ISSUE BRIEF Summer 2017

INFORMED DECISIONS ON CATASTROPHE RISK

Post-Flood Mitigation

The NFIP's *Increased Cost of Compliance (ICC)* Coverage

In connection with the National Flood Insurance Program (NFIP)'s anticipated reauthorization in 2017, Congress is looking at several proposals that would address the program's **Increased Cost of Compliance (ICC)** coverage, expanding its eligible uses and giving policyholders more funds to implement qualifying risk-reduction measures. In this policy brief, we examine ICC claims for single-family homes from 1997 to 2014 and report on our findings from conversations with floodplain managers in several states. Our analysis provides context for ongoing debates in Congress and highlights some of the key reasons the program is not more widely used. We also compare each of the proposals currently under consideration and discuss the implications of proposed reforms.

***Increased Cost of Compliance (ICC)* coverage provides funds to NFIP policyholders to bring flood-damaged homes into compliance with current floodplain management regulations.**

Unfortunately, ICC coverage is not well-understood by homeowners and often does not provide enough funds to cover required mitigation expenses.

Proposals in Congress would increase coverage available under ICC and expand its eligible uses, giving policyholders more funds for risk reduction post-flood.

Standardized communication to homeowners immediately after a flood could improve understanding of the program, as could guidance to communities on how to assist policyholders in making effective use of ICC coverage.

- ICC coverage is not widely used. From 1997 to 2014, the NFIP paid 774,000 single-family claims, totaling $30.6 billion. Over the same time period, there were only 27,000 ICC claims for single-family homes, totaling a bit over $700 million (2016 dollars).

- The key trigger for use of ICC funds is a determination that a policyholder's home has been substantially (more than 50%) damaged. It is not surprising then, that the highest payouts of ICC funds were after Hurricanes Katrina and Sandy.

- ICC coverage has some parallels to Law & Ordinance (L&O) insurance, which can be added to standard homeowners policies. L&O coverage pays for the costs of upgrades to meet current regulations when repairing a damaged home. For example, communities might require upgrades to meet plumbing, roofing, or electrical standards when rebuilding.

- Some proposed reforms would treat ICC coverage more like a grant than an insurance product. Rather than muddle these two different policy tools, ICC coverage should be improved to be a useful insurance product for maintaining compliance with updated floodplain regulations. Simultaneously, Congress should expand and reform mitigation grants to better address homeowner needs.

Introduction

Congress is currently considering reforms to the National Flood Insurance Program (NFIP) during the short-term extension under which the program is now operating. Currently, there are three bills proposed in the Senate (S.1313, S.1368, and S.1571) and a suite of linked bills proposed in the House (H.R. 1422, H.R. 1558, H.R. 2246, H.R. 2565, H.R. 2868, H.R. 2875, and H.R. 2874). All of these reform efforts would make changes to a lesser-known component of the NFIP: Increased Cost of Compliance (ICC) coverage.

When an NFIP-insured home is substantially or repetitively damaged by flooding, the owners are required to upgrade their property to meet the community's current floodplain management regulations. This could mean elevating the home, undertaking flood-proofing activities, or relocating entirely. ICC coverage is designed to help policyholders cover the costs of meeting these requirements.

Created by Congress in 1994, ICC has been a mandatory part of most NFIP policies since 1997. Homeowners pay an additional $4 to $70 for this coverage. ICC coverage is automatically included in new and renewed NFIP policies.[1]

ICC is widely praised because it makes funds available to homeowners faster than federal disaster aid for hazard mitigation, which may take months or years to get into the hands of victims. It is just as widely criticized, however, because the available funds, currently capped at $30,000, do not fully cover the cost for projects such as elevation. In 2016, FEMA's Office of the Flood Insurance Advocate reported that while ICC has been a substantial resource and effective mitigation tool for some policyholders, it has been a source of frustration and confusion for others.

Overview of ICC Coverage

ICC coverage provides up to $30,000 to NFIP policyholders to help cover the costs of bringing a flood-damaged home into compliance with local floodplain management regulations—regulations intended to reduce future flood damages.[2] These include provisions that all new construction, or substantially damaged or improved properties in the 1% annual chance floodplain (known as the Special Flood Hazard Area, or SFHA), be elevated so that the lowest floor is at or above base flood elevation (BFE)—the height of waters in a 100-year flood.

For residential structures, ICC provides funds for three mitigation measures: elevation, relocation, and demolition, or some combination thereof (for non-residential buildings, flood-proofing is also an option). Policyholders file ICC claims separately from regular flood insurance claims; policyholders are currently limited to a combined payout of $250,000 from their standard flood policy and ICC coverage.

By law, the following properties are eligible for ICC payments:

1) Substantially damaged properties (those with flood damage exceeding 50 percent of the building's value);
2) Repetitive loss properties (those that have experienced flood-related damage at least twice in 10 years with the average cost of repairs totaling at least 25 percent of the building's pre-flood value);
3) Properties for which the FEMA Administrator determines ICC is cost effective and in the best interest of the National Flood Insurance Fund; and
4) Properties receiving an offer of mitigation through FEMA's Hazard Mitigation Assistance programs or "any program authorized or for which funds are appropriated to address any unmet needs or for which supplemental funds are made available."

In practice, 99% of ICC claims were for substantially damaged properties, with another 1% for repetitive loss structures and none for the remaining two possible triggers.[3] As we discuss further below, the first category is the one where ICC coverage mimics the building ordinance coverage often offered with homeowners policies to pay for compliance with updated building codes. Use of ICC funds for the other three categories would treat it more like a grant and less like insurance (see discussion below).

---

[1] It is not available, however, for contents-only policies, group flood insurance policies, or for policies in emergency program communities (roughly 1% of communities).

[2] When ICC was first implemented in June 1997, coverage was limited to $15,000. In 2000, the limit increased to $20,000, and in 2003, it was raised to $30,000, where it stands today.

[3] See https://www.fema.gov/media-library-data/20130726-1447-20490-5393/increasedcostofcompliancecoverage_2012.pdf

ICC Premium Prices

The ICC premium is calculated based on a number of variables, including whether the building is pre-FIRM (pre-Flood Insurance Rate Map, meaning it was built before flood hazards were mapped and receives a discounted rate on flood insurance), the flood zone, the BFE, the quantity of coverage, and (in certain situations) other structural characteristics of the building. The highest ICC coverage premiums are for pre-FIRM properties in the SFHA since these are the properties most likely to have an ICC claim as they were built before floodplain management regulations were adopted. The lowest premiums are for properties elevated more than two feet above the BFE and those outside the SFHA since, in most cases, these properties would be in compliance with local regulations and thus less likely to have an ICC claim. Table 1 provides an overview of ICC premiums for single-family homes.

Table 1. ICC Premiums for Single Family Homes

			Building Coverage	
	Flood Zone*	***Elevation Difference*****	***$1 – $230,000***	***$230,001 – $250,000***
Pre-FIRM	A, V	N/A	$70	$55
	X	N/A	$5	$4
Post-FIRM	A	> -2	$5	$4
		< -1 (non-elevated)	$34	$24
		< -1 (elevated)	$9	$6
	V (post-1981)	> -4	$18	$13
	V (1975-1981)	> -2	$30	$20
	X	N/A	$5	$4

* The elevation difference, given in feet, refers to the difference in elevation between the lowest floor and the BFE.
** The A and V zones depict the 100-year floodplain (SFHA) and the X zone is outside the 100-year floodplain. V zones are subject to breaking waves at a least 3 feet; A zones are not.
Source: *NFIP Flood Insurance Manual*, Effective April 1, 2017

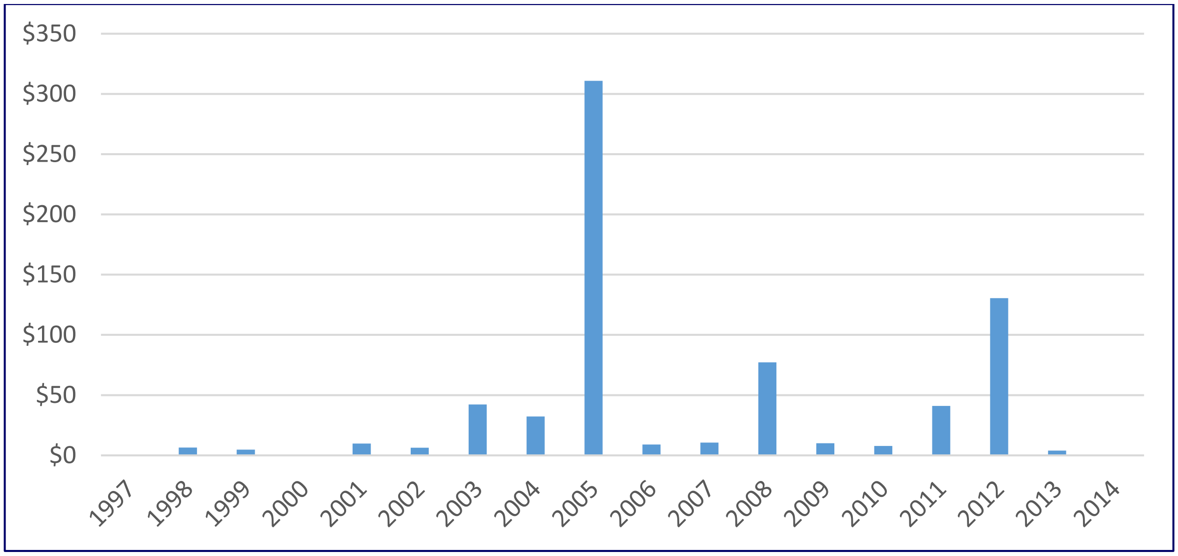
As a mandatory coverage, all policyholders are required to pay the ICC premium. Yet, in general, funds are only available to properties located in the SFHA where floodplain regulations typically apply. However, if buildings outside the SFHA are required to meet higher standards, funds may also be available to these properties. We find that over period of 1997 to 2014, 92 percent of claims are paid to properties inside the SFHA and 8 percent to those outside it. We also find that the percentage of paid NFIP claims that also received ICC funds is nearly four times higher for SFHA properties (4.43 percent as opposed to 1.14 percent). These differences are reflected in the premium table above as X zone properties pay only a nominal rate for ICC coverage.

Findings

From the program's inception in 1997 through 2014, 93 percent of ICC claims were for single-family residences. Several floodplain managers told us that use of ICC coverage can be problematic for multi-family dwellings, such as condos, because the program pays only $30,000 per overall structure, not per condo unit. Given the low use among other building types, the remainder of our analysis focuses only on single-family properties.

Over this period, ICC paid more than 27,000 single-family claims, totaling more than $700 million (in 2016 dollars). The average ICC claim is just over $25,000 (2016 USD). As illustrated in Figure 1 (next page), the program was not widely used initially; ICC spending and claims were highest in 2005 ($311 million; 12,000 claims) and 2012 ($131 million; 4,900 claims). This is not surprising considering that Hurricanes Katrina and Sandy led to many substantially damaged structures in those years, respectively. This also explains why Louisiana ($273 million) and New Jersey ($109 million) are the top two states for use of ICC coverage funds over this period.

Figure 1. Total ICC Claims by Year (millions of 2016 USD)

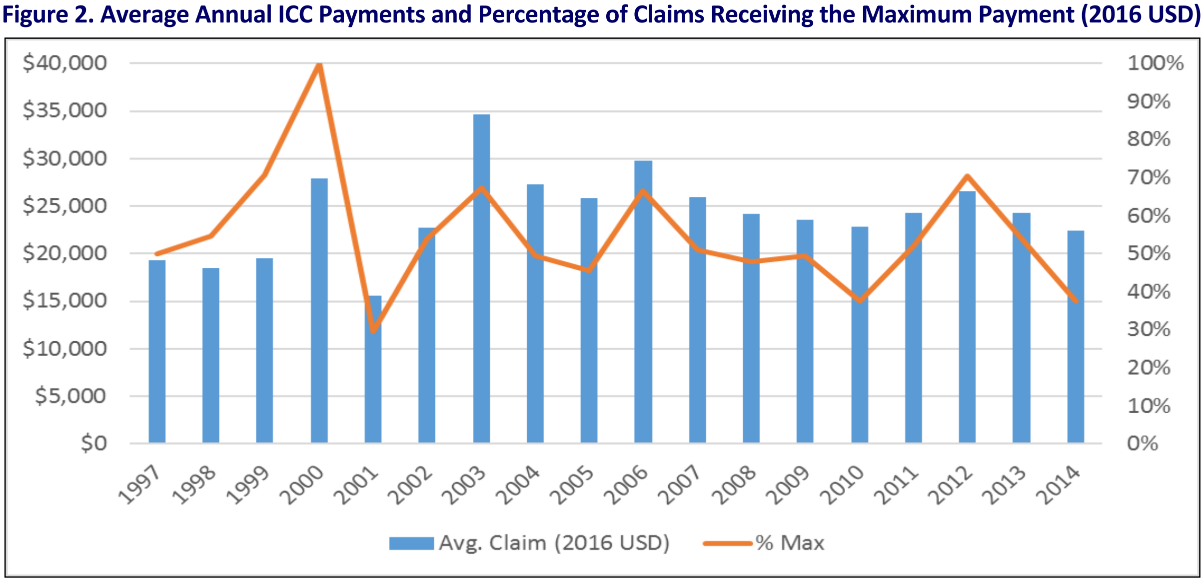


Even in 2005 and 2012, however, the percentage of paid NFIP flood claims that also made use of ICC coverage was small—ranging from less than 1 percent in the early days of the program to a high of only 7.5 percent in 2005. This could be because some properties that flooded did not meet the substantial damage criteria, some were already compliant with regulations, and some policyholders did not file a claim, even if eligible.

The floodplain managers we spoke with highlighted a number of reasons the program has not been more widely used. For example, many homeowners do not know about the program and there is often little outreach to educate them on the procedures on making a claim for ICC coverage—an issue underscored by the Flood Insurance Advocate's annual reports from 2015 and 2016. In addition, the maximum of $30,000 is insufficient to cover the costs of mitigation, particularly measures to elevate properties which can easily be three to five times this amount. Moreover, policyholders with flood damage near the combined payout limit of $250,000, such that their standard flood claim approaches the maximum, are not be able to receive the full amount of ICC funds.

Over the period of our analysis, we find that 52 percent of claims have received the maximum ICC payout. Figure 2 depicts average annual ICC payments and the percentage of claimants receiving the maximum payout in each year (note that these values are adjusted to 2016 dollars and, therefore, may exceed the ICC maximum).

Figure 2. Average Annual ICC Payments and Percentage of Claims Receiving the Maximum Payment (2016 USD)

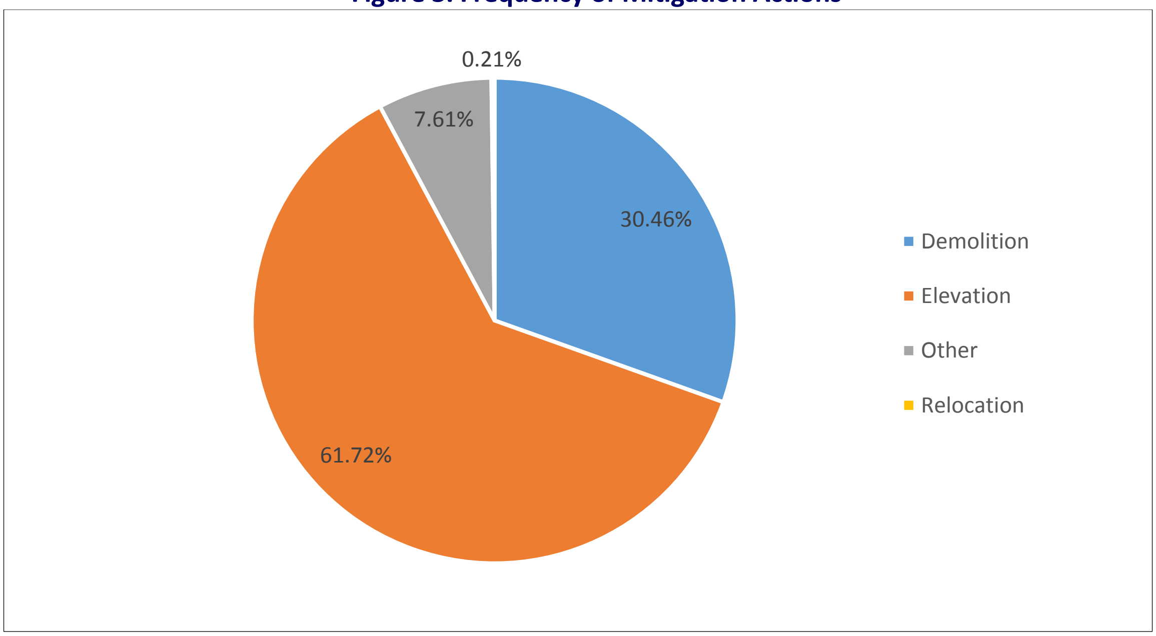


Note: The maximum ICC payout was $15,000 from 1997-1999; $20,000 from 2000-2002; and $30,000 from 2003 to the present

Pre-FIRM properties accounted for 86 percent of those using ICC funds over the period 1997 to 2014. This is intuitive—pre-FIRM properties, since they are older and were built prior to floodplain management regulations, are more likely to be out of compliance when they suffer a loss. In this way, ICC coverage may be a useful tool to help mitigate pre-FIRM properties. This may become increasingly important as pre-FIRM rates are phased out over time according to reforms to the NFIP enacted in 2012 and 2014. Mitigating these properties will reduce their vulnerability to floods and lower their flood insurance premiums.

Single-family homeowners used ICC funds most commonly for elevation (62 percent). Another 30 percent used the money for demolition and less than 1 percent used funds to relocate their homes (See Figure 3). According to some floodplain managers, elevation is the most important cost to cover; others thought that ICC could be usefully expanded to include a broader range of activities, such as buyouts or flood vents, for example. We also heard that it should cover all costs of full demolition, including things like disposal of hazardous building materials.

Figure 3. Frequency of Mitigation Actions



Insurance vs. Grant[4]

The ICC program in its current form poses further challenges because the program encompasses some aspects of an insurance product and some aspects of a grant. We believe this situation makes the ICC less effective than if it were more clearly defined one way or the other and this was clearly communicated to households and all stakeholders.

An insurance product to assist homeowners in gaining compliance with updated floodplain regulations should have three key features: it is paid quickly, it covers the full costs of all upgrades to be compliant with current floodplain regulations, and it is triggered by a flood claim. A grant for risk reduction should have three different key features: it can be used by any property in an at-risk area, it can cover a wide range of hazard mitigation options, and it can be used pre-flood. They are thus complimentary policy tools for increasing hazard mitigation investments.

If ICC were limited to those filing a flood claim to bring their home into compliance with upgraded building structures, it could be treated fully as an insurance product. The language used for this coverage could be similar to that used in homeowners policies and it should cover the full costs of all necessary upgrades. This may increase the cost of ICC coverage, but only nominally as it is already a small addition to the annual premium. It should be available to anyone filing a flood claim and funds should be made available quickly, with some paid before construction begins to ease the financing burden on homeowners.

[4] This section builds on Carolyn Kousky's July 2017 op-ed in *The Hill*: How to Reform Flood Insurance to Keep More Americans Afloat.

However, certain other policyholders would still need help with hazard mitigation: those who have not suffered a flood loss and those who are not out of compliance with current building codes. These homeowners should be eligible for assistance on mitigation costs, either through grants or low interest loans, or a combination. FEMA already administers several grant programs, but they suffer from two problems. First, it takes too long for dollars to get to those who would make use of them. An expedited process is needed for administering mitigation grants. Second, the vast majority of mitigation dollars are only made available after a disaster declaration and through supplemental funds. More pre-disaster dollars could be targeted at cost-effective investments to reduce risk before a flood occurs.

Proposed Reforms

Currently, proposals in both the House and Senate would reform some aspects of the ICC. We provide a table comparing certain ICC provisions of the four proposals in Appendix A.

All of the proposals would increase the cap above $30,000, as the current limit is usually not enough to cover the cost of elevating many homes. The Senate bills also remove the stipulation that ICC payouts cannot cause total claims payments to rise above the $250,000 residential cap. Both of these are important reforms: if the ICC is truly to be a product to help policyholders come into compliance with current floodplain regulations, it needs to cover the full cost of these upgrades. Increasing the cap would likely necessitate increases in the cost of premiums for ICC coverage. Given the current low premiums, however, any increases would presumably not be substantial. All four proposals now in Congress expand the range of eligible activities. This, too, could be useful if different measures would help homeowners comply with floodplain management codes and lower their risk.

These reforms could widen the use of the ICC for mitigating pre-FIRM and repetitive loss properties after a flood, which in turn could lower overall damages and lead to lower premiums for households, especially if they elevate above BFE. Since pre-FIRM premiums are increasing over time, mitigation would lower the price these homeowners have to pay as they could then be rated post-FIRM and fully compliant with current building codes.

None of the bills, however, addresses concerns about a lack of knowledge of the program. Standardized communication to homeowners immediately after a flood may help, as could FEMA outreach to communities with guidance on how to help them aid policyholders in making effective use of ICC coverage. Updating the coverage to more closely match building codes may improve understanding by insurance agents and this may in turn make it easier to communicate to policyholders.

Limiting ICC to be a true insurance product, however, should be coupled with increased funding for mitigation grants to help other homeowners reduce their flood risk and mitigate their properties. Three proposals currently in Congress do indeed increase grant funding for pre-disaster mitigation, and one targets this at the riskiest properties. Coupled to strategies to improve timeliness, these would help more families lower their risk.

Appendix A: 2017 ICC Reform Proposals (as of August 2017)

	S. 1313 (Cassidy-Gillibrand)	S. 1368 (SAFE NFIP Act)	S. 1571 (Crapo-Brown)	H.R. 2875 (House Financial Services)
Expanded Coverage	• Increases primary coverage to $75,000	• Increases primary coverage to $100,000	• Increases primary coverage to $60,000 • Provides optional coverage up to $100,000	• Maintains primary coverage maximum at $30,000 • Provides optional coverage up to $60,000
Effect on NFIP Payout Limits	• Up to 50% of ICC payments may exceed the maximum payout limit • Raises residential building coverage limits to $500,000	• Exempts ICC payments from maximum payout limits • Raises residential building coverage limits to $500,000	• Exempts ICC payments from maximum payout limits	• No changes
Expanded Eligible Activities	• Any activity under FEMA's Pre-Disaster Mitigation program	• Acquisition/demolition, elevation, and/or relocation projects allowed under NFIP and FEMA's Hazard Mitigation Assistance programs • Includes costs of ramps, elevators, or other devices a homeowner/occupant needs to access an elevated home due to physical limitations or disabilities	• Acquisition/demolition, elevation, and/or relocation projects allowed under NFIP and FEMA's Hazard Mitigation Assistance programs • Includes costs of ramps, elevators, or other devices a homeowner/occupant needs to access an elevated home due to physical limitations or disabilities	• Certain pre-disaster mitigation costs for certain at-risk properties identified by state and local governments
ICC Requirements for Private Flood Insurance Policies	• Private flood policies are required to provide law and ordinance coverage that meets or exceeds NFIP ICC coverage • Requires private insurers to impose and collect an ICC surcharge on private flood policies; proceeds are deposited in the NFIP's National Flood Insurance Fund	• No provisions	• No provisions	• No provisions

UNIVERSITY of PENNSYLVANIA
Risk Management and Decision Processes Center
The Wharton School
3819 Chestnut Street, Suite 130
Philadelphia, PA 19104-6340
https://riskcenter.wharton.upenn.edu/

Issue Brief: Post-Flood Mitigation: The NFIP's *Increased Cost of Compliance (ICC)* Coverage

INFORMED DECISIONS ON CATASTROPHE RISKS issue briefs are published by the Wharton Risk Management and Decision Processes Center of the University of Pennsylvania. For additional information, contact Carol Heller, hellerc@wharton.upenn.edu or 215-898-5688.

About the Wharton Risk Center

Established in 1985, the **Wharton Risk Management and Decision Processes Center** develops and promotes effective corporate and public policies for dealing with catastrophic events including natural disasters, technological hazards, terrorism, pandemics and other crises. The Risk Center research team – over 70 faculty, fellows and doctoral students – investigate how individuals and organizations make choices under conditions of risk and uncertainty under various regulatory and market conditions, and the effectiveness of strategies such as alternative risk financing, incentive systems, insurance, regulation, and public-private collaborations at a national and international scale. The Center actively engages multiple viewpoints, including top representatives from industry, government, international organizations, interest groups and academia. More information is available at https://riskcenter.wharton.upenn.edu/.

About the Authors

Carolyn Kousky (ckousky@wharton.upenn.edu) is Director of Policy Research and Engagement at the Wharton Risk Management and Decision Processes Center. Dr. Kousky's research focuses on natural resource management, decision-making under uncertainty, and individual and societal responses to natural disaster risk. She has examined how individuals learn about extreme event risk, the demand for natural disaster insurance, and policy responses to potential changes in extreme events with climate change. Kousky has a B.S. in Earth Systems from Stanford University and a Ph.D. in Public Policy from Harvard University.

Brett Lingle (blingle@wharton.upenn.edu) is Senior Research Coordinator at the Wharton Risk Management and Decision Processes Center. His work focuses on disaster risk financing and the role of public policy in hazard mitigation and disaster recovery. Lingle has a B.A. in Politics from Pomona College and an M.A. in Environmental Policy from American University.