

For Release on Delivery  
Expected at 10:00 a.m.  
Thursday  
July 19, 2001

# FLOOD INSURANCE

## Information on the Financial Condition of the National Flood Insurance Program

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Madam Chairwoman and Members of the Subcommittee:

We are here today to discuss the financial condition of the National Flood Insurance Program administered by the Federal Emergency Management Agency's (FEMA) Federal Insurance and Mitigation Administration (Administration). The program, along with low-interest loans provided by the Small Business Administration and individual and family grants provided by FEMA, is a major component of the federal government's efforts to provide flood-related disaster assistance. Floods have been, and continue to be, the most destructive natural hazard in terms of economic loss to the nation, according to FEMA. From fiscal years 1969 through 2000, the program paid about \$10 billion in insurance claims, primarily from premiums collected from program policyholders. The recent floods in the Midwest, Louisiana, Texas, and West Virginia have again demonstrated the destructive nature of this hazard to the nation.

Prior to the flood insurance program's inception in 1968, flood insurance was generally not available from private insurance companies. The National Flood Insurance Act of 1968 (P.L. 90-448) established the program to identify flood-prone areas, make flood insurance available to property owners living in communities that joined the program, encourage floodplain management efforts to mitigate flood hazards, and reduce federal expenditures for disaster assistance. As you know Madam Chairwoman, we last provided testimony to this Subcommittee on this issue on October 27, 1999.<sup>1</sup>

Our statement today will provide information on (1) the financial results of the program's operations since fiscal year 1993, (2) the actuarial soundness of the program, and (3) the impact of repetitive losses (multiple loss properties) and FEMA's strategies for reducing those losses.

The following summarizes our work:

- While the magnitude of flood damage varies considerably from year to year, the program has operated "in the black" during the last 2 fiscal years following a period of sustained losses to the program from severe flooding. In March 1994, we reported that, while sufficient to cover flood losses experienced at that time, overall income from the program's

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<sup>1</sup>*Flood Insurance: Information on Financial Aspects of the National Flood Insurance Program* (GAO/T-RCED-00-23, Oct. 27, 1999).

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premiums was not sufficient to build reserves to meet future expected flood losses.<sup>2</sup> Therefore, we concluded that it was inevitable that losses from claims and the program's expenses would exceed the funds available to the program in some years. During the 8-year period from fiscal years 1993 through 2000, the program experienced losses from floods that were greater than the premiums collected from policyholders. Cumulative operating losses to the program (program income less program costs) totaled about \$843 million during this 8-year period. During the first 6 years of that period, cumulative operating losses totaled about \$1.56 billion and required FEMA to borrow from the U.S. Treasury to help finance these losses. During fiscal years 1999 and 2000, however, program revenues exceeded program costs by about \$720 million, enabling the Administration to repay the funds it had borrowed from the U.S. Treasury to finance the program's earlier losses.

- The program is not actuarially sound because it does not collect sufficient premium income to build reserves to meet the long-term future expected flood losses.<sup>3</sup> The program, by design, is not actuarially sound because the Congress authorized subsidized insurance rates to be made available for policies covering certain structures to encourage communities to join the program. Because about 30 percent of the policies were subsidized as of 2000, overall premium income is not sufficient to build reserves to meet future expected flood losses. The Administration's annual target for the program's overall premium income is at least the amount of losses and expenses in an average historical loss year, which approximates the average annual losses experienced under the program since 1978. Since no catastrophic loss years have occurred since 1978,<sup>4</sup> collecting premiums that are based on an average historical loss year does not enable the program to build sufficient reserves to cover a possible catastrophic loss year in the future. Because the program does not collect sufficient premium income to build reserves to meet the long-term future expected flood losses, including catastrophic losses, it is inevitable that losses from claims and the program's expenses will exceed the funds available to the program in some years and, cumulatively, over time.

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<sup>2</sup>See *Flood Insurance: Financial Resources May Not Be Sufficient to Meet Future Expected Losses* (GAO/RCED-94-80, Mar. 21, 1994).

<sup>3</sup>For the program to be actuarially sound, overall revenues from insurance premiums would need to be sufficient to cover expected losses from claims and the program's expenses.

<sup>4</sup>Administration officials told us that a catastrophic year is defined as a year resulting in \$5.5 billion to \$6 billion in claims losses, which has a 1 in 1,000 chance of occurring.

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- Repetitive loss properties have a major disproportionate impact on the National Flood Insurance Program, according to FEMA. The cost of multiple-loss properties (two or more losses greater than \$1,000 each on the same property within a 10-year period) to the program is large—about 38 percent of all claims paid historically, currently about \$200 million annually. In a recent report on the Government Performance and Results Act, we identified improving the financial condition of the flood insurance program as a major management challenge and reported on FEMA’s strategy for addressing this challenge, including reducing losses from multiple loss properties.<sup>5</sup> In its fiscal year 2002 Performance Plan and budget proposal, FEMA, among other things, has under way or is planning actions aimed at (1) identifying a target group of properties suffering multiple losses and transferring them to a special servicing facility for better oversight and coordination of insurance and mitigation actions; (2) developing a proposal to reduce the subsidy provided to older repetitive loss properties; (3) terminating flood insurance coverage for the worst offending repetitive loss properties; and (4) eliminating subsidies for vacation homes, rental properties, and other nonprimary properties that experience repetitive losses.

Before I discuss these issues in greater detail, let me briefly explain the National Flood Insurance Program and other federal disaster assistance related to this program.

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## The National Flood Insurance Program and Other Flood-Related Assistance

About 19,600 communities have joined the flood insurance program. Under the program, flood insurance rate maps (FIRM) were prepared to identify special flood hazard areas. In order for a community to join the program, any structures built within a special flood hazard area after the FIRM was completed were required to be built according to the program’s building standards that are aimed at minimizing flood losses. Special flood hazard areas, also known as the 100-year floodplains, are areas subject to a 1-percent or greater chance of experiencing flooding in a given year. A key component of the program’s building standards, that must be followed by communities participating in the program, is a requirement that the lowest floor of the structure be elevated to or above the base flood level—the elevation at which there is a 1-percent chance of flooding in a given year.

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<sup>5</sup>*Federal Emergency Management Agency: Status of Achieving Key Outcomes and Addressing Major Management Challenges (GAO-01-832, July 9, 2001).*

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To encourage communities to join the program, thereby promoting floodplain management and the widespread purchasing of flood insurance, the Congress authorized FEMA to make subsidized flood insurance rates available to owners of structures built before a community's FIRM was prepared. These pre-FIRM structures are generally more flood-prone than later built structures because they were not built according to the program's building standards. Owners of post-FIRM structures pay actuarial rates for national flood insurance. The average annual premium for a subsidized policy is currently \$610, and the average annual premium for an actuarial policy is currently \$310. The higher average premium for a subsidized policy reflects the significantly greater risk of flood-prone pre-FIRM properties. The \$610 average annual premium for a subsidized policy represents about 38 percent of the true risk premium for these properties.

From 1968 until the adoption of the Flood Disaster Protection Act of 1973, the purchase of flood insurance was voluntary. The 1973 act required the mandatory purchase of flood insurance to cover structures in special flood hazard areas of communities participating in the program if (1) any federal loans or grants were used to acquire or build the structures and (2) the loans were secured by improved properties and were made by lending institutions regulated by the federal government. The owners of properties with no mortgages or properties with mortgages held by unregulated lenders were not, and still are not, required to buy flood insurance, even if the properties are in special flood hazard areas.

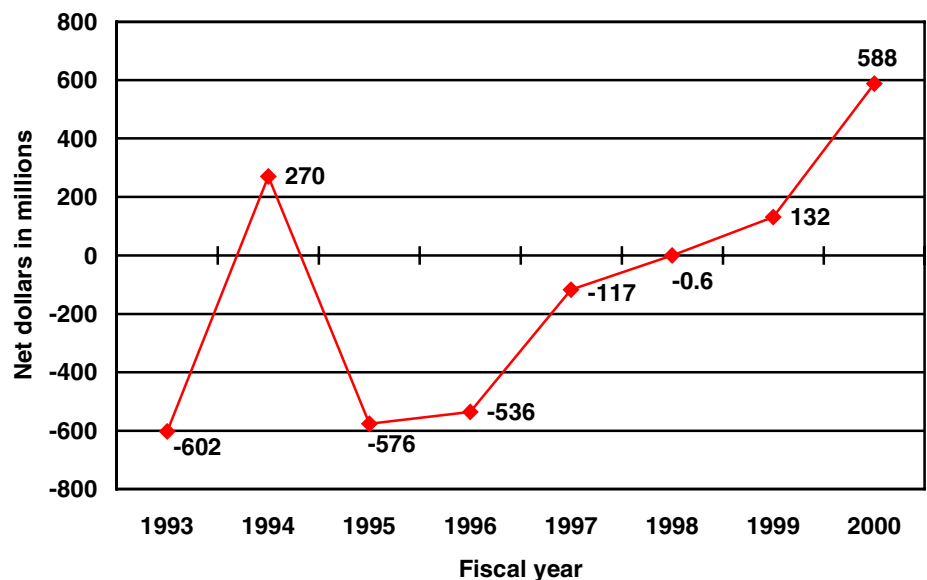
The National Flood Insurance Reform Act of 1994 reinforces the objective of using insurance as the preferred mechanism for disaster assistance by (1) expanding the role of federal agency lenders and regulators to enforce the mandatory flood insurance purchase requirements and (2) prohibiting further flood disaster assistance for any property where flood insurance is not maintained, even though flood insurance was mandated as a condition for receiving disaster assistance. Regarding the prohibition on further flood disaster assistance, the act requires borrowers who have received certain disaster assistance and then failed to obtain flood coverage to be barred from receiving future disaster aid.

Other forms of flood disaster assistance include low-interest loans from the Small Business Administration to flood victims who are creditworthy. In addition, a flood victim who cannot obtain a Small Business Administration loan may apply for an individual and family FEMA grant of up to \$14,400 or the amount of the loss, whichever is less.

## Severe Flooding Has Sometimes Resulted in Sustained Losses to the Program

Annual operating losses or net revenues from the National Flood Insurance Program's operations have varied significantly from year to year. While revenues exceeded program costs in some years, cumulative program costs exceeded income by about \$843 million during the period October 1, 1992, through September 30, 2000. As seen in Figure 1, during the 8-year period from fiscal years 1993 through 2000, the program incurred operating losses in 5 of these years and experienced net income in the 3 remaining years.

**Figure 1: Net Financial Status of the National Flood Insurance Program (Annual Income Minus Costs)**



Source: National Flood Insurance Program Operating Results by Fiscal Year

During fiscal years 1993 through 1998, the first 6 years of the 8-year period, the flood insurance program generally experienced operating losses.<sup>6</sup> This occurred because losses from flood claims were greater than premium income collected from the program's policyholders. The program's annual

<sup>6</sup>Program income primarily consists of premium revenues paid by policyholders, but also includes investments, fees, and other revenues. Program costs primarily consist of claims and related expenses, but also include, among other things, operating and interest costs.

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losses during this period ranged from about \$600,000 in fiscal year 1998 to \$602 million in fiscal year 1993. Cumulative operating losses experienced by the program totaled about \$1.56 billion during the 6-year period. To help finance these losses, the Administration borrowed from the U.S. Treasury during the 6-year period.<sup>7</sup> According to FEMA, as of August 31, 1999, the debt owed by the program to the U.S. Treasury totaled \$541 million.<sup>8</sup>

Since fiscal year 1995, losses experienced by the program annually have gradually declined, and in fiscal years 1999 and 2000 program revenues exceeded program costs by a total of about \$720 million. As a result, the Administration was able to repay its debt owed the U.S. Treasury, and, as of June 30, 2001, the program owes no debt to the U.S. Treasury.<sup>9</sup>

The financial improvement experienced by the program since fiscal year 1995 was primarily due to three reasons. First, claims and related expenses declined.<sup>10</sup> Second, the number of policyholders covered by the program increased about 31 percent from 3.3 million policies in force in fiscal year 1995 to 4.3 million policies in force by fiscal year 2000. Accordingly, earned premium revenue on these policies increased during the period. Third, according to Administration officials, the proportion of generally more flood-prone pre-FIRM subsidized policies insured by the program has declined, resulting in a less risky portfolio of policies in force. The percentage of program policies that are subsidized has declined over time as newer properties have joined the program and are charged actuarial rates. While 41 percent of the 2.7 million policies in force in fiscal

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<sup>7</sup>The Congress authorized the Administration to borrow up to \$1 billion from the U.S. Treasury, if necessary, to pay claims losses. Legislation enacted in 1996 provided a 1-year increase in borrowing authority to \$1.5 billion, later extended through 2001. No appropriations have been made to the program since fiscal year 1986.

<sup>8</sup>According to an Administration official, debt owed by the Administration to the U.S. Treasury is not equivalent to the program's cumulative losses because the amount of borrowing needed depends on (1) the relative timing of payments on the program's current obligations and expected monthly premium receipts and (2) future insurance claims.

<sup>9</sup>Administration officials noted that, beginning in fiscal year 1986, the Congress required all program and administrative costs to be paid for by the program without a commensurate rate increase. In 1991, the Congress authorized the Administration to charge policyholders a federal policy fee to pay for these costs. Administration officials estimate the current value of the resulting loss of funds and investment income to be about \$436 million, making the program more vulnerable to the need for exercising its borrowing authority.

<sup>10</sup>The magnitude of flood damage can vary considerably from year to year.

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year 1993 were subsidized, 30 percent of the 4.3 million policies in force in fiscal year 2000 were subsidized, according to an Administration official.

While the program incurred operating losses during the 8-year period, it should be recognized that the value of the program in reducing federal expenditures on disaster assistance should not be measured by net federal expenditures alone. For example, the Administration estimated that the program's standards for new construction are now saving about \$1 billion annually in flood damage avoided. Also, from October 1, 1968, through September 30, 2000, the program paid about \$10 billion in insurance claims, primarily from policyholder premiums that otherwise would, to some extent, have increased taxpayer-funded disaster relief.

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## The Program Is Not, by Design, Actuarially Sound

The program is not actuarially sound because about 30 percent of the 4.3 million policies in force are subsidized, according to an Administration official. For a single-family pre-FIRM property, subsidized rates are available for the first \$35,000 of coverage, although any insurance coverage above that amount must be purchased at actuarial rates. Administration officials estimated that total premium income from subsidized policyholders is currently about \$500 million less than it would be if these rates had been actuarially based and participation had remained the same.

Pre-FIRM structures that are within an identified 100-year floodplain and are covered by subsidized policies are, on average, not as elevated as the post-FIRM structures in comparison with the base flood level. Administration officials told us that, on average, pre-FIRM structures not built to the program's standards are three and a half to four times more likely to suffer a flood loss. When these structures suffer a loss, the damage sustained is, on average, about 40 percent greater than the damage to flooded post-FIRM structures. According to the Administration, when these two factors are combined, pre-FIRM structures suffer, on average, about five times more damage than post-FIRM structures.

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## Premium Income Is Not Sufficient to Build Reserves for Potential Catastrophic Losses

As an alternative to actuarial soundness, the Administration developed a financial goal for the program to collect sufficient revenues to at least meet the expected losses and expenses of the average historical loss year, as well as to cover all non-loss-related program expenses, such as the program's administration. However, the average historical loss year is based only on the program's experiences since 1978. Since then, no catastrophic year (\$5.5 billion to \$6 billion in claims losses) has occurred,



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and many years in the 1980s were characterized by fairly low actual loss levels as compared to the historical average losses experienced in other years. Therefore, the historical average loss year involves fewer losses from claims than the expected annual claims losses in future years. As a result, collecting premiums to meet the historical average loss year does not realize the collections necessary to build reserves for potential catastrophic years in the future.

For the program to be actuarially sound, its rate-setting process would have to consider the monetary risk exposure of the program or the dollar value of expected flood losses over the long run. Since the magnitude of flood damage varies considerably from year to year, income from premiums in many years would exceed actual losses. This circumstance would enable the program to build reserves toward a possible catastrophic year in the future.

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### **Increasing Premiums for Subsidized Policies or Expanding Participation in the Program Might Have Adverse Financial Impacts**

As we reported in March 1994, increasing the premiums charged to subsidized policyholders (thereby decreasing the subsidy) to improve the program's financial health could have an adverse impact on other federal disaster-related relief costs. Increasing the rates of subsidized policyholders would likely cause some policyholders to cancel their flood insurance, and, if flooded in the future, these people might apply for Small Business Administration loans or FEMA disaster assistance grants.

Because they were built before the program's building standards became applicable, pre-FIRM structures are generally not as elevated as post-FIRM structures, and, if their owners were to be charged true actuarial rates, these rates would be much higher than current subsidized rates.<sup>11</sup> For example, if the subsidy on pre-FIRM structures were eliminated, insurance rates on currently subsidized policies would need to rise, on average, approximately a little more than twofold, according to an Administration official. This increase would result in an annual average premium of about \$1,300 for these pre-FIRM structures. Significant rate increases for

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<sup>11</sup>Also, Administration officials told us that making all rates actuarially based would not make the program actuarially sound. They noted that an initial capitalization would be necessary to establish some reserves in the event that a catastrophic year were to occur before sufficient reserves had accumulated from income from premiums.

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subsidized policies, including charging actuarial rates, would likely cause some pre-FIRM property owners to cancel their flood insurance.<sup>12</sup>

If owners of pre-FIRM structures, which suffer the greatest flood loss, canceled their insurance policies, the federal government would likely face increased costs, as the result of future floods, in the form of low-interest loans from the Small Business Administration or grants from FEMA. The effect on total federal disaster assistance costs of phasing out subsidized rates would depend on the number of the program's current policyholders who would cancel their policies. Thus, it is difficult to estimate if the increased costs of other federal disaster relief programs would be less than, or more than, the cost of the program's current subsidy.

On the other hand, expanding participation in the program by increasing the rate of compliance with the mandatory purchase requirement, or by extending the mandatory purchase requirement to property owners not now covered, will likely increase the number of both subsidized and unsubsidized policies. Although greater participation in the program is likely to reduce the cost of FEMA grants and Small Business Administration loans, the resulting increase in subsidized policyholders will put greater financial stress on the flood insurance program, because the premiums received from subsidized policyholders are not sufficient to meet the future estimated losses on these policies.

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## FEMA Has Developed Strategies To Reduce The Impact of Repetitive Flood Losses

Repetitive loss properties have a major disproportionate impact on the National Flood Insurance Program, according to FEMA's fiscal year 2000 performance report. About 38 percent of all program claims historically (currently about \$200 million annually) represent repetitive losses, even though repetitive-loss structures make up a small percentage of all program policies. About 45,000 buildings currently insured under the program have been flooded on more than one occasion and have received flood insurance claims payments of \$1,000 or more for each loss. Over the years, the total cost of these multiple-loss properties to the program has been about \$3.8 billion.

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<sup>12</sup>The National Flood Insurance Reform Act of 1994 expanded the mandatory flood insurance purchase requirement on properties that are located in special flood hazard areas and financed with any federal loan or grant or loans made by lending institutions regulated by the federal government.

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A 1998 study by the National Wildlife Federation noted that repetitive loss properties represent only 2 percent of all properties insured by the program, but they tend to have damage claims that exceed the value of the house and most are concentrated in special flood hazard areas. For example, nearly one out of every ten repetitive loss homes has had cumulative flood loss claims that exceeded the value of the house. Furthermore, over half of all nationwide repetitive loss property insurance payments have been made in Louisiana and Texas. About 15 states account for 90 percent of the total payments made for repetitive loss properties.

We, as well as FEMA's Office of Inspector General, have identified improving the financial condition of the National Flood Insurance Program as one of FEMA's major management challenges. In our July report on FEMA's performance under the Government Performance and Results Act, we outlined FEMA's accomplishments and plans to reduce the losses it sustains from repetitive loss properties. Among other things, FEMA has under way actions or plans aimed at (1) identifying target repetitive loss properties and transferring their servicing to a special servicing facility designed to better oversee claims and coordinate and facilitate insurance and mitigation actions and (2) developing and implementing proposals to reduce the subsidy provided to pre-FIRM repetitive loss properties.

In fiscal year 2000, FEMA implemented a repetitive loss initiative to target the 10,000 worst repetitive loss properties, those currently insured properties that had four or more losses, or two to three losses where the cumulative flood insurance claims payments exceeded the building's value. According to FEMA, the initiative is designed to eliminate or short-circuit the cycle of flooding and rebuilding for properties suffering multiple losses due to flooding. The initiative includes identifying repetitive loss properties and transferring their insurance policies to a central, special servicing facility designed to better oversee claims. FEMA believes that this special servicing will help coordinate insurance activities and mitigation grant programs. FEMA reported that it had identified repetitive loss properties and would make this information available to state and local governments to help them target repetitive loss properties for mitigation actions. FEMA also reported that it planned to mitigate 1,938 target properties over the next 4 years.

In addition, in its fiscal year 2002 annual performance plan, FEMA outlined several strategies to reduce the subsidy provided to repetitive loss properties as well as several business improvement process actions to reduce the program's costs. FEMA stated it would use Flood Mitigation

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Assistance funds and Hazard Mitigation Grants Program funds in conjunction with flood insurance program funds to acquire properties, relocate residents, or otherwise mitigate future losses. FEMA also plans to provide incentives to communities to reduce repetitive flood losses.

In its fiscal year 2002 budget proposal, FEMA requested to transfer \$20 million in fees from the National Flood Insurance Program to increase the number of buyouts of properties that suffer repetitive losses. This proposal also includes a proposal for two major reforms to the flood insurance program. FEMA proposes to terminate flood insurance coverage for the worst offending repetitive loss properties. FEMA also proposes to eliminate subsidized premiums for vacation homes, rental properties, and other nonprimary properties that experienced repetitive losses. FEMA estimates these two reforms will generate savings of about \$12 million in fiscal year 2002 and additional funds in subsequent years.

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In closing, Madam Chairwoman, the Administration is helping the nation avoid the costs of flood damage through the premiums it collects from, and the claim payments it makes to, program policyholders as well as the building standards it has promoted for new construction that minimize flood damage. However, at times, heavy flooding has produced annual flood insurance losses that exceeded the premiums collected from policyholders. As a result, the program has had to borrow funds from the U.S. Treasury to cover its operating losses, which it subsequently repaid. Two major factors underlie these financial difficulties—the program, by design, is not actuarially sound and it experiences repetitive losses. These factors are not easy to overcome because they have been an integral part of the program since its inception, and they are related to the promotion of floodplain management and widespread purchasing of flood insurance.

Madam Chairwoman, this completes our prepared statement. We would be happy to respond to any questions that you or Members of the Subcommittee might have.

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## Contact and Acknowledgments

For further information on this testimony, please contact Mr. Stanley Czerwinski at (202) 512-2834. Mark Abraham, Martha Chow, Kerry Hawranek, Signora May, Lisa Moore, and Robert Procaccini made key contributions to this testimony.

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# Related GAO Products

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*Federal Emergency Management Agency: Status of Achieving Key Outcomes and Addressing Major Management Challenges* ([GAO-01-832](#), July 9, 2001).

*Flood Insurance: Emerging Opportunity to Better Measure Certain Results of the National Flood Insurance Program* ([GAO-01-736T](#), May 16, 2001).

*Disaster Assistance: Issues Related to the Development of FEMA's Insurance Requirements* ([GAO/GGD/OGC-00-62](#), Feb. 25, 2000).

*Flood Insurance: Information on Financial Aspects of the National Flood Insurance Program* ([GAO/T-RCED-00-23](#), Oct. 27, 1999).

*Flood Insurance: Information on Financial Aspects of the National Flood Insurance Program* ([GAO/T-RCED-99-280](#), Aug. 25, 1999).

*Disaster Assistance: Opportunities to Improve Cost-Effectiveness Determinations for Mitigation Grants* ([GAO/RCED-99-236](#), Aug. 4, 1999).

*Disaster Assistance: FEMA Can Improve Its Cost-Effectiveness Determinations for Mitigation Grants* ([GAO/T-RCED-99-274](#), Aug. 4, 1999).

*Disaster Assistance: Improvements Needed in Determining Eligibility for Public Assistance* ([GAO/RCED-96-113](#), May 23, 1996).

*Flood Insurance: Financial Resources May Not Be Sufficient to Meet Future Expected Losses* ([GAO/RCED-94-80](#), Mar. 21, 1994).

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