance combined cover less than 20 percent of the potential market
- NFIP policies in force have been flat or declining in recent years
- There is plenty of room for growth
- The private sector can and should help expand coverage for flood risk

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Private Coverage—Opportunities

- Private insurers are already offering:
  - excess coverage (above NFIP limits)
  - all-risk coverage on commercial property
- Reinsurers have excess capacity, which means funds are available to back new coverage
- Improvements in risk modeling open new possibilities

Private Coverage—Advantages

- Added capacity, more marketing channels
- More policies, more coverage
- Customization of policies
- Closer alignment with other insurance (homeowners, renters)
- More precise risk-based rates
- Rate competition/validation

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Private Coverage—Concerns

- Adverse selection – the possibility of “cherry-picking” of lower-risk policies due to more precise risk rating
- Loss of cross-subsidies
- Possible shrinkage in the number of policies in the NFIP

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Private Coverage—Concerns, cont.

- If the number of NFIP policies shrinks, so will surcharge revenue for:
    - flood mapping
    - repayment of debt from past storms
- There will be pricing disparity if surcharges are applied only to NFIP policies and not to privately issued policies

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Mega-Storms

- In general, the insurance marketplace has trouble dealing with low-frequency, high-impact catastrophic events, for example:
  - mega-storms
  - major earthquakes
  - large-scale terrorist attack
  - civilian nuclear mishaps
- Government backstops are needed in the case of extreme catastrophic losses
- Some programs are federal, some are state-specific

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Mega-Storms, cont.

- When insuring against catastrophic risk:
  - Collect premiums to cover “normal” losses plus the cost of reinsurance
  - Buy a layer of reinsurance for larger losses
  - Above agreed upon levels, spread losses over the larger public through guarantee funds (state level), forgiveness of government loans, etc.

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Looking Ahead

- Major issues for the NFIP
  - Transitioning to a market with a healthy private sector
  - Disposing of current and future debt from mega-storms
  - Factoring in rising sea levels

Rising Sea Levels

- Polar ice and glaciers are melting
- The meltwater has to go somewhere
- Persistent problems already occurring in south Florida, Norfolk, Va., and other coastal areas
- Sea level rise of 3 to 10 feet is expected to occur over the next several decades

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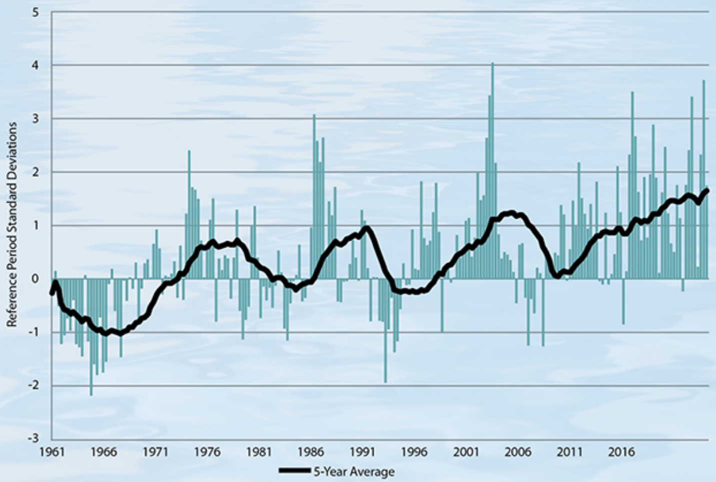
Sea Level Index[36]



The Sea Level Index for the U.S. and Canada from the Actuaries Climate Index highlights the recent trend of sea level rise.

Rising Sea Levels, cont.

- There is growing frequency of non-storm flooding
- There will be greater damage from coastal storms
- Flood maps and damage estimates do not take into account expected sea level rise

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State Models

- States also have been dealing with the problem of insuring against the risk of catastrophic events
- They face issues similar to those seen in the NFIP
- Problems may be on a smaller scale, but the risks are more highly concentrated
- Examples:
  - State pools for insurer insolvency
  - California Earthquake Authority (Cal-Quake)
  - Florida’s Citizens Property Insurance Corporation

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Florida's Citizens

- Direct/primary insurer
- Depopulation program, moving blocks of policies to the private market
- Disclosure of full-risk rates
- Data exchange and transparency with private insurers
- Clear process to fund losses from extreme events
- Growing use of reinsurance and capital market products to transfer risk of catastrophic losses

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Flood Reform Alternatives

Reform	Private vs. Public	Increase Takeup Rates & Protection	Fairness/ Subsidization	Mitigation/Risk Reduction	Risk Measurement	Risk Spreading	Education/ Transparency	Solvency	Rate Adequacy	Planning/Stability	Affordability
Communicate understandable risk of cat events to consumers beyond 1-100		x			x		x				
Pass Ross-Murphy bill (HR 2901): Flood Insurance Market Parity and Modernization Act	x	x									
Create more consistent mapping process that better reflects risk			x		x						
Implement long-term reauthorization										x	
Create road map to move more risks to private market over time	x										
Fund pre-event mitigation especially on repetitive loss properties				x							
Implement a broad multi-peril policy, effectively a national cat program across US		x	x			x					
Implement risk-based pricing within NFIP			x				x		x		
Address affordability through need-based subsidies			x								x
Eliminate noncompete for WYO companies	x	x									
Promote mitigation, improving coverages, underwriting in general				x							
Provide access to non-confidential FEMA data for regulators, cat modelers, industry organizations	x										
Account for future flood risk / sea level rise in flood maps				x	x			x		x	
Make NFIP premiums more differentiated for risks with different exposures			x				x		x		
Purchase reinsurance to protect NFIP	x					x		x			
Review training requirements for producers, ensure it is complete with respect to private flood	x	x					x				
Make NFIP policy terms more like private insurance	x	x									
Emphasize enforcement of provisions at every level		x		x							
Encourage pilot of flood insurance pool of private insurers	x					x					
Expand mandatory purchase area		x				x					
Require private insurers writing voluntary flood to take a certain percentage of residual risks	x		x								
Reinstate rules allowing mid-term NFIP policy cancellation/refund if private flood purchased	x	x									
Keep NFIP in place in addition to private market	x										
Require flood purchase if you've received federal disaster assistance					x						
Use natural resources (wetlands, etc.) to reduce risk				x							
Increase takeup rates through consumer education, better compliance with mandatory purchase		x									

What To Do?

- The Flood Insurance Work Group surveyed multiple stakeholders, identifying a wide range of proposals to consider
- There was agreement that the NFIP's authorization must be renewed
- There was general support for a renewal period longer than five years
- There was broad support for the private sector playing a bigger role in the flood insurance market

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Legislation

- A bill to expand the role of private insurance coverage for flood passed the House unanimously in 2016 (HR 2901), reintroduced in 2017 (HR 1422)
- A package of bills from leadership was approved recently by the House Committee on Financial Services (next slide). The five-year reauthorization includes an expanded role for private insurers.

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Legislation, cont.

Financial Services Committee leadership package

- HR 1422 – Flood Insurance Market Parity
- HR 1558 – Repeatedly Flooded Communities
- HR 2246 – Taxpayer Exposure Mitigation
- HR 2565 – Replacement Cost Value
- HR 2868 – NFIP Policyholder Protection
- HR 2874 – 21st Century Flood Reform
- HR 2875 – NFIP Administrative Reform

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Legislation, cont.

- Sens. Cassidy and Gillibrand have proposed a broad package of reform measures (S 1313), including a 10-year reauthorization
- Sens. Menendez, Kennedy, and Van Hollen have introduced the SAFE NFIP bill (S 1368) with a six-year reauthorization and a focus on mitigation
- Numerous other bills have been introduced in both the House and Senate

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Issues to Be Decided

- Reauthorization period—Five years again? Ten?
- Privatization—What is the long-term role of NFIP? Does it become a residual market for worst risks?
- Subsidies—Replace indirect subsidies (especially grandfathered rates) with need-based direct assistance?

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Issues to Be Decided, cont.

- Surcharges—Will surcharges, currently applied to NFIP policies to help pay for flood mapping and retirement of debt, also be imposed on private-sector flood insurance policies?
- Data—Will there be fees imposed for private-sector access to flood map and historic loss data?

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Issues to Be Decided, cont.

- Debt—What to do about past (and future) debt from mega-storms? (Another study?)
- Rising sea levels—How to take this into account when looking at the long-term future of public and private flood insurance?
- Marketing issues, claims handling concerns

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Questions?

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