

# ***The Future of the National Flood Insurance Program***

**Written Testimony as Delivered**

**by**

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**Committee on Banking, Housing and Urban Affairs**

**OCTOBER 18, 2005**

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Thank you, Mr. Chairman, and members of the Committee.

My name is Robert Hartwig and I am Chief Economist for the Insurance Information Institute, a property/casualty insurance trade association. I have been asked to testify before the Committee regarding the future of the National Flood Insurance Program (NFIP). Specifically, I have been asked to offer observations from an insurance industry perspective on how the NFIP can better manage the challenges it faces, employing strategies, techniques and organizational behaviors commonly found in the private insurance sector.

## **BACKGROUND**

Hurricane Katrina caused death, destruction and economic dislocation on a scale not seen from a natural disaster in this country since the 1920s. Indeed, from 1900 through the mid-1960s, hurricanes killed more than 15,000 people—most by drowning—and entire communities were washed away. Even today, flood remains the second leading cause of death from natural disasters, with recent floods from New Orleans to New England providing us with grim reminders. In 1968, in response to the rising cost of taxpayer-funded disaster relief for flood victims and the increasing amount of damage caused by floods, Congress enacted the National Flood Insurance Act, creating the National Flood Insurance Program (NFIP). This hearing today harkens back to that era, a time when the questions about what can and should be done about reducing flood risk were at the fore.

Much has been accomplished over the 37 years that the NFIP has been in existence and, in many respects, the NFIP operates like a private insurance company. The federal flood insurance program combines the concepts of insurance protection—which allows people and businesses to efficiently transfer risk in exchange for a premium—with hazard mitigation. In exchange for making federally-backed flood insurance available for residential and commercial properties, communities must agree to adopt and enforce floodplain management ordinances to reduce future flood damage.

While the approach appears reasonable, the fact remains that in the wake of Hurricanes Katrina and Rita, the program must now borrow an estimated \$10 billion to \$30 billion from the U.S. Treasury to meet its FY2005 obligations, including \$2 billion already

authorized by Congress last month, despite the fact that the overwhelming majority of property owners affected by the storms and who were vulnerable to flood losses had not purchased flood coverage. This suggests several serious structural and incentive-based problems not only within the NFIP itself, but also among other stakeholders, including lending institutions, state and local governments and at-risk property owners. Fortunately, there are solutions for most of these problems, which fall into two broad categories:

- the need to reflect the true cost of insuring against the peril of flood by adopting a policy of charging actuarially sound rates, thereby reducing the risk to taxpayers, and;
- an urgent need to dramatically increase participation rates in the federal flood insurance program in order to avoid a repeat of future human and economic tragedies on the scale of Katrina or worse.

### **Pricing: Moving Toward Actuarially Sound Rates**

As this year's significant shortfall in the NFIP's claims paying resources illustrates, premiums collected are insufficient to cover losses incurred after extreme events. This year's \$10 to \$30 billion in losses are some 5 to 15 times more than the \$2 billion the program collected in premiums in 2004. Were it a private insurer the NFIP would be bankrupt. Private insurers are expected to pay up to \$60 billion on 1.6 million claims from Hurricane Katrina alone, entirely from private resources. While the NFIP has made strides in improving the actuarial soundness of rates, and in a "normal" year the program does not operate with a deficit, in the world of insurance there is no such thing as "normal," only an average of extremes. Adopting a formal policy of actuarially sound pricing for all flood policies would create a more fair and equitable system for all plan participants that would minimize subsidies, discourage unwise development and greatly reduce the risk to taxpayers. Fortunately, data and technology exist today that would allow the NFIP to move swiftly in this direction. Available historical data on flooding is extensive, flood maps (many of which are decades old) could be updated to improve accuracy in underwriting and risk assessment and state-of-the-art catastrophe models

could be developed to help estimate risk and cost, as is currently done for hurricane and earthquake risk.

Actuarially sound rates, by definition, must *fully* account for the risk being underwritten, including the possibility of mega-catastrophes such as Hurricane Katrina. To that end, all private insurers accumulate substantial pools of claims paying capital to accommodate the possibility, no matter how remote, of large-scale losses. Consequently, the NFIP should charge premiums that, in addition to being sufficient to pay annual losses in most years, generate a surplus that allows the program to build claims-paying capacity over time. That stock of claims paying capital must be placed in a “lockbox,” untouchable for any other purpose.

Finally, there are occasions when the actuarially sound decision is to refuse to underwrite coverage at any price—in other words to just say no. There are hundreds of thousands of coastal structures today that would have never been built were it not for the implicit guarantees of a myriad of government-run insurance enterprises including the NFIP. Today, plans in nearly 30 states plus the NFIP issue approximately 6.6 million policies across the United States with a face value of some \$1.2 trillion. Many operate with deficits. Among 27 state-run high-risk property insurers in 2003 (latest year for which data are available), 15 posted an operating loss, a year with relatively light catastrophe activity. These deficits are paid off through assessments levied on virtually every property owner in the state, including those who live hundreds of miles from the coast.

### **Increasing Participation in the National Flood Insurance Program**

Approximately 275,000 homes were destroyed or damaged beyond economic repair by Hurricane Katrina, ten times the number destroyed by Hurricane Andrew or the four storms that hit Florida last year (Exhibit 1). Hundreds of thousands of others were damaged. Despite Katrina’s ferocious winds, water was the principle cause of economic dislocation. According to AIR Worldwide, a disaster modeling firm, flooding, including storm surge, from Katrina caused \$44 billion in damage to structures, most of it uninsured (Exhibit 2). Tragically, however, fewer than 10 percent of property owners in some coastal counties had purchased flood coverage (Exhibit 3). This figure is

astonishingly low, given the obvious risk in low-lying coastal communities, the fact that some of these same areas had been devastated by hurricanes in the past and the four warning shots Mother Nature fired over the bow of the Gulf states in 2004, not to mention the fact that the region affected by Katrina has a long and miserable history of river flooding (Exhibit 4). The NFIP also for many years has sought to increase awareness of flood risk through a variety of highly visible marketing campaigns.

So the question remains, why don't people buy flood coverage?

- **Denial**—the belief that “it won't happen to me” is ubiquitous and rooted in a fundamental misperception of risk. People translate the risk of living in a 1-in-100 year flood plain as a mere 1% chance of experiencing a flood over the course of an entire century, for example. In reality, a property owner in a 1-in-100 year flood plain has a 26% chance of being flooded during the course of a 30-year mortgage;
- **Cost**—when given the option of buying coverage at a relatively modest \$438 per year on average—and potentially much less in low-risk areas (Exhibit 5), most people will decline, even though the cost is small relative to the value of the home and turning down the coverage amounts to playing Russian roulette with the typical family's most valuable asset;
- **Government Aid**—why buy insurance if the government is going to bail me out anyway? There is a widespread belief that large amounts of government aid will be made available to disaster victims *after* an event and so there is little point in buying flood coverage if largely the same benefit is available for free (Exhibit 6). This perception would only be reinforced if property owners are allowed to buy into the NFIP retroactively;
- **Legal Action**—attorneys general and trial lawyers in some Katrina impacted states are suing private insurance companies to force them to pay flood losses, Mississippi in particular. Though it is a well-known fact that flood damage has been excluded from all homeowners insurance policies for decades (Exhibit 7) and that private insurers have never received a dime in premiums to cover flood-related losses, these suits spread false hope among desperate people that clever

lawyering can produce flood coverage where none, in fact, exists. In the remote likelihood that such suits were to be successful, an immediate national crisis in the availability and affordability of homeowners insurance would ensue and the NFIP's very reason for existence would be threatened (Exhibit 8). Why buy flood coverage from the NFIP when you can just sue your homeowners insurer and get it for free?

For the NFIP to be truly effective, it must overcome these obstacles and dramatically increase the proportion of at-risk properties that are insured and *stay* insured through the program. Tens of millions of homes and businesses are vulnerable to at least modest flood risk, but in 2004 just 4.7 million property owners purchased flood coverage through the NFIP. Increased marketing and educational efforts are likely to be of only marginal value. Even mega-disasters such as Katrina create only a temporary surge in demand and many of the recently purchased policies will soon be allowed to lapse. In fact, approximately 10 to 15 percent of NFIP policies lapse annually. Moreover, the reality is that government aid *will* flow after major disasters, possibly in ever larger amounts. Therefore, the ability to significantly increase flood insurance penetration rates and to sustain them is largely beyond the NFIP's capability, given the economic incentives at-risk property owners have to not buy insurance.

The most efficient way to substantially increase the NFIP's penetration rate among property owners is to expand mandatory participation through a lender-based system that ensures that flood coverage is in-force at all times for all mortgaged properties within 100-year flood plains and beyond. Lenders require the purchase of standard homeowners insurance with the result that 96% of homeowners carry the coverage. If a mortgage holder fails to buy insurance, the lender is legally authorized to secure the coverage at the property owner's expense. Such a system, when combined with actuarially sound rates and an accumulation of reserves in an NFIP "lockbox" would effectively eliminate the risk to the U.S. taxpayer for the vast majority of disaster scenarios.

## **IMPLICATIONS OF INACTION**

The value of privately insured coastal structures in hurricane exposed areas today exceeds \$7.2 trillion or about 60% of GDP (Exhibit 9). But as the severe flooding in the Northeast over the past week illustrates, flood poses a risk virtually everywhere. The consequences of inaction are grave. Katrinas of the future could be far more devastating and occur with greater frequency, jeopardizing hundreds of thousands of jobs, shattering families and communities and saddling the U.S. taxpayer with a burden it can ill-afford, given current record federal deficits.

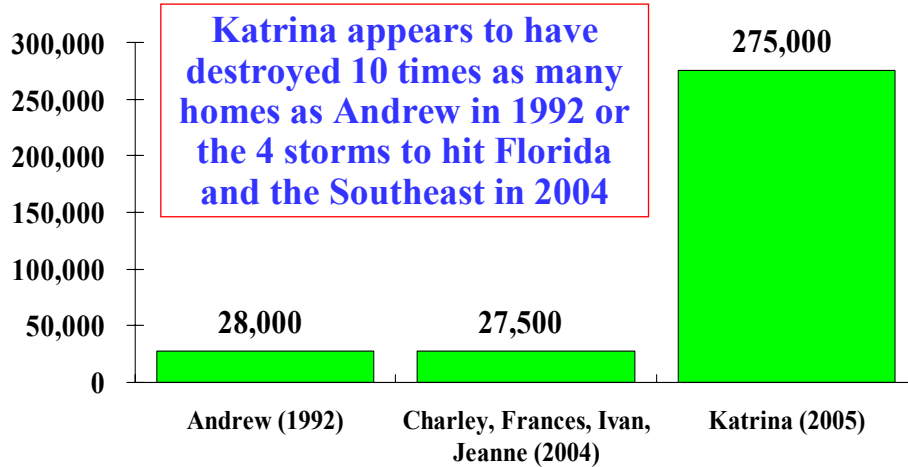
America's clear national interest lies in making sure that the National Flood Insurance Program remains financially secure and accessible, while sending market-based price and underwriting signals based on sound actuarial principles concerning risk.

Thank you for the opportunity to appear at today's hearing. I would be happy to answer any questions you may have.

Exhibit 1



# Number of Homes Destroyed by Major Hurricanes\*

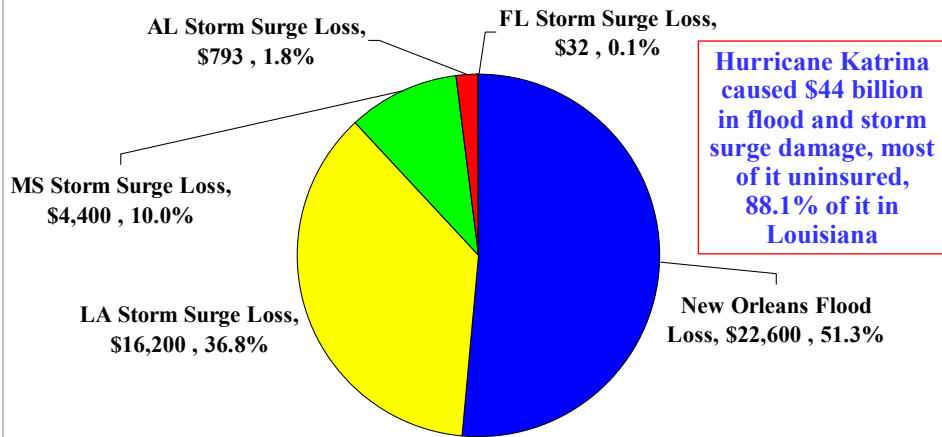


\*Destruction is defined as a structure made uninhabitable or damaged beyond economic repair. Source: National Association of Home Builders, National Red Cross (as of 9/15/05).

Exhibit 2



# Property Damage from Hurricane Katrina Flood & Storm Surge (\$ Millions)\*

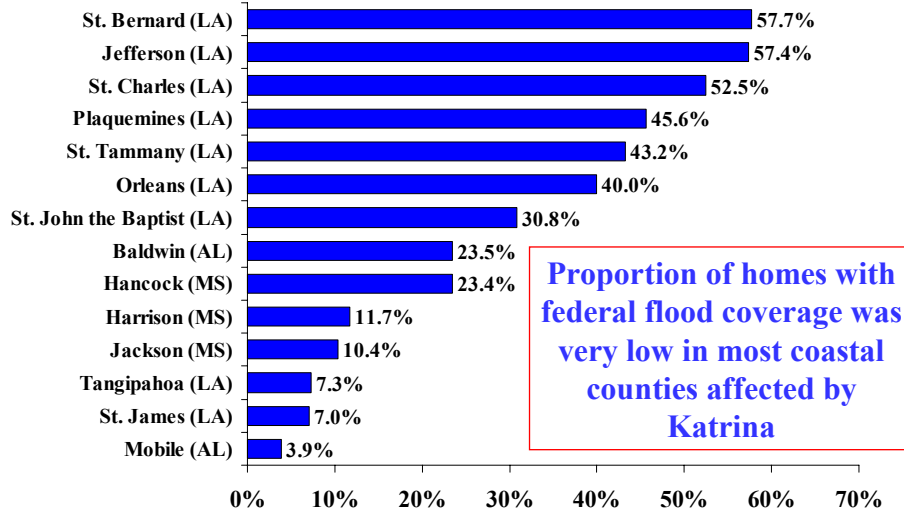


\*Value of property damage by flood and storm surge whether or not insured. Source: AIR Worldwide, September 29, 2005.

Exhibit 3



## Percentage of Homes With Flood Insurance Policies: Coastal Counties Affected by Katrina



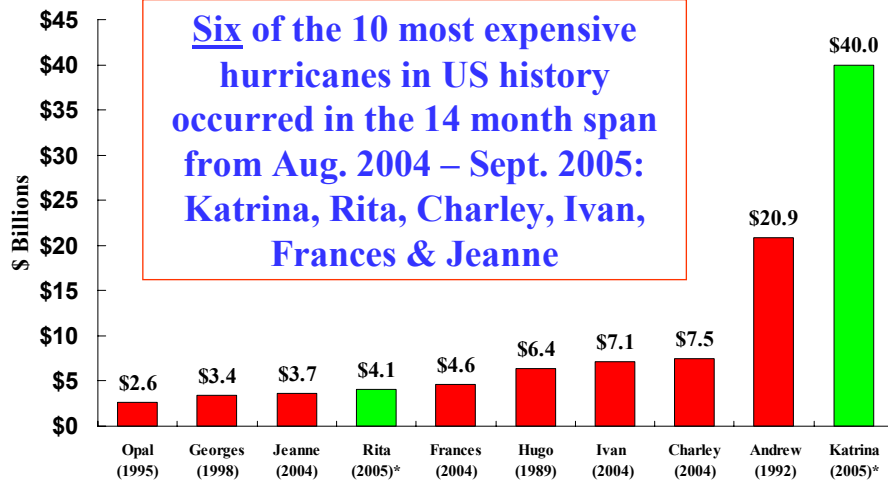
Proportion of homes with federal flood coverage was very low in most coastal counties affected by Katrina

Source: Census Bureau, FEMA, New York Times.

Exhibit 4



## Top 10 Most Costly Hurricanes in US History, (Insured Losses, \$2004)



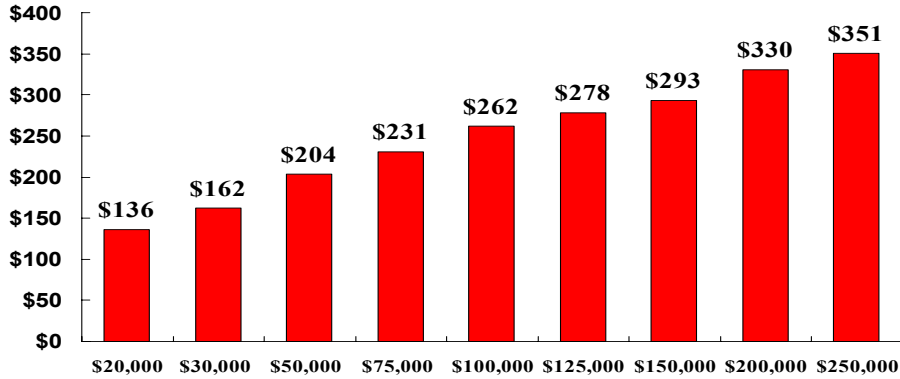
Six of the 10 most expensive hurricanes in US history occurred in the 14 month span from Aug. 2004 – Sept. 2005: Katrina, Rita, Charley, Ivan, Frances & Jeanne

\*All estimates as of October 14, 2005 in 2005 dollars.  
Sources: ISO/PCS; Insurance Information Institute.

Exhibit 5

## Average Premium Preferred Risk Policy\* For Buildings with Basement Under NFIP

Average Premium



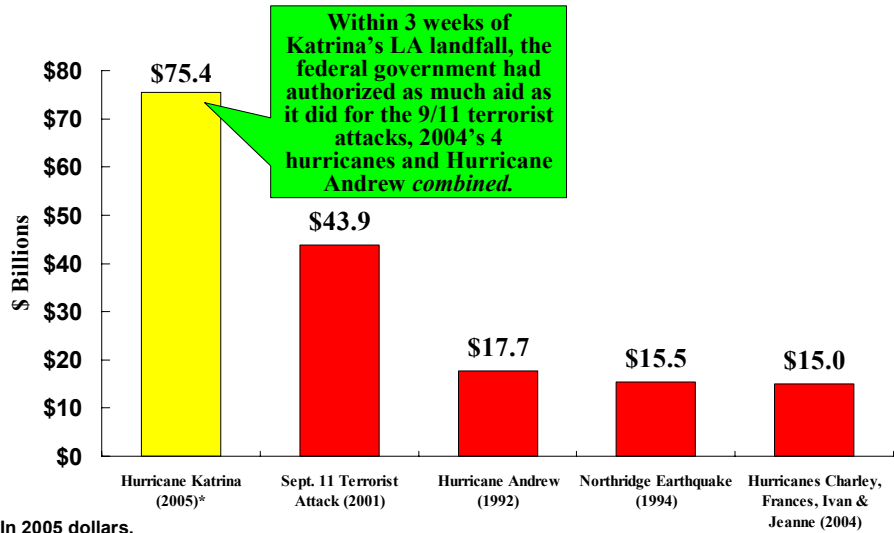
Building deductible: \$500. Contents deductible: \$500. Deductibles applied separately.

\*Under the NFIP a low-cost Preferred Risk Policy is available to homeowners located in low- to moderate-risk areas.

Sources: FEMA, National Flood Insurance Program (NFIP)

Exhibit 6

## Government Aid After Major Disasters (Billions)\*



\*In 2005 dollars.

Source: United States Senate Budget Committee as of 9/19/05; Insurance Information Institute.

Exhibit 7



*Itemization of Federal Government  
Spending on Hurricane Relief*

Legislation	5-Yr. Cost	Status
Emergency Spending Supplement #1, HR 3645	\$10.500	Public Law 109-61
Emergency Spending Supplement #2, HR 3673	\$51.8	Public Law 109-62
Flood Insurance Borrowing Authority	\$2.000	Passed House & Senate
Pell Grant Relief, H.R. 3169	\$0.002	Passed House & Senate
TANF Disaster Relief, H.R. 3672	\$0.294	Passed House & Senate
Katrina Short-Term Tax Relief Bill, H.R. 3768	\$6.500	Passed Senate
Sarbanes Housing Amend. To H.R. 2862	\$3.500	Passed Senate
Harkin Legal Services Amend. To H.R. 2862	\$0.008	Passed Senate
Snowe Small Business Amen. To H.R. 2862	\$0.595	Passed Senate
Baucus Economic Develop. Amend to H.R. 2862	\$0.210	Passed Senate
<b>TOTAL</b>	<b>\$75.409</b>	
Emergency Health Care Relief Act, S. 1716	\$5.0-\$7.0B	Introduced in Senate
Additional Flood Insurance Borrowing Authority	\$10.0-\$30.0B	N/A

Exhibit 8



*Typical Flood Exclusion in  
Homeowners Insurance Policy*

• **Flood Exclusion**

➤ **Water Damage, meaning any loss caused by, resulting from, contributed to or aggravated by:**

1. *flood, surface water, waves, tidal water or overflow of any body of water*, or spray from any of these, *whether or not driven by wind*.
2. Water or water-borne material which backs up through sewers or drains, or which overflows or is discharged from a sump pump, sump pump well or other system that is designed to remove subsurface water which is drained from the foundation area; or
3. Water or water-borne material below the surface of the ground, including water which exerts pressure on, or flows, seeps or leaks through any part of a building, sidewalk, foundation, driveway, swimming pool or other structure or water that causes earth movement.

*This exclusion applies whether or not the water damage is caused by or results from human or animal forces or any act of nature.*

Exhibit 9



## Consequences of Mississippi AG's Actions

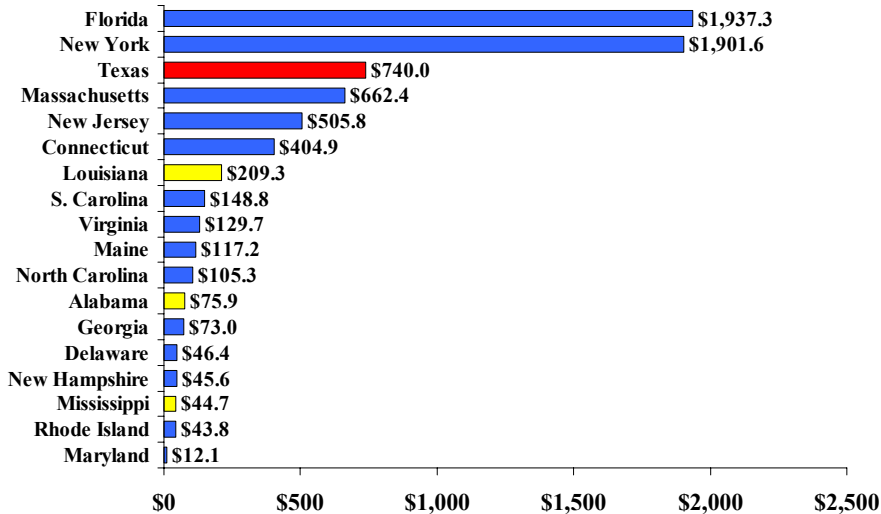
- Sept. 15 suit by MS AG Hood constitutes and attempt to retroactively rewrite all HO insurance contracts in MS. *“Contract certainty” extinguished.*
- Suit amounts to little more than an attempt to expropriate shareholder assets (and the equity of mostly non-MS policyholders of mutual insurers)
- The risk is fundamentally political, cannot be modeled or priced
- Insurers will necessarily be motivated to protect shareholder equity (and claims paying resources generally). Reinsurers will exert pressure too.

Source: Insurance Information Institute

Exhibit 10



## Total Value of Insured Coastal Exposure (2004, \$ Billions)



Source: AIR Worldwide