United States Government Accountability Office
Report to Congressional Committees

August 2016

FLOOD INSURANCE

Review of FEMA Study and Report on Community-Based Options

GAO-16-766

GAO Highlights

Highlights of GAO-16-766, a report to congressional committees.

August 2016

FLOOD INSURANCE

Review of FEMA Study and Report on Community-Based Options

Why GAO Did This Study

Floods are the most common and destructive natural disaster in the United States. The National Flood Insurance Program, which FEMA administers, has struggled financially to both pay for flood losses and keep rates affordable. To address these and other challenges, Congress has passed legislation including the Homeowners Flood Insurance Affordability Act of 2014 (HFIAA). HFIAA included provisions for FEMA to conduct a study and submit a report that assesses and recommends options, methods, and strategies for making CBFI available through NFIP. FEMA presented the study and related report to Congress in March 2016.

HFIAA also includes a provision for GAO to review the FEMA report, which is to include the study and submit a related report to Congress. To review the study and report FEMA submitted to Congress, GAO analyzed the FEMA study's objectives, methodology, and findings, and evaluated the FEMA report's conclusions.

GAO analyzed the appropriateness of the objectives, the reasonableness of the methodology, and the extent to which the conclusions were supported by the findings. GAO also evaluated relevant study findings against public policy goals for federal involvement in catastrophe insurance previously identified by GAO, and interviewed FEMA and NAS officials.

GAO is not making recommendations in this report.

View GAO-16-766-For more information, contact Alicia Puente Cackley at (202) 512-8678 or cackleya@gao.gov

What GAO Found

The Federal Emergency Management Agency (FEMA) used reasonable objectives and methodology for its study on community-based flood insurance (CBFI)—flood insurance that a community would purchase to cover all properties located within it. FEMA contracted with the National Academy of Sciences (NAS) to conduct the study, and worked with NAS to design a study that would provide a high-level, independent discussion of issues related to CBFI. According to FEMA officials, such a study would help FEMA decide whether CBFI should be implemented, an important step before developing any plans to implement CBFI. Once the study was designed, NAS conducted the study independently, using input obtained from an expert committee that met twice in early 2015. The members of the committee represented academia, the private sector, and state and federal government. GAO determined that the study objectives were designed to meet FEMA's needs, the methodology supported the objectives, and alternative methodologies that were considered would have faced various limitations.

In its report submitted to Congress, which contained the study, FEMA concluded that it should not conduct further related research or implement CBFI. Specifically, it concluded that the challenges outlined in the study outweigh any potential benefit when considered against limited community interest. FEMA officials further cited the need to dedicate FEMA's resources to effective National Flood Insurance Program (NFIP) reform. Based on the factors cited by FEMA officials, and the consistency of these factors with findings in prior GAO reports on NFIP, GAO determined that FEMA's conclusion was reasonable. For example, prior GAO work has highlighted challenges FEMA faces in balancing reform efforts with limited resources.

In prior work, GAO identified four public policy goals for federal involvement in natural catastrophe insurance and used them to evaluate changes to NFIP. While the FEMA study did not use these goals, as part of its assessment GAO evaluated relevant elements of the study against them. For example, one of these goals is charging premium rates that fully reflect actual risk, and the study discussed innovative uses of CBFI that could help NFIP charge such rates. Another goal is encouraging private markets to provide natural catastrophe insurance, and the study discusses ways in which CBFI could encourage private market participation in flood insurance markets, as well as challenges that CBFI would pose to private insurers.

Contents

Letter		1
	Background	4
	FEMA's Study and Report Provided Relevant Information and Concluded that FEMA Should Not Implement CBFI	9
	Agency Comments	18
Appendix I	GAO Contact and Staff Acknowledgments	19

Figures

Figure 1: Number of National Flood Insurance Program Policies in Force, by State, as of March 2016	7
Figure 2: Number of Communities Participating in the National Flood Insurance Program, by State, as of March 2016	8
Figure 3: Federal Emergency Management Agency Community-Based Flood Insurance Study Statement of Task	10

Abbreviations

Biggert-Waters Act	Biggert-Waters Flood Insurance Reform Act
CBFI	community-based flood insurance
FEMA	Federal Emergency Management Agency
HFIAA	Homeowners Flood Insurance Affordability Act
NAS	National Academy of Sciences
NFIP	National Flood Insurance Program
NRC	National Research Council
SFHA	Special Flood Hazard Areas
Treasury	Department of the Treasury

441 G St. N.W.
Washington, DC 20548

August, 24, 2016

The Honorable Richard Shelby
Chairman
The Honorable Sherrod Brown
Ranking Member
Committee on Banking, Housing, and Urban Affairs
United States Senate

The Honorable Jeb Hensarling
Chairman
The Honorable Maxine Waters
Ranking Member
Committee on Financial Services
House of Representatives

Floods are the most common and destructive natural disaster in the United States. The National Flood Insurance Program (NFIP) makes federally backed flood insurance available to property owners in participating communities and is the only source of insurance against flood damage for most residents of flood-prone areas. NFIP is administered by the Federal Emergency Management Agency (FEMA).

Since 2000, NFIP has experienced several years with catastrophic losses, primarily from Hurricane Katrina and the other 2005 storms and Superstorm Sandy in 2012. Since then, FEMA has needed to borrow money from the U.S. Department of the Treasury (Treasury) to cover claims in some years. As of March 2016, FEMA owed Treasury $23 billion. As a result of the program's importance, level of indebtedness to Treasury, and substantial financial exposure for the federal government and taxpayers, as well as FEMA's operating and management challenges, NFIP has been on our high-risk list since 2006.[1]

[1]Every 2 years, we provide Congress with an update on our high-risk program, which highlights major areas that are at high risk for fraud, waste, abuse, or mismanagement, or that need broad reform. See GAO, *High-Risk Series: An Update*, GAO-15-290 (Washington, D.C.: Feb. 11, 2015).

To address certain challenges, Congress has passed legislation including the Biggert-Waters Flood Insurance Reform Act of 2012 (Biggert-Waters Act) and the Homeowner Flood Insurance Affordability Act of 2014 (HFIAA).[2] The Biggert-Waters Act sought to strengthen the future financial solvency and administrative efficiency of NFIP, but it also raised concerns for policyholders whose premiums increased. HFIAA sought to address these affordability concerns by repealing or altering some Biggert-Waters Act requirements.[3]

HFIAA also included provisions for the study of voluntary community-based flood insurance (CBFI). While there is no single generally accepted definition for CBFI, the term generally refers to the concept of a single, community-wide flood insurance policy that a community would purchase to cover all properties located within it.[4] Specifically, HFIAA included provisions for FEMA to conduct a study and submit a report that assesses and recommends options, methods, and strategies for making CBFI available through NFIP. In September 2014, FEMA awarded a contract to the National Academy of Sciences (NAS) to conduct a study on potentially making voluntary CBFI policies available through NFIP.[5] Specifically, the study as contracted was to include, but was not limited to, discussion of topic areas and questions that would require further evaluation in order for FEMA and others to better evaluate strengths and weaknesses of providing CBFI. FEMA's report was to include the results and conclusions of the study. NAS completed a pre-publication version of the study and submitted it to FEMA in July 2015 and published the final

[2]Pub. L. No. 112-141, tit. II, 126 Stat. 405, 916 (2012). Pub. L. No. 113-89, 128 Stat. 1020 (2014).

[3]In 2016, we reported on the affordability challenges related to NFIP. See GAO, *National Flood Insurance Program: Options for Providing Affordability Assistance,* GAO-16-190 (Washington, D.C.: Feb. 10, 2016).

[4]For the purposes of this report, we based this definition on common elements of definitions used by other stakeholders including FEMA and the Congressional Research Service.

[5]NAS is a private, nonprofit society of distinguished U.S. scholars that is charged with providing independent, objective advice to the United States on scientific and technological matters.

version of the study in December 2015.[6] FEMA delivered its summary report, which included the study and indicated it was FEMA's final report on the topic, to the relevant congressional committees in March 2016. Additionally, HFIAA included a provision for GAO to review and analyze FEMA's CBFI report, and report to the relevant congressional committees. This report analyzes the report FEMA submitted to Congress by reviewing the study's objectives, methodology, and findings and describing the FEMA report's conclusions that were based on the study.

For the purposes of this report, we defined CBFI as the concept of a single, community-wide flood insurance policy that a community would purchase to cover all properties located within it. To establish this definition, we drew upon common elements of definitions used by FEMA and other stakeholders.[7] Our review included several FEMA and NAS documents. These included the prepublication and final versions of the NAS study, the FEMA report that included the study, the study's statement of objectives and project management plan, and previous FEMA documents related to CBFI. To guide our assessment of the FEMA study's design, execution, and findings, and report's corresponding conclusions, we reviewed FEMA documents, including the study's statement of objectives and project management plan as well as the final study and report. We evaluated the study on the clarity and appropriateness of the objectives, the consistency of the methodology with the objectives, the reasonableness of the methodology, and the extent to which the conclusions were supported by the findings. We evaluated the FEMA report, which included the study, on the extent to

[6]The substance of NAS prepublication reports is final, but NAS may make editorial changes throughout the text prior to publication. The final version of the study, *A Community-Based Flood Insurance Option,* is available on the NAS website: http://dels.nas.edu/Report/Community-Based-Flood-Insurance-Option/21758.

[7]Other stakeholders included Atkins, the Congressional Research Service, and Resources for the Future. For further details on these definitions, refer to the relevant reports: Federal Emergency Management Agency, *NFIP Stakeholder Listening Session: Findings & Next Steps, Phase I Report* (Washington, D.C. April 2010); Atkins, *Community-Based Flood Insurance: Impacts on the Flood Hazard Management Cycle,* accessed May 20, 2016, https://www.floods.org/ace-files/documentlibrary/2012_NFIP_Reform/Flood_Mapping_for_the_Nation_ASFPM_Report_3-1-2013.pdf; Congressional Research Service, *The National Flood Insurance Program: Status and Remaining Issues for Congress* (Washington, D.C.: February 2013); and Resources for the Future, *A Proposed Design for Community Flood Insurance* (Washington, D.C.: December 2015).

which the conclusions were supported by the findings of the study and consistent with findings in prior GAO reports on FEMA's administration of the National Flood Insurance Program. We also analyzed how the study's findings might be used to evaluate CBFI against public policy goals for federal involvement in catastrophe insurance identified by GAO in prior reports. In addition, we interviewed FEMA officials and the study's authors to develop an in-depth understanding of the design, execution, findings, and conclusions of the study and report.

We conducted this performance audit from March 2016 to September 2016 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Overview of Key NFIP Legislation

In 1968, Congress created NFIP to address the increasing cost of federal disaster assistance by providing flood insurance to property owners in flood-prone areas, where such insurance was either not available or prohibitively expensive.[8] The 1968 law also authorized premium subsidies to encourage property owner participation. To participate in the program, communities must adopt and agree to enforce floodplain management regulations to reduce future flood damage. In exchange, federally backed flood insurance is offered to residents in those communities.

NFIP was subsequently modified by various amendments to strengthen certain aspects of the program. The Flood Disaster Protection Act of 1973 made the purchase of flood insurance mandatory for properties in special flood hazard areas—areas that are at high risk for flooding—that are security for loans from federally regulated lenders and located in NFIP

[8]The National Flood Insurance Act of 1968 established NFIP. Pub. L. No. 90-448, Tit. XIII, § 1301 et seq., 82 Stat. 476, 572 (1968).

participating communities.[9] This requirement expanded the overall number of insured properties, including those that qualified for subsidized premiums. The National Flood Insurance Reform Act of 1994 expanded the purchase requirement for federally backed mortgages on properties located in special flood hazard areas.[10]

Congress has passed two key pieces of legislation designed to reform NFIP. The Biggert-Waters Flood Insurance Reform Act of 2012 (Biggert-Waters Act), enacted in July 2012, instituted provisions to help strengthen NFIP's future financial solvency and administrative efficiency. For example, it required FEMA to phase out almost all discounted insurance premiums and establish a reserve fund.[11] As implementation proceeded, however, affected communities raised concerns about some Biggert-Waters Act requirements. The Homeowner Flood Insurance Affordability Act of 2014 was enacted in March 2014 and sought largely to address affordability concerns by repealing or altering some Biggert-Waters Act requirements. In this context, HFIAA included provisions that FEMA produce a study and submit a report that assess and recommend options, methods, and strategies for making voluntary CBFI available through NFIP.

[9]Pub. L. No. 93-234, 87 Stat. 975 (1973). The 1973 act also prohibited regulated lenders from making loans secured by properties in a special flood hazard area in nonparticipating communities. The Housing and Community Development Act of 1977 amended the 1973 act to permit regulated lending institutions to make conventional loans in special flood hazard areas of nonparticipating communities. Special flood hazard areas represent the land subject to a 1 percent or greater chance of flooding in any given year.

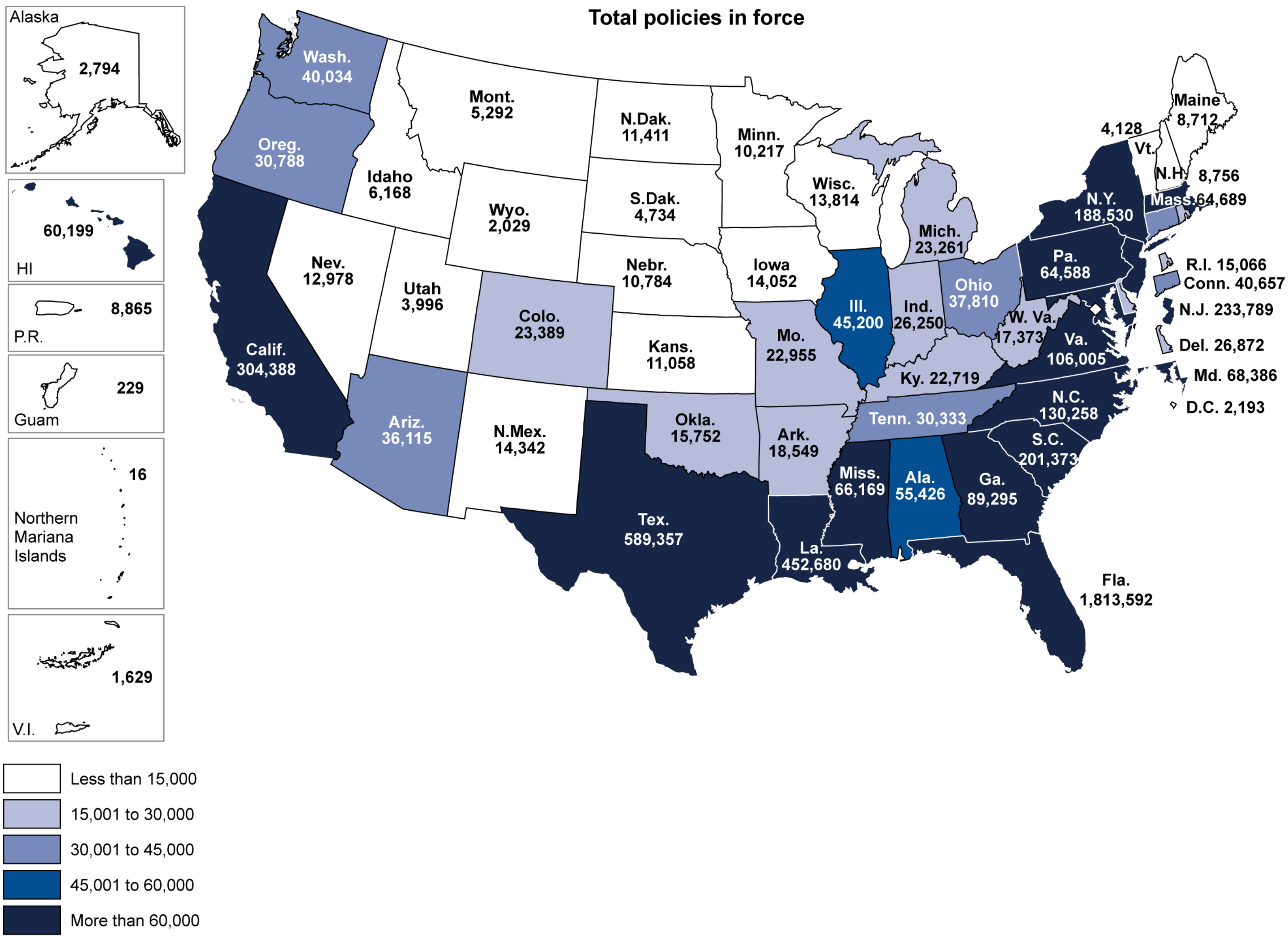
[10]Pub. L. No. 103-325, § 522, 108 Stat. 2160, 2257 (1994).

[11]Discounted insurance premiums include both subsidized and grandfathered policies. Generally, subsidized policies are policies that are sold at highly discounted rates and cover properties in high-risk locations known as Special Flood Hazard Areas (SFHA) that were built before Flood Insurance Rate Maps became available for the community and the flood risk was clearly understood; these properties otherwise would have been charged higher premiums. NFIP allows other property owners to continue to pay "grandfathered" rates, which do not reflect reassessments of their properties' flood risk that occur when the properties are remapped into higher-risk flood zones but whose policies continue to be classified with other policyholders from lower-risk zones.

NFIP Data on the Number of Policies in Force and Communities Participating

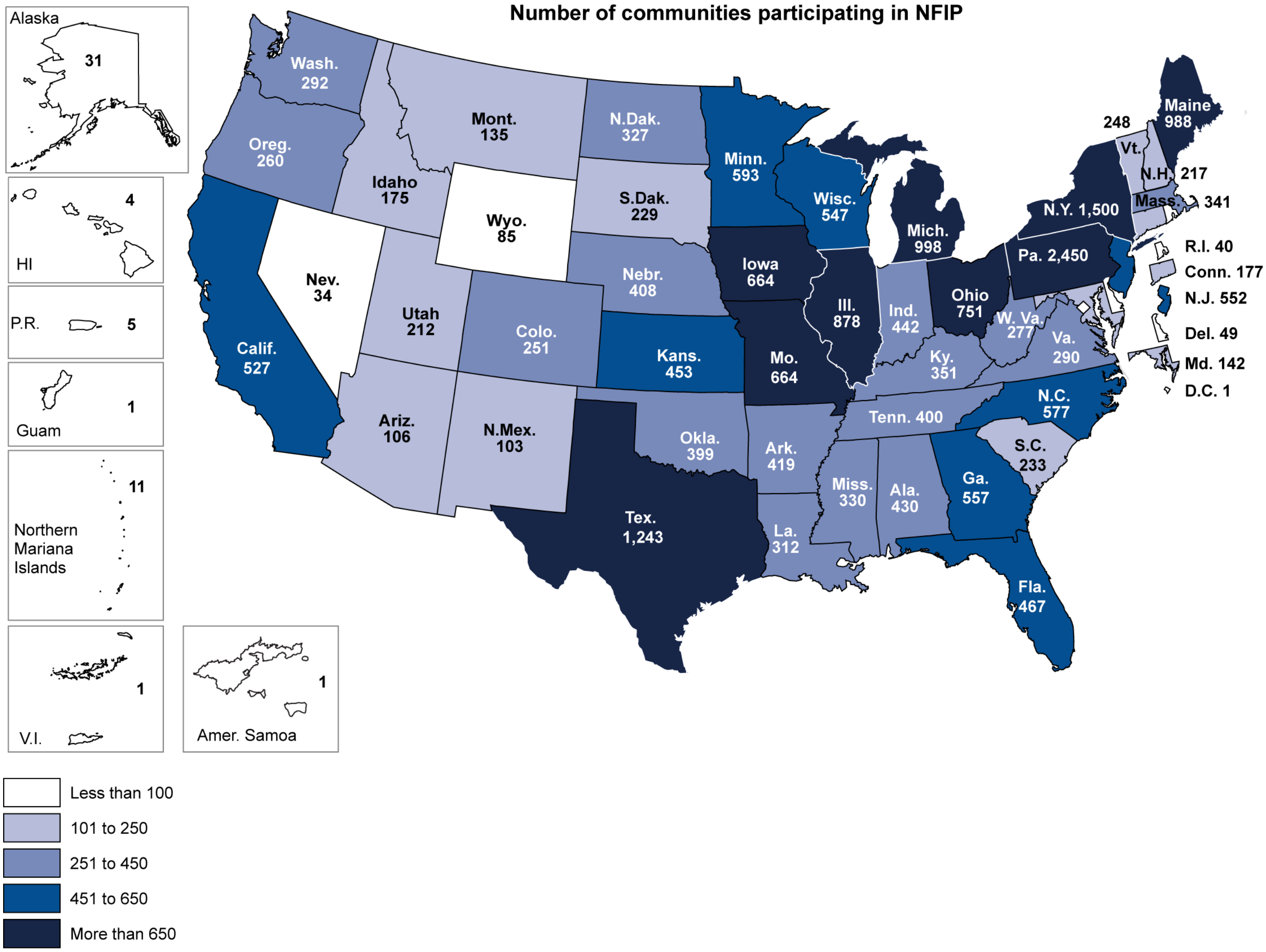
According to FEMA, as of March 2016 there were more than 5 million NFIP policies in force, which were spread across more than 22,000 communities throughout the United States and its territories (see figs. 1 and 2). FEMA defines a community as a political entity that has the authority to adopt and enforce floodplain ordinances for the area under its jurisdiction which is—in most cases—an incorporated city, town, township, borough, village, or an unincorporated area of a county or parish. While FEMA could potentially modify this definition to include other types of communities for a CBFI option, using the number of communities currently participating in NFIP provides one measure of how many communities could hypothetically pursue a CBFI option.

Figure 1: Number of National Flood Insurance Program Policies in Force, by State, as of March 2016



Source: GAO analysis of Federal Emergency Management Agency National Flood Insurance Program Policy Statistics Report data and Map Resources. | GAO-16-766

Figure 2: Number of Communities Participating in the National Flood Insurance Program, by State, as of March 2016



Source: GAO analysis of Federal Emergency Management Agency National Flood Insurance Program Community Status Book Report data and Map Resources. | GAO-16-766

Policy Goals for Federal Involvement in Natural Catastrophe Insurance

In 2007, we identified four broad policy goals for federal involvement in natural catastrophe insurance: (1) charging premium rates that fully reflect actual risks; (2) encouraging private markets to provide natural catastrophe insurance; (3) encouraging broad participation in natural catastrophe insurance programs; and (4) limiting costs to taxpayers before and after a disaster.[12] We identified these goals by drawing insights from a variety of sources: past GAO work, legislative histories of laws that changed the roles of state governments and the federal government after disasters, bills considered by Congress, interviews with public and private sector officials, and articles written by experts in insurance economics. We believe that the four goals we identified accurately capture the essential concerns of the federal government. We have previously used these policy goals to evaluate potential changes to NFIP. We believe that they are still relevant and could also be used to evaluate a CBFI option.[13]

FEMA's Study and Report Provided Relevant Information and Concluded that FEMA Should Not Implement CBFI

The Design of FEMA's Study Was Reasonable, with Methodology Supporting Study Objectives

We determined that the CBFI study objectives and methodology agreed upon by FEMA and NAS were reasonable. The objectives were clearly stated and designed to provide relevant, high-level considerations that could help FEMA decide whether CBFI should be implemented before determining how it should be implemented, which FEMA officials said was an important step. The methodology was consistent with the study's objectives and was reasonable given the limitations identified by FEMA: short time frames, the need to obtain informed opinions, and unavailable data. As a result, the study included findings that helped FEMA draw

[12]GAO, *Natural Disasters: Public Policy Options for Changing the Federal Role in Natural Catastrophe Insurance,* GAO-08-7 (Washington, D.C.: Nov. 26, 2007).

[13]GAO, *Flood Insurance: Public Policy Goals Provide a Framework for Reform,* GAO-11-670T (Washington, D.C.: June 23, 2011), *Flood Insurance: Strategies for Increasing Private Sector Involvement,* GAO-14-127 (Washington, D.C.: Jan. 22, 2014), and GAO-16-190.

conclusions about whether and how to implement CBFI, if it chose to do so.

FEMA and NAS took several steps to design the objectives and methodology of the CBFI study. FEMA initially provided NAS with documents that included background information on the purpose of the study and proposed a methodology and objectives. Then, NAS officials responded with minor modifications that reflected what NAS could do to meet FEMA's needs. FEMA and NAS officials told us that they held two meetings and communicated via email before agreeing to the methodology, objectives, and time frames (see fig. 3).

Figure 3: Federal Emergency Management Agency Community-Based Flood Insurance Study Statement of Task

An ad hoc committee of the National Research Council (NRC) will issue a consensus report examining future prospects for community-based flood insurance policies for the United States. Given the lack of experience with Community based Flood Insurance (CBFI) in the U.S., the committee's report will identify and discuss topic areas and questions that it concludes will require further evaluation—and explain why—in order for the Federal Emergency Management Agency (FEMA) to and others to better evaluate strengths and weaknesses of CBFI. Examples of these topic areas include:

- implementation and feasibility challenges of CBFI;
- possible terms of CBFI policies (e.g., options for portions of communities to be covered; renters versus owners insurance; limits and deductible policies);
- pricing considerations, including possible catastrophic flood losses; and
- potential roles for the private sector.

The committee's report and discussions will consider analogues and lessons from past experiences in National Flood Insurance Program (NFIP) with pros and cons of individual homeowner policies; relevant information and experience from private sector insurance firms that provide protection against losses in nonflood sectors (e.g., earthquake and fire), and insurance to municipalities; and other information as the committee sees fit.

Source: Federal Emergency Management Agency Community Based Flood Insurance study. | GAO-16-766

According to FEMA and NAS officials, FEMA and NAS agreed that the study's objectives were to examine future prospects for CBFI by identifying and discussing issues that would require further evaluation in order for FEMA and others to better evaluate CBFI's strengths and weaknesses. According to FEMA officials, the agreed-upon objectives met their needs.

To execute the CBFI study, NAS convened an expert committee to produce a report using a consensus report process.[14] The committee was composed of 12 members that represented academia, the private sector, and state and federal government. The committee met twice: the January 2015 meeting featured guest presentations, and the March 2015 meeting was convened in a workshop-type format with multiple panels of external speakers. Following these meetings, the NAS study director, committee chair, and other committee members developed sections of the study and all committee members signed off on the full study. Prior to publication, NAS conducted an independent external peer review by experts who NAS recruited based on their technical expertise and breadth of perspectives.

NAS and FEMA officials explained that they decided to use the consensus report process because it offered several benefits and did not face the same limitations that other methodologies would have faced. According to NAS officials, because consensus reports modulate different perspectives and identify new concepts and approaches, this approach was appropriate to meet the study's objectives. FEMA officials explained that they requested a consensus report methodology because it would provide independent, creative, and unbiased ideas from experts who already had a deep contextual knowledge of NFIP. Further, FEMA officials said that alternative approaches they considered would have faced various limitations. They stated that community-based surveys or listening sessions, for example, would have taken more time and might not have reached audiences that could provide well-informed opinions. Data analysis was not considered a viable option because FEMA does not have the data it would need to determine hypothetical costs for participating communities, homeowners, and FEMA. For example, as we have previously reported, FEMA does not collect all information

[14]According to NAS officials, the NAS consensus report process consists of four main steps, which NAS followed for the CBFI study: (1) defining the study; (2) selecting and approving the committee; (3) holding committee meetings, gathering information, deliberating, and drafting the report; and (4) reviewing the report.

necessary to determine flood risk, which is a key factor for determining NFIP premiums for individual policyholders or, potentially, communities.[15]

FEMA's Study Provided Relevant Information for Evaluating the Advisability of Implementing CBFI

We determined that FEMA's study provided relevant information for evaluating the advisability of implementing CBFI. The study identified and discussed seven main areas for further consideration in designing a CBFI option for potential implementation.

- Risk bearing and sharing—A CBFI option could conceivably shift risk-bearing to communities, private insurers, or individuals depending on how it is structured.
- Responsibilities for writing policies and loss adjustments—Participating insurance agents write policies and collect premiums under NFIP, but CBFI policies could be written at the community level.
- Coverage limits, standards, and compliance—Movement to a CBFI policy option could provide a community with an opportunity to reconsider flood exposures, such as extending the exposure beyond individual homes to public infrastructure.
- Underwriting, pricing, and allocation of premium costs—Several complex considerations could fall under this topic, including methods used in setting premiums, the extent to which catastrophic losses would be reflected, and the allocation of premium costs among homeowners.
- Administrative capabilities—Communities would likely not have expertise for undertaking the administration of CBFI policies, but depending on how a community is defined, it could have the means for collecting funds to pay for CBFI premiums.
- Confirming compliance with mandatory purchase requirements—A community-based policy might have to maintain some aspect of individual property coverage in order to satisfy mandatory flood

[15]We have recommended that FEMA collect such data, but FEMA has yet to implement our recommendations as of June 2016. See GAO, *Flood Insurance: More Information Needed on Subsidized Properties,* GAO-13-607 (Washington, D.C.: July 3, 2013), *Flood Insurance: Forgone Premiums Cannot Be Measured and FEMA Should Validate and Monitor Data System Changes,* GAO-15-111 (Washington, D.C.: Dec. 11, 2014), and *National Flood Insurance Program: Options for Providing Affordability Assistance,* GAO-16-190 (Washington, D.C.: Feb. 10, 2016).

insurance purchase requirements, which could be administratively burdensome.

- Pricing expertise, including valuation of mitigation measures—Pricing of CBFI policies would need to account for the risk underwritten and the savings expected from mitigation measures.

The study also provided other relevant information related to CBFI, such as discussion of potential benefits and challenges, a conceptual rationale for identifying cases in which CBFI may or may not be a good option, and considerations for defining "community" in the context of CBFI. For example, the study reports that benefits could include reduced administrative and transaction costs, increased take-up rates, and promotion of mitigation efforts and floodplain management. The study also reports that challenges could include lack of community interest; limited implementation capability; likely need to create many approaches given variation in population size, geography, and authority to regulate land use and collect revenue; and political obstacles. Additionally, the study developed a conceptual rationale for identifying cases in which CBFI may or may not be desirable, and also identified several factors that could make CBFI more or less desirable than individual flood insurance policies. In addition, the study notes that FEMA may want to consider broadening the current definition of "community" because it may be too narrow in the context of CBFI.[16] Specifically, the study noted that while a town or city would clearly be considered as a community under FEMA's current definition, the status of areas such as business districts or gated communities would be unclear and, as a result, it is difficult to say whether or not these kinds of areas would be eligible to purchase CBFI policies.

To further assess FEMA's study, we evaluated relevant elements of its findings against the four public policy goals for federal involvement in natural catastrophe insurance that we have previously identified. The public policy goals, along with examples of elements from the study, follow.

[16]FEMA defines a community as a political entity that has the authority to adopt and enforce floodplain ordinances for the area under its jurisdiction which is—in most cases—an incorporated city, town, township, borough, village, or an unincorporated area of a county or parish.

1. Charging premium rates that fully reflect actual risks. Our prior work has shown that charging rates that do not fully reflect actual risks makes it difficult for FEMA to maintain the financial stability of NFIP, sends policyholders inaccurate price signals about their chances of incurring losses, and reduces incentives for policyholders to undertake mitigation efforts.[17] FEMA's study identified areas for further consideration, including several related to charging premium rates that fully reflect risks; responsibility for bearing and sharing risk; responsibility for writing policies and loss adjustments; underwriting, pricing, and allocation of premium costs; and pricing expertise, including valuation of mitigation measures. The study also outlined concepts for innovative uses of CBFI that could help NFIP charge full-risk rates, such as requiring communities interested in CBFI to provide comprehensive analysis of flood risk in their communities, which would enhance NFIP's knowledge of flood risk at the community level.
2. Encouraging private markets to provide natural catastrophe insurance. Our prior work has shown that covering flood-related losses through NFIP involves significant federal expense, and Congress has shown interest in reducing the federal government's role in flood insurance by transferring its exposure to the private sector.[18] While the private sector has not historically been willing to participate in the flood insurance market, facilitating certain conditions could help increase private sector involvement. FEMA's study discusses ways in which CBFI could encourage or discourage private market participation in flood insurance markets. For example, the study suggests that CBFI could encourage private sector involvement if NFIP offered it in either of two forms. First, CBFI could be offered as a way to insure all properties at a base level of coverage, providing the private sector with an opportunity to offer supplementary insurance above this base level of coverage. Second, CBFI could be offered as coverage for residual risk properties—the highest-risk

[17]See, for example, GAO, *National Flood Insurance Program: Options for Providing Affordability Assistance,* GAO-16-190 (Washington, D.C.: Feb. 10, 2016), *National Flood Insurance Program: Continued Progress Needed to Fully Address Prior GAO Recommendations on Rate-Setting Methods,* GAO-16-59 (Washington, D.C.: Mar. 17, 2016), GAO-15-111, and *Overview of GAO's Past Work on the National Flood Insurance Program,* GAO-14-297R (Washington, D.C.: Apr. 9, 2014).

[18]See, for example, GAO, *Flood Insurance: Strategies for Increasing Private Sector Involvement,* GAO-14-127 (Washington, D.C.: Jan. 22, 2014).

properties that the private sector would not want to insure—allowing the private sector to insure all other properties.[19]

However, the study also suggests several challenges that may outweigh these potential benefits. For example, private insurers would need to acquire the information and expertise to price CBFI policies in line with actuarial standards and would have difficulty diversifying their risk pool—issues we have previously identified as key private sector concerns about offering flood insurance.[20] Additionally, CBFI may discourage private sector participation because servicing CBFI policies after a disaster could be difficult, as the damage would be concentrated in a set geographic area.

3. Encouraging broad participation in natural catastrophe insurance programs. Our prior work has shown that nationwide flood insurance penetration rates are estimated to be low and information on compliance with the mandatory purchase requirement is limited.[21] The study provided some discussion of how potential benefits and challenges of CBFI could relate to increasing NFIP participation. For example, the study notes that CBFI could help increase take-up rates and encourage compliance with mandatory purchase requirements, but it also noted that there may be challenges related to requiring all community members to participate in CBFI and some communities would not be able to oversee compliance with mandatory purchase requirements (unless that responsibility remained with the lender).
4. Limiting costs to taxpayers before and after a disaster. Our prior work has shown that the losses already generated by NFIP, as well as the potential for future losses, have created substantial financial exposure

[19]In 2014, we reported that NFIP could act as a residual insurer. This strategy would give private insurers the opportunity to provide flood insurance to most property owners who desire it, and the federal government would offer coverage only to the highest-risk properties that private insurers were unwilling to underwrite. See GAO-14-127.

[20] In 2014, we found that insurers cited three main conditions that needed to be present to increase private sector involvement in the sale of flood insurance. In addition to being able to charge premium rates that reflect the full estimated risk of potential flood losses while still allowing the companies to make a profit, insurers said that they need to be able to accurately assess risk to determine premium rates and need a sufficient level of consumer participation for insurers to properly manage and diversify their risk. See GAO-14-127.

[21]See, for example, GAO-14-297R and *Flood Insurance: Options for Addressing the Financial Impact of Subsidized Premium Rates on the National Flood Insurance Program,* GAO-09-20 (Washington, D.C.: Nov. 14, 2008).

for the federal government and NFIP likely will not generate sufficient premium revenue to repay the billions of dollars borrowed from Treasury.[22] The study provided some discussion of how CBFI could potentially limit costs to taxpayers by encouraging communities to pursue mitigation options that reduce risk of flood damage and result in lower premiums, or by potentially reducing administrative and transaction costs. However, the study also said that—given administrative costs required to design and set up the program—these cost savings could be limited if few communities decide to enroll.

Finally, FEMA officials said that the CBFI study's findings met their needs. According to the officials, the study's broad discussion of areas for further research as well as potential benefits and challenges of CBFI informed their opinion on the prospects for CBFI.

FEMA's Report Concludes that CBFI Should Not Be Implemented

The FEMA report, which included the study, provides a brief set of related conclusions from FEMA, including that FEMA should not implement CBFI. FEMA officials explained that, after reviewing the results of the study, they concluded that FEMA should not conduct further related research or implement CBFI for several reasons:

- The challenges outlined in the study—such as administrative burden on communities and FEMA, unavailable data, unclear cost distribution among community members, and potential legislative requirements—are significant and likely outweigh the benefits.
- A limited number of communities would be likely to participate in a CBFI option, as only one community expressed positive interest in CBFI after FEMA presented the idea during previous NFIP reform listening sessions.[23]
- Dedicating FEMA's resources to other potential NFIP reforms and strengthening existing programs would be a better use of these resources.

[22]See, for example, GAO-14-297R and *High-Risk Series: An Update,* GAO-15-290 (Washington, D.C.: Feb. 11, 2015).

[23]In 2009, NFIP held listening sessions to collect input from stakeholders in the public, private, and non-profit sectors on the focus and direction of NFIP reform efforts.

Based on the factors cited by FEMA officials and our prior work, we agree that FEMA's conclusion that it was not advisable to implement CBFI at this time was reasonable. We have previously reported on how some of the challenges that the CBFI study outlined apply to NFIP more broadly. For example, we have previously reported that FEMA's resource constraints may jeopardize potential NFIP reform efforts. In 2008, we reported that implementing a combined federal flood and wind program could make addressing existing management challenges even more difficult, given the resources that would be required to administer and oversee a new program. In 2015 we reported that while FEMA had begun taking some actions to improve its capacity to administer NFIP, it was unclear whether FEMA had the resources required to complete its efforts to implement both the Biggert-Waters Act and HFIAA reforms.[24] Also, starting in 2013, we have stated in multiple reports that FEMA does not collect some data necessary to determine flood risk—a key factor for determining NFIP premiums for individual policyholders or, potentially, communities.[25] In addition, we have reported that some communities may face challenges administering NFIP and flood mitigation programs. In 2013, we reported that communities such as Indian tribes may lack the resources and administrative capacity needed to administer NFIP requirements, and in 2014 we reported that experts claim that some communities—especially rural ones—may lack the expertise and administrative capabilities to apply for and administer grants for mitigation activities.[26]

---

[24]GAO, *Natural Catastrophe Insurance: Analysis of a Proposed Combined Federal Flood and Wind Insurance Program,* GAO-08-504 (Washington, D.C.: Apr. 25, 2008), *Flood Insurance: Status of FEMA's Implementation of the Biggert-Waters Act, as Amended,* GAO-15-178 (Washington, D.C.: Feb. 19, 2015), and *High-Risk Series: An Update,* GAO-15-290 (Washington, D.C.: Feb. 11, 2015).

[25]GAO recommended in July 2013 that FEMA collect information from all policyholders necessary to determine flood risk. FEMA agreed with the recommendation but—as of June 2016—had taken limited action to implement it, citing the considerable time and cost involved in obtaining the information. See GAO-13-607, GAO-15-111, and GAO-16-190.

[26]GAO, *Flood Insurance: Participation of Indian Tribes in Federal and Private Programs,* GAO-13-226 (Washington, D.C.: Jan. 4, 2013) and *National Flood Insurance Program: Additional Guidance on Building Requirements to Mitigate Agricultural Structures' Damage in High-Risk Areas Is Needed,* GAO-14-583 (Washington, D.C.: June 30, 2014).

Agency Comments

We provided a draft of this report to FEMA for its review. FEMA did not provide formal comments, and did not have any technical comments.

If you or your staff have any questions concerning this report, please contact me at (202) 512-8678 or cackleya@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix I.

Alicia Puente Cackley

Alicia Puente Cackley
Director, Financial Markets and Community Investment

Appendix I: GAO Contact and Staff Acknowledgments

Contact

Alicia Puente Cackley, (202) 512-8678 or cackleya@gao.gov.

Acknowledgments

In addition to the contact named above, Patrick Ward (Assistant Director); Chloe Brown and Tarik Carter (Analysts-in-Charge); Namita Bhatia-Sabharwal; and Jennifer Schwartz made key contributions to this report. Also contributing to this report were David Dornisch; Jessica Sandler; and Jena Sinkfield.

GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's website (http://www.gao.gov). Each weekday afternoon, GAO posts on its website newly released reports, testimony, and correspondence. To have GAO e-mail you a list of newly posted products, go to http://www.gao.gov and select "E-mail Updates."

Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, http://www.gao.gov/ordering.htm.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

Connect with GAO

Connect with GAO on Facebook, Flickr, Twitter, and YouTube.
Subscribe to our RSS Feeds or E-mail Updates. Listen to our Podcasts.
Visit GAO on the web at www.gao.gov.

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Website: http://www.gao.gov/fraudnet/fraudnet.htm
E-mail: fraudnet@gao.gov
Automated answering system: (800) 424-5454 or (202) 512-7470

Congressional Relations

Katherine Siggerud, Managing Director, siggerudk@gao.gov, (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548

Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, DC 20548

Strategic Planning and External Liaison

James-Christian Blockwood, Managing Director, spel@gao.gov, (202) 512-4707
U.S. Government Accountability Office, 441 G Street NW, Room 7814,
Washington, DC 20548