

Statement of David R. Conrad
Senior Water Resources Specialist
National Wildlife Federation

For Hearings on
Recommendations for Strengthening the Financial Solvency of the
National Flood Insurance Program

Before the
Committee on Banking, Housing, and Urban Affairs
United States Senate

February 2, 2006

Good morning Chairman Shelby, Ranking Member Sarbanes and Members of the Committee. My name is David Conrad, and I serve as Senior Water Resources Specialist for the National Wildlife Federation, the nation's largest conservation education and advocacy organization, with four million members and supporters, and 46 state and territorial affiliate conservation organizations. The National Wildlife Federation has a long history of involvement with and concern for the success of the National Flood Insurance Program (NFIP), particularly because of the critical help it provides people and communities in the wake of devastating flood events and as the federal government's principal program to promote wise floodplain management for the benefit of people and the environment.

I appreciate the opportunity to present the Federation's views on recommendations for strengthening the financial solvency of the NFIP.

The Federation also wishes to express its sincere support and appreciation for the continuing efforts of Chairman Bunning, Chairman Shelby, Ranking Member Sarbanes, and the Members of the Senate Banking Committee to strengthen and reform the NFIP. The Federation was a strong supporter of the Flood Insurance Reform Acts in 1994 and 2004. Both of these laws made substantial improvements, but it is now abundantly clear more needs to be done.

Status of the NFIP after Katrina

Mr. Chairman, the National Flood Insurance Program is currently facing the most serious crisis in its thirty-eight year history. The four major hurricanes which struck Florida in 2004 set a stage for a major strain on the NFIP's solvency. Hurricanes Katrina, Rita and Wilma have now demonstrated what has long been predicted -- that the program's lack of an actuarially-based financial structure leaves it vulnerable to major catastrophic losses -- losses which can now only be repaid with enormous bailouts from the American taxpayers. With a lack of accumulated "catastrophic reserves", only \$2 billion in annual revenues, the need to borrow in excess of \$24 billion from the Treasury to pay claims, and interest payments that will approach \$1 billion from the borrowing, it is clear that without a bailout, the NFIP would soon collapse. We are assuming that some level of bailout will be provided, but we would hope that concurrently Congress will take significant actions to put the program on a much sounder footing in the future.

To reach a sounder footing, improvements will have to be made both financially in how, where, and at what and price we provide insurance and through a concerted effort to better manage risk. This, in turn, requires a commitment to apply the best scientific methods of determining risk and the best policy-setting regarding where and under what circumstances we allow building in the vicinity of floodprone areas.

We believe it would be wise to view the experiences of 2004 and 2005 as critical to bringing greater recognition to potential risks that many communities could find themselves facing in the future. Katrina has been a wake-up call for many communities to

consider their own risks and vulnerabilities. In October, Dr. Chris Landsea of NOAA's National Hurricane Center told the Committee **"an Atlantic hurricane era is underway, similar to that last seen from the late 1920's to the late 1960's. Our research suggests that many of the hurricane seasons in the next two or three decades may be much more active than they were in the 1970's through the early 1990's. Warmer sea surface temperatures are expected to contribute to conditions that foster increased hurricane development over this period."** Other research has also supported the notion that we may be seeing more storms of increased intensity and duration. Katrina shows the need to plan for the potential of larger, catastrophic storm events to better protect our citizens from their impacts.

A. Repetitive Losses Are Continuing to Drain the Flood Insurance Fund

In 1998, National Wildlife Federation published a three-year study we had conducted on the NFIP and federal flood policies called **"Higher Ground – A Report on Voluntary Buyouts in the Nation's Floodplains."** This was the study that found that from 1978 through August of 1995, while repetitive loss properties represented only two percent of all insured properties they had experienced 25 percent of the losses and received 40 percent of total NFIP claims payments.

These properties have continued to be a large and chronic drain on the National Flood Insurance Fund. In 1995, the 74,000 repetitive loss properties had received \$2.8 billion in claims and were costing the NFIP \$200 million annually. Just prior to Hurricane Katrina (7-31-05), these numbers had grown to more than 111,000 properties nationally that have cost the NFIP a total of \$5.6 billion, doubling the total cumulative cost in only 10 years, and again, cumulatively, having received 38 percent of all NFIP claims. The information generated in this study, we believe, was helpful to alerting FEMA and the Congress of problems with the NFIP and was one factor that led to the eventual passage of the FIRA 2004.

There were other significant findings that may be relevant to today's concerns:

- Nationally, flood losses have risen alarmingly through this century, despite huge expenditures on traditional flood control projects. Twenty-five year average national flood losses (in constant dollars) had soared to \$4.2 billion annually, more than double what they were early in the century. For the five-year period 1993 - 1998, the losses were more than \$8 billion each year. Approximately \$140 billion in federal tax revenues has been spent during the past 25 years preparing for and recovering from natural disasters.
- **A large number of properties (5,629 - 10% of all single family residence repetitive loss properties) had already received cumulative flood insurance payments in excess of the highest reported value of the property.** At the top end, a single family residence in the Houston area was valued at \$114,000, yet it received \$806,000 in payments for 16 floods over 18 years. [In July of 2005 FEMA reported that there were more than 12,500 currently insured properties

with either 4 or more losses or total cumulative claims that exceeded the property value.]

- **Properties that sustained “substantial damage” were not subject to NFIP hazard mitigation requirements.** NFIP regulations require any owner of a building sustaining a single loss event exceeding 50% of the building’s value to either remove the building or reconstruct the building to current code requirements, including elevation to at least the base flood level to reduce flood risk. Nearly 11,000 repetitive loss properties (approximately 15% of the total) had sustained substantial damage on one or more occasions during the 18 years studied (costing more than \$500 million in NFIP claims though the point of first being substantially damaged), yet overall they continued to sustain losses essentially as they did before they were substantially damaged. This suggested that many NFIP communities were delinquent in their enforcement of substantial damage rules. In all, 5,578 of the repetitive loss properties received \$167 million in insurance payments after they were substantially damaged. We concluded that with better enforcement of substantial damage rules, it would be reasonable to expect that the subsequent damage would have been greatly reduced.
- **15,275 repetitive loss properties, or 20% of all repetitive loss properties, were classified as being *outside the designated 100-year floodplain*.** These structures had received a total of \$530 million in NFIP payments. This raised serious concerns about the accuracy of flood insurance maps and further concern that the public was not being adequately informed of the risks of living in the vicinity of floodplain areas. We do not today have updated statistics for this class of properties.
- **The vast majority of repetitive loss properties (94%) are older “pre-FIRM” properties,** which were initially constructed before the establishment of flood insurance rate maps and NFIP building standards.

Our report showed that historically many repetitive loss building owners have simply continued to reinvest in extremely high risk properties with chronic flooding problems, often without instituting mitigation measures to reduce the associated risk, and at extremely high cost to the NFIP and other disaster relief programs.

It can well be expected that when statistics are aggregated after last year’s hurricanes, most of these numbers will be much higher.

It is obvious from last week’s testimony that repetitive losses continue to be a major problem for the NFIP. We were most pleased that the Conference Committee on the Department of Homeland Security recently chose to fully fund the FIRA 2004 flood hazard mitigation and Pilot programs. These can begin to reduce the \$200+ million costs of repetitive losses to the NFIP. Yet, we are concerned that the current dire financial

straight of the program and failure to develop regulations may result in these monies not getting to hazard mitigation, or at least on a timely basis.

B. Desirability of moving all policy premiums to actuarially sound rates.

The NFIP began in 1968 with a promise to do two things: provide affordable insurance for properties with flood-related risks -- and, working with local communities -- to guide new at-risk development out of harm's way. Failure to accomplish either of these goals would likely result in the overall failure of the NFIP.

The National Wildlife Federation believes the reduction and elimination of subsidies, especially for pre-FIRM structures and repetitive loss properties, is a long overdue reform of the NFIP and should be an urgent goal today. The initial assumption when the program began was that overtime the highly subsidized pre-FIRM properties would be damaged and either be demolished and removed from the floodplain or rebuilt to safer standards, yet our study showed that this was seldom happening. The continuing drain on the National Flood Insurance Fund, combined with the wrong financial signals which subsidies send that discourage hazard mitigation are critical reasons the NFIP is financially unsound. It has been suggested that an initial step could be to eliminate subsidies for vacation homes, non-primary residences and commercial properties. We would agree with this. An equally important alternative to help those for whom increased rates would constitute a significant hardship, is to provide substantial and sustained support through hazard mitigation grants to reduce risk.

C. Suggestions for Reducing Flood Damages Through Increased Mitigation.

In addition to eliminating NFIP subsidies, greater attention to hazard mitigation and strengthening NFIP standards should be cornerstones of restoring financial integrity to the NFIP.

Often the greatest strides that have been made toward reducing existing flooding risk have been made in the wake of flood disasters. After the Great Midwest Flood, FEMA approved more than 170 hazard mitigation projects in 9 states where some 10,000 highly flood prone and damaged structures were acquired and removed from floodplains. Many others were elevated, relocated, or floodproofed. These efforts were made possible especially with monies provided through the Stafford Act (Section 404 Hazard Mitigation Grants Program) and the NFIP's Flood Mitigation Assistance Program.

In August 2004 (see attachment) FEMA reported it had to that point mitigated through **acquisition, elevation, floodproofing, relocation, and retrofitting more than 28,000 properties**. The vast bulk of funding for these activities came through the HMGP, which is made available *after* presidentially-declared disasters.

We are concerned that in recent years there has been a reduction of overall HMGP funding and an unfortunate confusion over the relative importance of pre-disaster vs.

post-disaster mitigation. Both are necessary. As a budget-cutting measure, in 2003 the formula for HMGP funds was cut from 15% to 7 ½% of Stafford Act expenditures. Yet, it is almost always after disasters that the greatest potential exists to implement meaningful hazard mitigation. While HMGP is not specifically targeted at pre-FIRM structures, by far the most flood hazard HMGP funds (more than FMA and the new Pilot program) go toward mitigating these structures. **We strongly urge the Committee to support restoration of the 15% HMGP formula, and we would further urge that the increase be applied to recent Gulf Coast disasters to meet the current restoration and mitigation needs.**

In addition, there are a range of measures that should be taken immediately to strengthen NFIP mitigation standards and improve the program's financial solvency.

Basic community participation standards have remained largely unchanged since the start of the NFIP. Initially the program planners chose minimum standards such as requiring all new construction first floor elevation to be "at or above" the Base Flood Elevation (1% chance flood) to encourage all communities to join. While some communities adopted higher standards, others chose only the minimums. Thirty eight years into the program we would urge that key standards be increased in light of what we have learned and to promote greater safety. We would specifically urge that FEMA:

Require that all new and substantially improved buildings in the SFHA have the first floor elevated to at least one-foot above the Base Flood Elevation (BFE). This would, in part, compensate for the large range of uncertainties associated with defining a base flood;

Adopt a "no-rise" standard for restricting flows in the 100-year flood instead of the current "one-foot rise". The current standard has worked to draw large encroachment onto floodplains that through time results in substantial new flood risk and damages.

Require all "critical facilities" to be elevated above and flood protection structures to be designed and constructed to protect from at least the 500-year (.2 % annual chance) flood. A host of government and professional reports and studies support the need for much higher than 100-year standards for urban flood protection and for key community infrastructure (e.g. schools, hospitals, eldercare, police, fire, and other public facilities, important roads, bridges, and transportation facilities).

The NFIP's Community Rating System has identified and rated 18 types of best management practices that can be employed by communities to reduce flood hazards. Communities representing about half the nation's population have already participated in this voluntary program. **We would urge the Committee to direct FEMA to identify what practices from the CRS could be adapted universally as part of the basic community participation criteria to reduce risks.**

I would also call special attention to the situation we found with **substantial damages**. Because the calculation and decisions related to substantial damage determinations in the

current NFIP is left with local government officials, who are often subject to immense pressure in the wake of disasters, often these decisions result in negative determinations when all reasonable evidence points in the direction of requiring the reconstruction to be elevated to modern code. **We believe for the sake of improving the financial stability of the NFIP and consistency of decision making, that FEMA should be directly involved with substantial damage determinations. We would also suggest that the determinations be based on cumulative damage claims and not simply single events.**

D. Places Where Insurance Should Not Be Provided

When the NFIP was first conceived, it was recognized that there were places where insurance should be withheld – particularly in floodways and areas of moving water. These were excluded because of the prohibitive cost of insuring these locations and the risks that building there posed to owners, their neighbors, first responders and the public. Subsequently, Congress established a Coastal Barrier Resources System that withholds insurance on undeveloped barrier islands. In light of the history of the program, we would urge the Committee to work with FEMA to identify what other such areas have flooding histories or risks or values that would warrant exclusion of availability of insurance.

E. Expanding Insurance Participation

The National Wildlife Federation was a strong supporter during development of the 1994 Flood Insurance Reform Act of strengthening escrow authorities and improving federal bank regulator oversight and enforcement of the mandatory purchase requirements. Substantial measures were adopted, yet it still appears that many who should have insurance do not have it when disasters occur.

We believe that still not enough is being done by the nation's financial sector and government regulators to assure that those living in flood prone areas purchase insurance and maintain their policies. We would urge the Committee to consider stronger enforcement measures and penalties for failures to assure that there is required coverage.

We would also strongly support changes in the NFIP to expand the mandatory purchase requirement to "residual risk" areas behind levees and below dams within the natural floodplains. Too often, communities falsely believe that because there is a levee or other structure shielding them from floodwaters, that they are essentially safe. The fact that today no flood insurance is required only encourages this false sense of reality. In our 1998 report, we found in particular that across the nation damages from more rare, catastrophic-type flood events are growing at the greatest magnitude – in many cases when flood control structures fail and inundate populated areas or spread out beyond what is identified as the 100-year floodplain.

F. Improving NFIP Mapping Accuracy and Adequacy of the 1% Chance Flood Standard

Because the flood insurance maps are literally the foundation of the NFIP and they are basic planning documents for the nation's urban and rural areas, it continues to be critical that the maps be updated and made accurate as possible. With one-third of the nation's 100,000 maps greater than 15 years old and another 30 percent at least 10 years old, we are seeing more and more instances of storms that result in much greater flooding than would be predicted by current maps. Again, we were rather shocked to learn in our 1998 study that fully 20 percent of repetitive loss properties were located *outside* the designated Special Flood Hazard Areas (1% chance flood zones). The repetitive loss properties had, on average more than 3 losses over 18 years, meaning that statistically they are probably located in the 5 – 10 year floodplains.

The National Wildlife Federation strongly supports continuation of FEMA's Map Modernization program and appreciates the Administration and Congress' continued support and funding. We are concerned, however, that in order to help place the NFIP on a course to fiscal solvency, the program needs to be expanded and extended.

The 1% chance standard was admittedly a compromise when the original drafters of the NFIP conceived the program. It was even recognized at the time that the 1% chance flood was probably too high a risk for most cities and urban areas, yet it was adopted as a "minimum" in order to entice reluctant communities to join the program. Unfortunately, the minimum became the maximum for many areas, and the choice of terminology has failed to adequately convey the risks of flooding to the public. Many communities sought the minimum levels of protection behind levees or dams, then nurtured the notion that they were safe and did not need flood insurance or elevation or other protection for their properties.

Today it is clear that basic to helping put the NFIP in a financially sound position, we need to build out from the 1% chance standard. A critical step must be to map beyond the 1 % chance area, and we strongly recommend that mapping extend to the .2 % chance ("500-year") flood level, and to all "residual risk" areas behind levees and below dams, in the event of structural failure. Furthermore, mapping should include other hazards, such as land subsidence, coastal erosion, sediment and mud flow areas, and areas subject to ice jams. In addition, mapping should be based upon reasonable estimates of "future conditions" – when growing communities are changing hydrologic regimes through their growth. Each of these is well within current technical capabilities.

Senator Reed has introduced S. 2005, critically important legislation that would continue the Map Modernization Program, direct the mapping of the additional dimensions and authorize \$400 million annually from 2006 to 2012 to accomplish the mapping.

We strongly urge the Committee to support this legislation as part of its efforts to reform the NFIP.

Conclusion

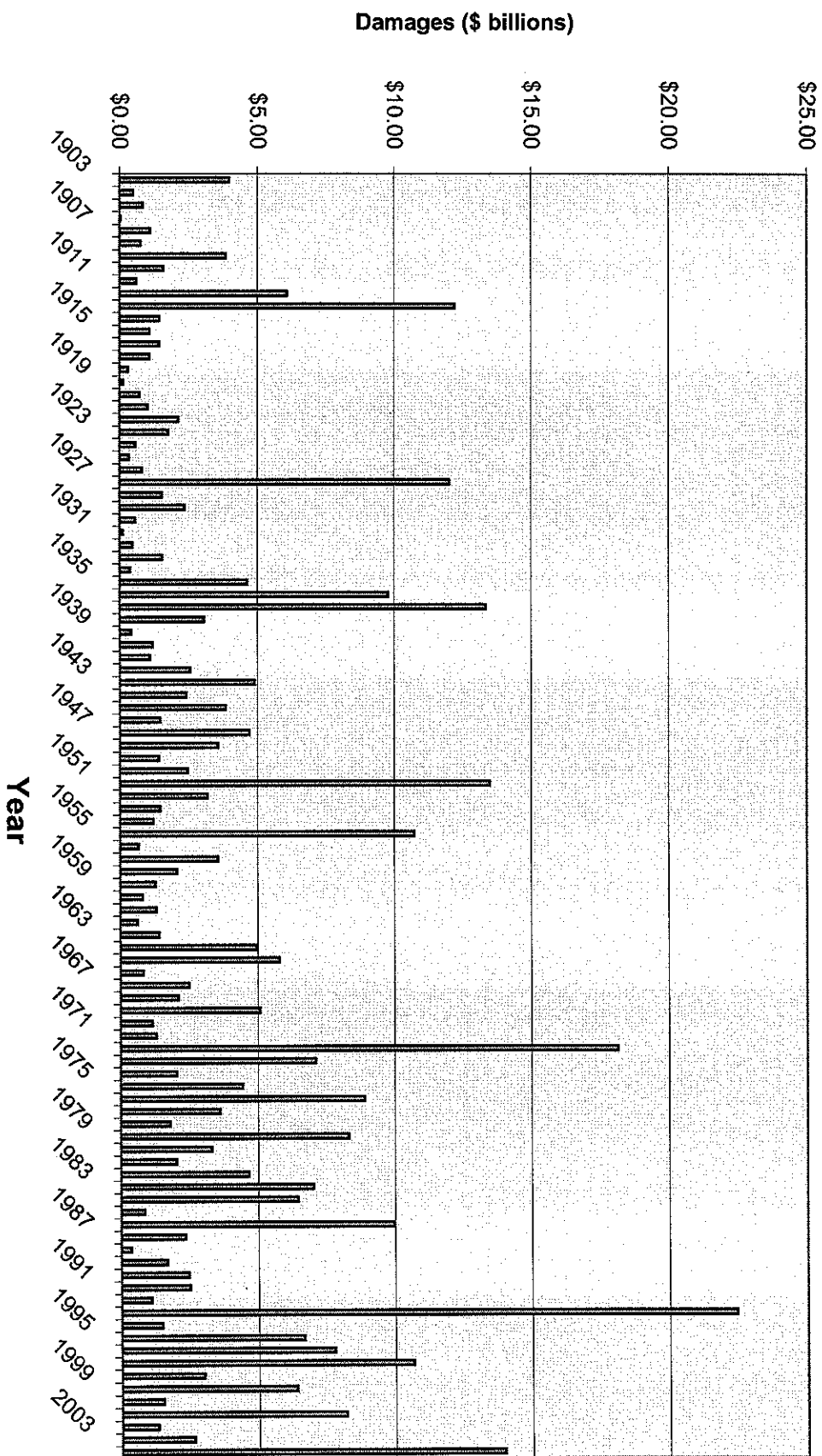
Once again, Mr. Chairman and Members of the Banking Committee, we applaud your work to reform the National Flood Insurance Program. The program has fallen short of its initial promises and currently finds itself in extremely serious financial trouble. The program has been successful in many ways to reduce the adverse impacts of flooding on many of the nation's communities, yet it has overall failed to put insurance on an actuarial footing, failed to accurately assess flood risks, failed to adequately communicate those risks to the public and failed to adequately discourage building and rebuilding in high and substantial risk areas. For 38 years it has continued to highly subsidize many of the policies it sells, thus skewing market signals as to the risks involved with certain floodplain locations and in some cases serving as an inducement to develop in high risk areas, rather than the opposite.

Perversely, this has also had a substantial adverse impact on many sensitive and critical ecosystems that support a large portion of the nation's wildlife – with the result sometimes being intensive urbanization and fill immediately along the nation's rivers, streams, coastlines, estuaries and barrier islands, with heightened flooding risks.

We are ready to work with the Committee to make needed improvements. Thank you for allowing me to provide the views of the National Wildlife Federation and I would be happy to respond to any questions you may have.

Attachments

Flood Damages (constant dollars)



Attachment 2

Repetitive Loss State Summary

Data as of 07/31/2005

State Name	RL Bldgs Total	RL Bldgs Insrd	RL Losses Total	RL Losses Insrd	\$ Losses Total	\$ Losses Insrd	Bldgs W/4 + Losses Total	Bldgs W/4 + Losses Insrd	Bldgs W/2-3 Losses > Tot Val	Bldgs W/2-3 Losses > Ins Val	Bldgs Post-Firm A-V Zone Total	Bldgs Post-Firm A-V Zone Insrd
Alabama	2803	1742	7396	4688	210,725,742.20	141,377,355.69	418	289	68	33	1125	834
Alaska	20	12	51	32	558,010.84	356,536.45	3	2	0	0	8	6
Arizona	172	39	394	92	5,173,543.20	1,380,086.69	8	1	15	1	2	2
Arkansas	321	100	898	290	12,145,504.83	5,547,493.97	65	26	6	4	7	3
California	2766	1385	7147	3730	131,403,560.31	73,710,337.34	372	228	106	57	110	70
Colorado	38	14	87	29	851,345.92	211,291.26	4	0	0	0	1	1
Connecticut	1059	552	3044	1653	44,679,079.42	26,263,750.46	220	128	20	13	26	21
Delaware	332	152	878	437	32,045,237.51	19,959,778.50	53	34	4	2	67	38
District Columbia	10	2	25	8	585,392.24	262,094.85	1	1	0	0	0	0
Florida	12528	8510	30475	20898	902,002,460.45	644,631,173.49	1181	859	388	228	2917	2208
Georgia	1003	555	2568	1414	55,256,363.19	33,612,724.36	120	67	43	18	111	71
Hawaii	14	9	29	19	403,093.63	304,894.14	0	0	0	0	2	1
Idaho	152	70	415	207	10,118,606.04	5,725,954.88	25	14	7	5	4	3
Illinois	14	5	40	19	579,663.18	269,658.65	3	2	0	0	2	1
Indiana	1794	569	5341	1877	55,853,632.16	23,170,749.42	383	142	49	11	20	7
Iowa	782	378	2108	1053	24,548,987.79	13,532,209.44	132	71	24	7	15	11
Kansas	466	240	1128	597	18,286,302.67	10,231,156.02	35	24	15	6	21	13
Kentucky	338	88	917	256	18,203,570.50	7,858,184.95	50	18	8	3	8	3
Louisiana	1230	583	3778	1961	62,400,895.05	36,739,084.35	288	180	45	17	48	29
Louisiana	20648	11097	63218	35976	833,284,058.68	526,697,789.00	5000	3152	626	183	1624	1129
Maine	127	59	330	166	6,037,309.31	3,368,750.66	14	9	2	0	2	2
Maryland	641	366	1508	856	38,844,122.30	25,594,077.82	48	26	25	9	51	38
Massachusetts	2205	1448	6157	4266	92,114,615.93	64,213,263.99	433	352	52	27	135	104
Michigan	391	135	981	362	11,296,617.03	6,566,482.70	45	21	7	2	6	7
Minnesota	368	161	891	405	12,948,316.31	6,539,008.29	29	17	11	4	10	2
Mississippi	3304	1221	9622	3777	131,097,345.86	63,249,283.06	654	287	287	49	265	160
Missouri	3979	840	12579	3020	192,971,657.03	62,188,818.85	1094	295	319	60	66	26
Montana	35	5	76	12	706,576.26	145,891.03	1	0	1	0	2	2
Nebraska	302	48	744	115	7,961,118.72	1,259,849.72	32	3	21	6	5	1
Nevada	22	9	54	22	1,741,491.71	650,351.10	3	2	0	1	3	2
New Hampshire	103	46	251	120	2,808,305.13	1,717,029.45	10	4	3	1	3	2
New Jersey	6778	4169	20279	12867	307,086,377.00	206,818,220.11	1537	1031	115	74	323	215
New Mexico	15	8	39	20	517,823.20	205,115.02	3	1	0	0	0	0
New York	7211	2901	18975	7944	209,596,020.47	112,348,838.56	1053	501	116	54	177	105
North Carolina	6312	4457	15563	11925	307,897,431.89	213,016,349.56	866	657	142	67	1347	1024
North Dakota	113	25	250	55	5,244,998.56	929,110.98	5	1	11	0	1	0
Ohio	1487	839	3917	2272	60,252,770.77	43,374,989.35	202	130	42	18	58	46
Oklahoma	755	200	2192	662	34,022,366.65	12,857,463.03	151	59	33	10	31	13
Oregon	253	139	610	340	13,430,789.46	8,480,003.14	21	14	20	13	25	16
Pennsylvania	5357	3485	13485	8613	298,268,852.74	211,892,668.08	573	327	166	99	89	78
Puerto Rico	1947	383	5577	1098	49,207,799.17	16,261,050.44	385	70	26	12	63	32
Rhode Island	169	75	492	240	9,963,947.42	5,056,012.27	30	17	3	1	3	1
South Carolina	1274	640	3111	1654	70,393,665.22	34,624,544.00	125	88	36	16	157	81
South Dakota	69	20	147	47	2,162,452.42	876,534.94	2	2	5	1	2	1
Tennessee	708	354	1950	1022	27,298,940.35	18,248,161.27	120	69	22	8	36	24
Texas	15352	5398	44557	18454	1,022,034,042.50	535,772,836.49	3067	1454	698	267	939	530
Utah	48	4	112	53	1,437,608.33	830,578.50	4	3	0	0	0	0
Vermont	6	21	14	9	184,364.53	160,514.95	0	0	0	0	0	0
Virgin Islands	204	83	544	230	24,214,407.64	13,816,752.06	33	13	6	4	25	5

NOTE: DATA LIMITED TO REPETITIVE LOSS PROPERTIES WITH AT LEAST TWO LOSSES IN A 10 YEAR ROLLING PERIOD & AT LEAST TWO LOSSES THAT ARE MORE THAN 10 DAYS APART.

THE DATA CONTAINED ON THIS REPORT DOES NOT CONTAIN PROPERTIES THAT HAVE BEEN MITIGATED (PROPERTIES THAT ARE NO LONGER REPETITIVE).

Repetitive Loss State Summary

Data as of 07/31/2005

State Name	RL Bldgs Total	RL Bldgs Insrd	RL Losses Total	RL Losses Insrd	\$ Losses Total	\$ Losses Insrd	Bldgs W/4 + Losses Total	Bldgs W/4 + Losses Insrd	Bldgs W/2-3 Losses > Tot Val	Bldgs W/2-3 Losses > Ins Val	Bldgs Post-Firm A-V Zone Total	Bldgs Post-Firm A-V Zone Insrd
Virginia	2135	1284	5463	3294	122,953,671.70	73,607,461.16	241	158	89	30	154	117
Washington	617	307	1609	822	32,907,784.01	17,637,993.13	93	53	38	14	35	21
West Virginia	2564	1447	6512	3730	102,405,664.24	62,939,507.45	302	175	95	40	82	57
Wisconsin	362	201	812	465	11,116,572.11	6,089,851.01	17	11	6	1	2	2
Wyoming	5	3	13	9	157,285.42	115,372.42	1	1	0	0	0	0
TOTAL	111708	57423	310353	164182	5,630,386,961.20	3,403,294,904.50	19565	11089	3821	1475	10216	7166

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National Average Residential Property Costs And State Activity Totals
For Acquisition, Relocation, Elevation, Floodproofing, Retrofit, and Safe Room Projects
All Mitigation Programs

Average Property Cost by Mitigation Activity Type					
Project Type Classification (Residential Only)	Approved Net Eligible Project Cost	Federal Share Obligated	Number Of Mitigated Properties	Average Project Cost	Average Fed Share
Acquisition	\$1,656,568,610	\$1,188,766,042	24,779	\$66,854	\$47,975
Elevation	\$148,627,695	\$136,431,368	2,241	\$66,322	\$60,880
Floodproofing	\$9,054,150	\$5,075,554	181	\$50,023	\$28,042
Relocation	\$21,298,491	\$15,985,858	191	\$111,510	\$83,696
Retrofit	\$60,312,583	\$45,202,435	1,807	\$33,377	\$25,015
Safe Room/Shelters	\$46,162,335	\$33,651,749	7,745	\$5,960	\$4,345
Grand Total	\$1,942,023,864	\$1,425,113,006	36,944	\$52,567	\$38,575

Number of Mitigated Properties by Activity Type						
State Code	Acquisitions	Elevations	Floodproofing	Relocations	Retrofits	Safe Rooms/ Wind Shelters
AK	0	0	0	71	0	0
AL	676	62	0	5	0	399
AR	84	4	0	0	0	1
AZ	98	0	0	0	0	0
CA	338	687	0	0	1,330	0
CO	31	0	40	15	0	0
CT	2	26	0	0	0	0
DE	1	52	0	0	0	0
FL	253	188	2	2	89	0
GA	785	59	0	0	0	0
GU	0	0	1	0	0	0
IA	1,267	15	0	2	0	0
ID	42	30	0	8	0	0
IL	2,859	2	0	0	6	0
IN	345	0	1	0	0	0
KS	1,167	0	0	0	0	7
KY	586	13	0	0	0	0
LA	152	149	4	0	0	0
MA	16	57	70	1	3	0
MD	62	0	0	1	0	0
ME	44	0	0	7	0	0
MI	23	39	0	0	0	0
MN	831	2	0	0	2	0
MO	4,770	2	0	0	0	0
MS	353	40	0	1	0	743
MT	2	6	0	8	0	0
NC	3,871	253	0	64	0	0
ND	843	0	0	2	0	0
NE	277	0	0	0	0	0
NH	2	0	0	0	0	0
NJ	98	47	0	0	0	0
NM	6	0	0	0	0	0
NV	23	7	0	0	0	0
NY	131	83	0	0	0	0
OH	865	32	0	0	0	0
OK	106	0	0	0	0	6,554
OR	110	129	0	1	1	0
PA	745	28	10	0	0	0

National Average Residential Property Costs And State Activity Totals
For Acquisition, Relocation, Elevation, Floodproofing, Retrofit, and Safe Room Projects
All Mitigation Programs

Number of Mitigated Properties by Activity Type						
State Code	Acquisitions	Elevations	Floodproofing	Relocations	Retrofits	Safe Rooms/ Wind Shelters
PR	312	0	0	0	14	0
SC	36	0	0	0	5	0
SD	34	0	0	0	0	41
TN	389	0	0	0	0	0
TX	709	0	0	0	0	0
UT	1	0	0	0	0	0
VA	278	53	7	3	0	0
VI	0	0	0	0	357	0
VT	31	0	5	0	0	0
WA	246	175	0	0	0	0
WI	400	1	41	0	0	0
WV	467	0	0	0	0	0
WY	12	0	0	0	0	0
TOTALS	24,779	2,241	181	191	1,807	7,745