In Deep: Dilemmas of Federal Flood Insurance Reform

Jennifer B. Wriggins*

Introduction ................................................................................................................... 1444
I. The NFIP: Basic Background ................................................................................. 1445
   A. Broad Structure of the NFIP ................................................................ 1446
   B. Other Key Aspects of the NFIP: Mandates, Subsidies, and Consequences ........................................................................................... 1447
   C. Constraints on the NFIP ....................................................................... 1450
   D. The Current Situation of the NFIP ...................................................... 1453
II. Better Flood Insurance ........................................................................................... 1454
   A. Mapping Should Be Funded and Protected from Political Influence ................................................................................................... 1454
   B. Subsidies Should Be Phased Out .................................................................. 1455
      1. Risk-Based Rates Will Be Positive and Probably Bring Increased Private Competition ....................................................... 1456
      2. The Justifications for Continuing the Subsidies Are Specious. 1456
      3. Other Arenas of Federal Government Involvement with Insurance Reflect More Compelling Policy Justifications than Flood Insurance............................................................................. 1457
      4. The Subsidies Create Negative Incentives that Are Unfair to the General Public ............................................................................ 1460
   C. A Means-Tested Voucher Program Should Be Passed to Address Affordability Concerns ........................................................... 1460
   D. Congress Should Pass a Comprehensive Climate Change Plan ...... 1462
Conclusion ...................................................................................................................... 1462

*Acknowledgements: Many thanks to the organizers of the conference, “The Relationship Between Insurance and Legal Regulation: Normative, Theoretical, and Empirical Perspectives,” particularly Shauhin Talesh, as well as to the participants in the conference for useful comments. I am also grateful to Mary Bonauto, Dave Owen, Adam Scales, Deirdre Smith, and Jeff Thaler for helpful conversations and comments on drafts. Conversations with faculty at American University-Washington College of Law at an early faculty presentation were very valuable, as were conversations at a faculty workshop at the University of Maine School of Law. The staff and librarians at University of Maine School of Law, including Lindsay Brissette, Heidi Gage, Sherry McCall, Maureen Quinlan, and Julie Welch provided invaluable assistance. Many thanks, as well, to the editors of the UC Irvine Law Review.
INTRODUCTION

Floods are the most expensive form of natural disaster in the United States.1 Climate change and population growth are likely to lead in the coming decades to more severe, frequent, and costly floods.2 How we pay for flood losses is an urgent public policy issue. The National Flood Insurance Program (NFIP) provides most of the flood insurance policies on homes in the United States.3 The U.S. Flood Insurance Program is a complex scheme that uses insurance coverage subsidies, mandates, and other tools to support various policies related to floods;4 in other words, it uses insurance to govern.5 Yet, the governance of the NFIP is limited; powerful factors constrain its impact, and the policies it furthers have long been criticized.6 This Article first showcases key aspects of the NFIP, including its structure and goals.7 Then it shifts to consider constraints on the almost fifty-year-old NFIP8 and outlines the current status of this program.9 Finally, it considers what sort of federal governmental involvement with insurance would be better for dealing with homeowners' flood risk than the current system.10 In trying to reform the NFIP, Congress has gone in circles between 2012 and 2014 and will again

4. See infra Part I.
5. An important literature has developed in recent years, largely focused on private insurance, which conceptualizes insurance as governance. See generally RICHARD V. ERICSON, AARON DOYLE & DEAN BARRY, INSURANCE AS GOVERNANCE (2003); Kenneth S. Abraham, Four Conceptions of Insurance, 161 U. PA. L. REV. 653, 683–93 (2013). United States federal flood insurance, which is publicly underwritten yet privately purchased, is also an example of insurance as governance. In this Article, I use a broad conception of governance and governing that embraces incentives and impacts of insurance, as well as explicit rules and regulations.
7. See infra Sections I.A., I.B. For a more detailed discussion regarding federal flood insurance, see Wriggins, supra note 6.
8. See infra Section I.C.
9. See infra Section I.D.
10. See infra Part II.
consider reforms in 2017. Risk-based rates based on state-of-the-art maps and a small, means-based voucher program rather than the current general subsidies are reforms that both make sense and would be workable if introduced gradually. A comprehensive plan to address rising sea levels and other aspects of climate change is also a necessary, although unlikely, reform. In the meantime, a better flood insurance program can begin to steer us in the right direction.

I. THE NFIP: BASIC BACKGROUND

The NFIP, founded in 1968, was a product of the Great Society and the shift in government risk management that evolved from the 1930s to the 1960s. In this shift, the federal government took an active role in managing and spreading risks that previously had been shouldered by individuals and localities. Federal disaster relief, which had begun in 1927 with a devastating Mississippi flood, had been ballooning. Congress hoped its new program would result in lower disaster relief bills by making development safer or guiding development away from flood-prone areas and by bearing and sharing flood risk among the residents of risky areas who purchased insurance. Congress also aimed to supply flood insurance “in flood-prone areas to property owners who otherwise would not be able to obtain it” under “reasonable” terms and conditions but failed to define the meaning of “reasonable.” To encourage participation in the new program, it

12. See infra Section II.A–D.
13. See infra Section II.A–C.
15. Id.
16. Wriggins, supra note 6, at 372–73.
19. Id.
provided deep subsidies for the oldest, highest-risk properties. Congress also envisioned that a unified national floodplain management plan would eventually be developed and passed.

A. Broad Structure of the NFIP

The NFIP is a complex governmental insurance program with both public and private aspects. First, the federal government has chosen to make flood insurance coverage available to homeowners, covering a risk that the private market was not insuring when the law establishing the NFIP passed in 1968. Although it may seem surprising now, the NFIP was designed to run a deficit during years when floods were huge. Deficits would be funded through loans from the Treasury Department. Currently, the deficit is twenty-four billion dollars with no expectation it will be paid back without changes in the program. Second, risk reduction policies were a part of the NFIP from the beginning. For example, the NFIP made the availability of flood insurance to communities contingent on the passing of risk reduction ordinances in those communities. If communities passed ordinances acceptable to the NFIP, such as requiring new construction to be elevated in a flood zone, residents of these communities would be able to buy federal flood insurance. In addition, the NFIP provided funds to participating communities for risk reduction. This arrangement of offering flood insurance, which was unavailable on the market, to communities that adopted policies aimed at reducing flood risk comprises the basic structure of the NFIP.


22. MOSS, supra note 14, at 262; Scales, supra note 20, at 7.

23. See NFIP: CONTINUED ACTIONS NEEDED, supra note 17, at 6 (“As we have pointed out, the number of policies receiving subsidized rates has grown steadily in recent years and without changes to the program will likely continue to grow, increasing the potential for future NFIP operating deficits.”).

24. Id.


26. KUNREUTHER ET AL., supra note 17, at 84–85; Scales, supra note 20, at 12.

B. Other Key Aspects of the NFIP: Mandates, Subsidies, and Consequences

The federal government, by selling flood insurance, has decided to sell a product that people must be forced to buy even when it is sold at less than half price. When Congress created the NFIP in 1968, it assumed that communities would voluntarily participate in the federal flood program, and that homeowners would eagerly buy flood insurance, which had previously been unavailable. Congress even required deep subsidies for policies on the highest-risk properties, including second homes and homes that had repeatedly suffered flood losses. These high-risk properties were homes that had been built in flood-prone areas without flood risk in mind and before flood maps had been developed. But because community and homeowner interest was minimal, the program would have quickly failed without reform.

Congress in the 1970s and 1980s reformed the program by adding mandates for homeowners and banks. Homeowners in high-risk zones who had mortgages were required to keep flood insurance for the life of the mortgage; similarly, banks had to ensure flood insurance was retained for the duration of all loans in flood zones. The goal was for the mandates to help create a pool of funds out of which flood losses could be paid.

The Federal Emergency Management Agency (FEMA), which administered the program, later expanded the subsidies for policies on high-risk properties. FEMA decided, for example, that when flood maps changed in such a way that a property, which had been located in a low-risk zone, was remapped into a high-risk zone, the initial lower rate would continue to apply to the property. These

28. The subsidized rates charged by the NFIP are estimated as between thirty-five and forty-five percent of what risk-based rates would be. FEMA ACTION NEEDED, supra note 20, at 52 (reporting that rates for older properties in high-risk zones are forty to forty-five percent of what full risk rates would be).

29. MORE INFORMATION NEEDED, supra note 20, at 1, 9; Scales, supra note 20, at 42. The subsidies are known as pre-FIRM, or pre-Flood Insurance Rate Map, subsidies.

30. See NFIP: CONTINUED ACTIONS NEEDED, supra note 17; KUNREUTHER ET AL., supra note 17, at 86.

31. See NFIP: CONTINUED ACTIONS NEEDED, supra note 17; KUNREUTHER ET AL., supra note 17, at 86.

32. See NFIP: CONTINUED ACTIONS NEEDED, supra note 17; KUNREUTHER ET AL., supra note 17, at 86. For properties (mortgaged or unmortgaged) outside high-risk zones or unmortgaged properties within high-risk zones, there is no purchase mandate. Charlene Luke & Aviva Abramovsky, Managing the Next Deluge: A Tax System Approach to Flood Insurance, 18 CONN. INS. L.J. 1, 13–16 (2011).


34. PUBLIC POLICY GOALS, supra note 27, at 3–4; Scales, supra note 20, at 15–16; FEMA Administrator 2013 Written Testimony, supra note 33, at 10. A related type of subsidy also known as a grandfathering subsidy was applied when a property was built in compliance with FEMA standards in a flood zone. When the risk of that zone increased even further, the property still would be charged
types of subsidies, known as grandfathering subsidies, meant that even more high-risk properties were charged rates below their risk, and thus that the program’s deficits were likely to be greater in the event of large floods.35

The mandates are a straightforward mechanism by which Congress governs through insurance, where individuals are required to participate in a specific risk-spreading mechanism.36 The subsidies, too, are meant to incentivize the purchase of insurance. Congress assumes that encouraging the purchase of insurance is a good idea because it forces people to bear at least some of the costs of living where they do. As the reasoning goes, homeowners who share flood risk and thus have insurance for that risk will bear at least some of the costs of rebuilding following a flood.

In providing deeply discounted rates on the oldest and riskiest properties, Congress discouraged replacing and mitigating these properties.37 In fact, Congress’s policies unfortunately encouraged homeowners to retain these properties.38 After floods, flood insurance benefits were often used to repair existing homes rather than replace them with new, more flood-resistant homes.39 Thus, the number of older, risky homes remained higher than it would be if people actually had to pay the full cost of flood insurance on those homes.40 Many see this retention of older, risky homes as a negative effect of the insurance, leading to more losses in the long run.41 Federal regulations provided that if completed repairs or renovations were worth less than half of a home’s value,

lower rates based on the earlier compliance rather than the current risk. See FEMA Administrator 2013 Written Testimony, supra note 33, at 10; see also NFIP: CONTINUED ACTIONS NEEDED, supra note 17, at 7, 14. This is the type of subsidy most commonly referred to as “grandfathering.” See NFIP: CONTINUED ACTIONS NEEDED, supra note 17, at 7. The “pre-FIRM” subsidies are sometimes referred to as “grandfathered” also. See FEMA Administrator 2013 Written Testimony, supra note 33, at 10.

35. FEMA Administrator 2013 Written Testimony, supra note 33, at 10; PUBLIC POLICY GOALS, supra note 27, at 3–4; NFIP: CONTINUED ACTIONS NEEDED, supra note 17, at 7, 14; Scales, supra note 20, at 15.

36. See Abraham, supra note 5, at 683–93 (describing the conception of private insurance as “governing” its policyholders and in part acting as a surrogate government). See generally ERCSON, DOYLE & BARRY, supra note 5 at 43–65 (describing private insurance practices as creating a system of governance, including by collaboration with the federal government).


38. Wriggins, supra note 6, at 393–95; see SARMIENTO & MILLER, supra note 37, at x; WETMORE ET AL., supra note 37, at 10, 12–14.

39. See SARMIENTO & MILLER, supra note 37, at vi–xiii; WETMORE ET AL., supra note 37, at 22–24.

40. See Wriggins, supra note 6, at 393–95.

41. See id.
such home did not need to meet the standards for flood resistance after repairs.42
Not surprisingly, this created perverse incentives for property owners to minimize
renovations so as not to be required to make homes more flood-resistant.43 When
it created the flood program in 1968, Congress expected that the older housing
stock on which it was giving subsidies would be replaced within approximately
twenty-five years.44 But this has not happened. There are still about 3.5 million of
these older structures and their turnover is very low.45 Relatedly, flood insurance
has been found to inflate the market value of these older buildings, discouraging
their replacement by newer, more flood-resistant structures.46 Thus, a negative
consequence of the NFIP has been the retention by private homeowners of older,
less flood-resistant buildings in flood-prone areas.

While the NFIP has encouraged private parties to build in flood-prone areas,
it also has helped make new buildings in flood-prone areas more resistant to
floods.47 For example, most new construction in high-risk areas is elevated in
accordance with NFIP requirements.48 The NFIP’s actions have been estimated to
reduce costs from flooding by about one billion dollars per year.49 However, the
program has probably simultaneously encouraged building in flood-prone areas,
putting more property at risk. While one of the program’s many goals was guiding
development away from floodplains, the program has instead encouraged building
in floodplains, albeit while making doing so safer.50 One consequence has been
more new development in flood-prone areas than there would have been without
the NFIP.51

The NFIP has created maps showing flood risk throughout the United
States. Prior to the federal flood program, there existed no mapping for flood risk,
yet maps of flood risks are useful planning tools.52 The program developed rates
based on its flood risk maps.53 Throughout its history, the mapping program has

42. 44 C.F.R. §§ 59.1, 60.3(c)(2) (2015).
43. See WETMORE ET AL., supra note 37, at 22–24.
44. Id. at 22.
45. Id. at 22–23.
46. SARMIENTO & MILLER, supra note 37, at x.
47. WETMORE ET AL., supra note 37, at xi.
48. Id. at 16.
49. See id. at 9; SARMIENTO & MILLER, supra note 37, at 8.
50. See WETMORE ET AL., supra note 37, at 12–20. See generally Wriggins, supra note 6, at 384–
86.
51. Oliver A. Houck, Rising Water: The National Flood Insurance Program and Louisiana, 60 TUL. L.
REV. 61, 73, 160 (1985); see SARMIENTO & MILLER, supra note 37, at x; WETMORE ET AL., supra note 37,
at x, 9, 12–14; Scales, supra note 20, at 13.
52. See 42 U.S.C. § 4010(a) (2012) (administrator of NFIP required to identify flood risk zones
within 3 years of 1968); NFIP CONTINUED ACTIONS NEEDED, supra note 17, at 7; KUNREUTHER
ET AL., supra note 17, at 84–85; Houck, supra note 51, at 71 n.49 (stating accelerated mapping program
passed in 1973), 74 (stating that FEMA prepares maps), 159 (stating program has evolved to at least
the flood-map phase in thousands of communities); Luke & Abramovsky, supra note 32, at 18 n.94.
53. See NFIP CONTINUED ACTIONS NEEDED, supra note 17, at 7; KUNREUTHER ET AL., supra
note 137, at 84–85.
been underfunded, subject to political pressure, and technically subpar. Rates based on faulty maps are inherently suspect, and inferior mapping has contributed to a suspicion of, and hostility toward, the federal flood program.

C. Constraints on the NFIP

The NFIP faces various limitations and constraints because of the structure of the U.S. government, the nature of the provided insurance, and the all-too-common human behavior toward risk, where people tend to underestimate the magnitude of low-probability, high-impact events like floods.

First, land use is primarily a local and state matter. The federal government cannot enforce local building codes. Enforcement of local building codes in flood-prone areas is sometimes lax. When the NFIP provides funds for local communities to make buildings more flood-resistant and the communities do not use the money for this purpose, NFIP cannot get its money back. Thus, the NFIP is underwriting a risk over which it has little control.

Moreover, the NFIP has not been able to exclude high-risk properties from the pool or charge all high-risk properties a higher rate as a commercial insurer would. The law has strictly controlled the rates that can be charged for flood insurance. The NFIP has been required to sell insurance to all who will pay for it. For example, people in high-risk zones who do not have mortgages are voluntary purchasers; though their rates may be high, the NFIP cannot refuse to sell them insurance. While the NFIP might want to keep costs down by refusing to insure these high-risk properties, excluding them from the pool of insureds is not allowed by the law that establishes and defines the rules that govern the NFIP.

54. See Houck, supra note 51, 159–63.
55. See, e.g., Christie Thompson et al., Fed Flood Maps Left NY Unprepared for Sandy—and FEMA Knew It, WNYC RADIO (Dec. 6, 2013), http://www.wnyc.org/story/fed-flood-maps-left-ny-unprepared-sandy-and-fema-knew-it [https://perma.cc/3CGP-FK7C]. Also, given the common human tendency to discount flood risk, see infra text accompanying notes 65–66, even accurate maps may be greeted by hostility by those who live in high-risk areas.
56. KUNREUTHER ET AL., supra note 17, at 17; Scales, supra note 20, at 12.
57. KUNREUTHER ET AL., supra note 17, at 17; Scales, supra note 20, at 43 n.134.
58. KUNREUTHER ET AL., supra note 17, at 17.
59. See, e.g., United States v. Parish of Saint Bernard, 756 F.2d 1116, 1127 (5th Cir. 1985) (limiting remedies of the United States against Louisiana public and private defendants for violating their obligations to adopt and enforce flood control measures, thus leading to massive flood damage).
61. FEMA’S RATE-SETTING, supra note 60.
62. Id.; see NFIP: CONTINUED ACTIONS NEEDED, supra note 17, at 1 (NFIP “cannot reject high-risk applicants.”); Luke & Abramovsky, supra note 32, at 16 (“The NFIP has no ability to deny coverage if individuals are eligible to purchase the insurance.”); Scales, supra note 20, at 13.
63. See TOM BAKER, INSURANCE LAW AND POLICY 6 (2d ed. 2008) (describing adverse selection and the role of insurance as gatekeeper).
Second, the NFIP’s reach is limited due to common human behavior concerning risk.64 Despite the subsidies and mandates, people resist buying and retaining flood insurance, even when they live in high-risk areas. Banks often fail to ensure that borrowers have and retain flood insurance in flood zones. Much research has discussed resistance to buying flood insurance and the broader human tendency to underestimate the magnitude of low-probability, high-impact risks like floods.65 Floods can happen outside high-risk flood zones, and outside high-risk zones flood insurance is voluntary. Yet, people outside high-risk zones rarely buy flood insurance, even though it is inexpensive. The chronically low level of participation in the program despite the mandates is an important reason why the NFIP has deficits in addition to the subsidies. It does not have a deep pool of policyholders to pay for claims.

The way the program has evolved to sell insurance reflects some of the limitations of the NFIP’s governance. Because of the low demand, Congress made a shift in 1983 for insurance to be sold by private companies that would receive a commission and claims adjustment expenses.66 Although the NFIP also sells insurance, the plan to have private companies sell the insurance was based on the idea that private companies sell it more effectively than the government.67 Despite this shift to private sales, participation in the program remains limited.68

Disaster relief creates challenging dilemmas for flood insurance. Federal disaster relief, activated by a Presidential declaration and supplied by FEMA, includes both emergency assistance like rescues (also provided by state and local governments) and some housing assistance.69 This housing assistance includes aid

64. See HOWARD C. KUNREUTHER, MARK V. PAULY & STACEY MCMORROW, INSURANCE AND BEHAVIORAL ECONOMICS: IMPROVING DECISIONS IN THE MOST MISUNDERSTOOD INDUSTRY 71–72, 113–15 (2013); see also KUNREUTHER ET AL., supra note 17, at 16; Scales, supra note 20, at 13; Wriggins, supra note 6, at 390–93.
65. See KUNREUTHER ET AL., supra note 64, at 71–72, 113–15; KUNREUTHER ET AL., supra note 17, at 16; Scales, supra note 20, at 12–13; Wriggins, supra note 6, at 390–93.
66. See KUNREUTHER ET AL., supra note 17, at 85; LLOYD DIXON ET. AL., RAND CORP., THE NATIONAL FLOOD INSURANCE PROGRAM’S MARKET PENETRATION RATE 1 (2006), http://www.rand.org/content/dam/rand/pubs/technical_reports/2006/RAND_TR300.pdf [https://perma.cc/4BE8-3D2H] (describing limited demand for flood insurance and reasons); Scales, supra note 20, at 14. This is known as the “Write-Your-Own” (“WYO”) program, although it seems to be a misnomer because the policies are written by the NFIP. Scales, supra note 20, at 14. The companies collect premiums, enroll policyholders, and administer claims. Id.; see 42 U.S.C. § 4071 (2012). Private companies, selling federal policies, are referred to as “fiscal agents” of the federal government. See 42 U.S.C. § 4071(a)(1) (2012).
68. See DIXON ET AL., supra note 66, at 14 (estimating that forty-nine percent of eligible properties in high-risk flood areas actually had flood insurance, based on a sample).
to make damaged homes habitable as well as loans for repairs. FEMA tries to sharply distinguish between benefits provided by flood insurance and FEMA emergency housing benefits.\(^70\) One area of clear distinction is that FEMA provides temporary housing, whereas flood insurance does not.\(^71\)

However, other aspects of housing assistance are more difficult to distinguish. FEMA’s assistance to make homes habitable overlaps with flood insurance benefits that provide funds for repairs and reconstruction, which also helps to make homes habitable.\(^72\) FEMA (and the NFIP) requires that homeowners use flood insurance benefits before they can receive FEMA housing benefits.\(^73\) FEMA publicity urges purchase of flood insurance, rather than receipt of disaster relief benefits, claiming that insurance puts homeowners more in control than disaster relief does.\(^74\) Nonetheless, as both flood insurance and FEMA benefits may provide assistance to make flood-damaged homes more habitable, there is duplication between the two. Further, receiving benefits under flood insurance policies is not easy; strict deadlines and documentation requirements apply.\(^75\) Press accounts after Hurricane Sandy featured some individuals who had flood insurance but wished they did not, since they thought they would have fared better had they relied on disaster relief.\(^76\) Not surprisingly, the availability of federal disaster relief, which has become a political necessity, may have led to reduced demand for flood insurance.\(^77\)
D. The Current Situation of the NFIP

Almost fifty years after the NFIP was founded, disaster relief costs are still soaring. Development has not been guided away from flood-prone areas. To the contrary, development has been encouraged in these areas, although NFIP requirements have made most new construction more flood-resistant. The heavily subsidized insurance for the oldest, highest-risk properties and other properties affected by map changes has discouraged their replacement. Human behavior toward flood risk has meant that people tend not to buy flood insurance voluntarily and let it lapse frequently. The low rate of participation in the program and massive storms such as Katrina and Sandy have led to huge, enduring deficits that are now widely seen as problematic. The NFIP cannot enforce local building codes, must limit its prices, and cannot exclude properties as too risky to insure. Federal disaster relief provides some housing assistance benefits that overlap with flood insurance, thereby undercutting incentives to purchase or retain flood insurance.

The current NFIP and federal flood policy, painted in broad-brush here, are widely criticized. Further, climate change is likely to result in rising sea levels, larger storms, and more floods. In July 2012, Congress passed a law to reform the program, gradually eliminating all subsidies, moving to risk-based rates, and creating a plan for a reserve fund to cover catastrophe years. It also funded flood mapping and specified both that private flood insurance satisfied the mandates and that the NFIP could buy insurance to cover claims that were larger than its assets, which is known as reinsurance. If the NFIP has reinsurance, the reinsurance policy, rather than taxpayers, should cover claims when claims exceed capacity. Returning the NFIP to fiscal solvency was a widely accepted, dominant goal. The aim was to gradually have rates for flood insurance reflect actual flood risk. If homeowners were charged rates that reflected actual risk, the program would be fiscally sound going forward. After some of the 2012 reforms began to go into effect, the real estate industry and the potentially affected homeowners energetically lobbied Congress to stop the rate increases that would eventually


79. Wriggins, supra note 6, at 366 n.15.


82. JERRY & RICHMOND, supra note 81, at 995.

83. See generally MORE INFORMATION NEEDED, supra note 20, at 2; NAT’L ASS’N OF INS. COMM’RS, supra note 81; FEMA, supra note 20.
ensue from removing subsidies.\textsuperscript{84} Congress responded by backtracking on some of the subsidy removals and made other changes in 2014.\textsuperscript{85} In 2017, Congress will revisit the program.\textsuperscript{86} The next section considers what sort of federal approach to flood insurance would improve the current situation.

\section*{II. \textsc{Better Flood Insurance}}

Between now and 2017 there exists an opportunity for widespread education about the risks and costs of climate change and floods. The public has a chance to consider what sort of approach to take to flood risk and federal flood insurance. Congress, the media, and the public now have time to consider and reframe the issues in a way that is more thoughtful than a panicked response to potential rate increases. This Section will consider what sort of insurance we should endorse for flood risk going forward. First, mapping should be adequately funded and protected from political influence. Second, subsidies should gradually be phased out and risk-based rates adopted for flood insurance. Third, a targeted affordability plan should be passed. Fourth, a comprehensive strategy should be developed to deal with the long-term effects of floods and climate change.

\subsection*{A. Mapping Should Be Funded and Protected from Political Influence}

The mapping of flood risk must be based on the most precise scientific information available.\textsuperscript{87} At some point in the future, with computer mapping, flood risk information may be so widely available that the NFIP may not need to generate maps. That point has not yet been reached. Maps must be as accurate as possible so that the risk of flood can be gauged with maximum accuracy. In turn, an accurate estimation of flood risk can lead to an accurate calculation of premiums based on it. If the premiums are based on accurate risk predictions, then the program should not run deficits. Opponents of rate reform have been able to point to the mapping program’s weakness as a way to attack suggested reforms, and excellent maps will foreclose this objection.\textsuperscript{88}

\textsuperscript{84} Robert R. M. Verchick \& Linsey R. Johnson, \textit{When Retreat Is the Best Option: Flood Insurance after Biggert-Waters and other Climate Change Puzzles}, 47 J. MARSHALL L. REV. 695, 711, 716 (2013); Wriggins, supra note 6, at 413–20 (analyzing the efforts to derail the 2012 reforms).


\textsuperscript{87} For more discussion of mapping, see Wriggins, supra note 6, at 401–02, 408, 421–22. Provisions about mapping in BW-12 and MG-14 include Biggert-Waters Flood Insurance Reform Act of 2012, Pub. L. No. 112-141, §§ 100216(b)(1)(A)(iii), 100216(b)(1)(C).

B. Subsidies Should Be Phased Out

The remaining subsidies should be gradually phased out. Congress in 2014, to its credit, continued with the rollback of some of the subsidies. The longstanding subsidies for flood insurance policies on high-risk older homes (the pre-FIRM subsidies) applied not only to policies on primary residences but even to policies on second homes, businesses, and properties that had repeatedly suffered large losses. In 2014, Congress continued with the gradual elimination of those subsidies for policies on second homes, business properties, and severe repetitive loss properties. Those subsidies apply to about 425,000 properties. However, approximately 715,000 subsidized policies on high-risk properties remain and were renewed by Congress in 2014. These subsides apply to primary residences and also to some properties that have become more high risk over the years—the grandfathering subsidies mentioned above. These subsidies should end for several reasons. First, risk-based rates will probably bring private competition and state insurance regulation; competition and state regulation will likely be overall more efficient and better for consumers than the current system. Second, the justifications for continuing these subsidies are specious. Third, other areas of the federal government’s involvement in insurance are far more compelling from a policy standpoint than flood insurance. Fourth, the incentives created by the subsidies make little sense, particularly given climate change risks. Instead of the current subsidies, there should be a voucher program which is means-tested and narrow. Finally, Congress should develop a plan to face the realities of climate change, including rising sea levels.

89. The 2012 reforms eliminated subsidies for 438,000 policyholders—for second homes, businesses, and severe repetitive loss properties. More information needed, supra note 20, at 12. The 2014 reforms continued with the elimination of these subsidies. See FEMA, Homeowner Flood Insurance Affordability Act: Overview (2014), http://www.fema.gov/media-library-data/1396551935597-4048b686d095a6eb66e7111d3ec464/HFIAA_Overview_FINAL_03282014.pdf [https://perma.cc/F3HZ-677H]. But 715,000 subsidized properties remained. More information needed, supra note 20, at 12. Policy holders who had subsidized policies for nonprimary residences, businesses, and severe repetitive loss properties (a total of five percent of flood policyholders) received twenty-five percent premium increases starting January 1, 2013. FEMA, supra note 20, at 1–2. “Severe repetitive loss” properties are defined as single family residences that have suffered flood damage for which four or more claims have been made, each greater than $5000 or at least two claims have been made with the total amount exceeding the value of the property. 42 U.S.C. § 4104c(b)(1)(B) (2012).


1. Risk-Based Rates Will Be Positive and Probably Bring Increased Private Competition

The federal government’s deeply subsidized rates have hampered the private market’s ability to provide basic homeowners flood coverage and have inhibited private competition. While flood risk is a difficult, correlated risk that the private market has been reluctant to cover, private insurance may become more widespread if the federal government reduces subsidies and improves mapping. Interestingly, Lloyd’s of London is offering some basic private flood insurance in Florida, which in some instances is cheaper than coverage through the NFIP. Private insurers are better at some aspects of risk reduction than governments. If rates become based on risk, better risk modeling information will probably become available, thus furthering competition between private insurers. Private insurers may be able to provide more variety in policies as well as more nuanced rate making, better data, and individualized risk management. If private insurance begins to cover this risk, consumer-friendly state insurance law doctrines will begin to apply. Even an expansion of the private market will not mean an absence of a federal role. The federal government may need to be involved in an affordability program, discussed below, as well as perhaps playing a role in providing reinsurance.

2. The Justifications for Continuing the Subsidies Are Specious

Second, the justification for the subsidies has not been persuasively made. Subsidy proponents have not made arguments on the merits as to why the subsidies are a positive idea, except to say that flood insurance rates should not be too high. The original justification for the subsidies, encouraging participation in the program, is stale and no longer valid. The subsidies are not based on need or income. They are based on factors such as the age of the house, its location, mapping history, and risk. The subsidies were originally instituted to encourage

95. Of course, as risk modeling becomes more granular and individualized, difficult questions of cross-subsidization may come to the fore.
96. See Scales, supra note 20, at 33–34.
98. See Wriggins, supra note 6, at 413–17, 414 n.322.
99. Congress initiated the subsidies when it founded the program in order to encourage participation in the program. U.S. GOV’T ACCOUNTABILITY OFFICE, supra note 20, at 1, 9; FEMA, supra note 20, at 7; Scales, supra note 20, at 16.
100. More Information Needed, supra note 20, at 2 n.2; FEMA Action Needed, supra note 20, at 52 (2011) (reporting that rates for older properties in high-risk zones are forty to forty-five percent of what full risk rates would be).
participation in a new program and were expected to last for twenty-five years, by which time the older properties would be replaced by newer, more flood-resistant ones. However, the older properties have endured and in some cases increased substantially in value. The real estate industry in coastal areas, we can assume, relies to some degree on the availability of affordable flood insurance. But the proponents of these enduring subsidies on primary residences and grandfathering subsidies have not explained why they, along with the real estate industry in their areas, should receive these particular subsidies. Nor have they articulated why deeply discounted, federally supplied property insurance should be denied to homeowners outside high-risk coastal or riverine areas.

Not all subsidies are the same, and not all risks should be spread across all taxpayers. The way in which the federal government spreads flood risk makes little sense now. This is not to say that the government generally should return all widely spread risks to the backs of individuals. Rather, one can oppose some of the ways in which the government has returned risk to individuals in recent decades, such as the shrinking of retirement security, and also oppose the way government spreads flood risk.


If we consider three areas where the federal government has been involved with insurance, we can see that the case for continuing federal subsidies is much more problematic. One context is the Urban Property Insurance Protection and Reinsurance Act of 1968 (UPIPRA). This law, passed in 1968, was aimed at the challenges posed by a lack of insurance in urban areas both before and after the urban riots of 1966. This law authorized states to pass statutes known as Fair Access to Insurance Requirements plans (FAIR plans) and provided federal riot reinsurance to companies that participated in FAIR plans. The major goal of

101. Wetmore et al., supra note 37, at 12–20.
102. Id.
105. Id.
108. Dwyer, supra note 107, at 621–22.
these plans was to make affordable property insurance more available in urban areas.\textsuperscript{109} These plans varied according to state laws but needed to meet basic federal requirements in order for companies to receive federal reinsurance for riots.\textsuperscript{110}

Eventually, private reinsurers returned to the market and Congress terminated the riot reinsurance program in 1985.\textsuperscript{111} Now, the standard policies of homeowners cover riots.\textsuperscript{112} UPIPRA aimed to deal with a national emergency of widespread urban decline that threatened the survival of U.S. cities. Insurance companies had been refusing to insure properties in large areas of cities, particularly those inhabited by minorities; this refusal to insure contributed significantly to the decline of these large urban areas. Individuals who owned property in these areas often were simply unable to obtain insurance. States and cities did not have the resources to deal with the situation.\textsuperscript{113} The federal government’s involvement was limited in scope, finite in duration, and targeted a beneficial goal. The federal government did not take over the entire underwriting risk, but rather created incentives for states to prod insurance companies to take on some of the risk because of the importance of the coverage.

Flood insurance contrasts unfavorably with this example. The federal government has entirely underwritten flood risk for homeowners, the subsidies have endured for decades, federal involvement is widely seen as having led to significant negative consequences such as retaining risky properties that otherwise would have been replaced, and the risk that the federal government has shouldered is one that many homeowners choose to face.

A second area of instructive contrast is federal unemployment insurance. Passed in 1935, the law establishing federal unemployment insurance aimed to fill a void in the private market. There was no private unemployment insurance available on the market, apparently because of concern about the challenge of distinguishing between voluntary and involuntary employment and moral hazard.\textsuperscript{114} The structure was a payroll tax on the majority of employees; those who participated in a satisfactory state unemployment insurance program could deduct

\begin{itemize}
\item \textsuperscript{109} Urban Property Insurance Protection and Reinsurance Act of 1968 § 1103.
\item \textsuperscript{110} Dwyer, supra note 107, at 621–28.
\item \textsuperscript{111} 12 U.S.C. § 1749bbb(b) (omitted); BAIRD WEBEL, CONG. RESEARCH SERV., R42716, TERRORISM RISK INSURANCE 8 (2013).
\item \textsuperscript{112} U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-14-179, HOMEOWNERS INSURANCE: MULTIPLE CHALLENGES MAKE EXPANDING PRIVATE COVERAGE DIFFICULT 9 (2014) [hereinafter HOMEOWNERS INSURANCE].
\item \textsuperscript{113} ADVISORY PANEL ON INS. REPORT, supra note 107, at 32; Dwyer, supra note 107, at 617.
\item \textsuperscript{114} The National Advisory Commission on Civil Disorders set up the distinct National Advisory Panel on Insurance in Riot-Affected Areas, which later endorsed the report of the Advisory Panel on Insurance. NAT’L ADVISORY COMM’N ON CIVIL DISORDERS, REPORT OF THE NATIONAL ADVISORY COMMISSION ON CIVIL DISORDERS 197–99 (1968); Dwyer, supra note 107, at 617.
\end{itemize}
the full amount of their state contributions from the federal tax.\textsuperscript{115} The goal was to help stabilize the economy and lessen individual hardship from job loss that was not an individual’s fault.\textsuperscript{116} Payments from states are supplemented by the federal government at times of economic hardship.\textsuperscript{117} Many aspects of the program can be questioned, but the need for stabilizing the economy was and sometimes is compelling.\textsuperscript{118} States, cities, employers, and the private market lack the resources to deal with the economic consequences of widespread unemployment, and federal unemployment insurance helps stabilize the economy.\textsuperscript{119} Federal unemployment insurance spreads a risk that is not within the control of individuals and that almost everyone faces.

The third example is the Affordable Care Act that was passed in 2010 when 40 million Americans did not have health insurance.\textsuperscript{120} Although it may be difficult to remember now, this was a time when there was a consensus across the political spectrum that the private health insurance market was not working well and that reform was needed so that more individuals could have health insurance.\textsuperscript{121} While concerns were raised about costs, bureaucracy, and so on, this is a context where government’s involvement in insurance markets made sense. The risk of illness—though unevenly distributed—is universally shared and outside the control of individuals, and public health concerns support wide provision of healthcare to citizens.\textsuperscript{122}

These three contexts, insurance in urban areas, unemployment insurance, and the Affordable Care Act, present much more compelling reasons for the federal government’s involvement in insurance than does flood insurance. Even if there are strong reasons for the federal government’s involvement with flood insurance, the case for the present subsidies is weak.

\textsuperscript{115} See U.S. DEP’T OF LABOR, supra note 114; MOSS, supra note 14, at 191.
\textsuperscript{116} See U.S. DEP’T OF LABOR, supra note 114.
\textsuperscript{119} See Galle, supra note 118, at 2–3.
\textsuperscript{121} KENNETH S. ABRAHAM & DANIEL SCHWARZ, INSURANCE LAW & REGULATION 12 (5th ed. Supp. 2010).
\textsuperscript{122} Space constraints prevent detailed discussion of these points. For a comparative perspective, see generally T.R. REID, THE HEALING OF AMERICA: A GLOBAL QUEST FOR BETTER, CHEAPER, AND FAIRER HEALTH CARE (2010).
4. The Subsidies Create Negative Incentives that Are Unfair to the General Public

The third major reason why the subsidies should gradually be phased out is that the incentives they create are perverse, particularly given climate change. Existing subsidies incentivize citizens living in flood zones, particularly in older homes. The current rules encourage building in flood-prone areas, yet the federal government has no way to enforce land-use restrictions there. Given climate change and increasing disaster relief costs, there is no strong reason why these particular subsidies should continue. The subsidies and government rebuilding efforts permit homeowners and the real estate industry in flood-prone areas to avoid bearing the costs of the risks they face. Instead, all taxpayers, even those who are not living in flood-prone areas, ultimately share those ever-increasing costs.

C. A Means-Tested Voucher Program Should Be Passed to Address Affordability Concerns

Instead of the current subsidies, there should be a voucher program that is means tested and narrow. Flood insurance is both required and subsidized in high-risk zones. There are good reasons for the mandate, but weak reasons for the general subsidies, as explained above. Yet, for low-income residents of high-risk areas who have mortgages and are subject to the mandate, the gradual elimination of subsidies would be overly harsh. This raises concerns about affordability for some homeowners. The 2012 and 2014 reforms both require a National Academy of Sciences study to develop a possible affordability framework for flood insurance. The provisions about the study, which is intended to set the stage for the affordability framework, are complex and unlikely to result in a clear answer as to what Congress should do about affordability. It would be a mistake for Congress to wait for the affordability study without independently considering what it should do about the issue.

One response to the affordability concern is to say that if the cost of owning an asset becomes too high, the owner can generally sell it. High insurance costs based on the riskiness of a particular property could simply be seen as a market signal. However, not all flood-prone areas are desirable, and selling may not always be an option. Some areas may become blighted if rates are based on risk. Virtually everyone involved in flood insurance reform calls for consideration of affordability issues in government insurance policy in this context, although the

---

123. See supra notes 30–33 (reasons for mandates), 37–46 (effects of subsidies), 92–122 (reasons for phasing out subsidies) and accompanying text.
124. See supra Section II.B.
rationales for these calls are often left unarticulated. What are the arguments for an affordability program for flood insurance? Expert Carolyn Kousky explains in discussing state natural catastrophe programs that there are basically three arguments.

The first is a political response to subsidize “vocal, high-risk residents.” This is essentially what Congress did when it restored the majority of subsidies and made other changes in 2014. However, with more time and education, there is hope for a more reflective response in the future.

The second argument, Kousky explains, is the equity argument. She writes, “some low-income homeowners reside in high-hazard areas, and it is a government role to help these homeowners afford insurance, just as society subsidizes their food and health care.”

The third is an economic argument. She writes:

[I]nsurance . . . is necessary for development, and some types of development must be in high-risk areas but provide economic spillovers that justify insurance subsidies. The extent to which this is the case is a difficult empirical question that to my knowledge has not been thoroughly addressed but would likely justify only very small and targeted subsidies in any event.

The federal flood insurance program, of course, offers not small and targeted subsidies but large and general subsidies. Assuming Kousky is correct, these subsidies would not be economically justified.

The only strong argument for subsidies, then, is the equity argument that would extend them to poor people as part of government’s role in subsidizing housing, health care, and food. The existing general flood insurance subsidies for older homes and grandfathered homes are not targeted at people with low incomes or limited assets. They cover some people in these situations, but also


129. Id.

130. Id.

131. While moral hazard arguments are commonly raised in opposition to subsidies for poor people, see generally Tom Baker, On the Genealogy of Moral Hazard, 75 TEX. L. REV. 237 (1996), in this context these arguments ring particularly false since the enduring subsidies have not had a clear purpose or strong rationale other than to benefit “vocal high-risk residents,” KOUSKY, supra note 128.
cover homeowners who are not poor or middle class. For example, wealthy people with older, oceanfront homes have received massive subsidies for almost fifty years. If their home is their primary residence, they still receive the subsidies with only small rate increases authorized by Congress. The rates for standard homeowners insurance (which does not cover floods) vary by type and degree of risk, including materials and probability of exposure to catastrophes. 132 But flood risk enjoys a most favored risk status for no valid reason.

The Government Accountability Office (GAO), academic experts, and private organizations have charted a route out of the current untenable situation. They argue that Congress should eliminate subsidized rates gradually and charge risk-based rates to everyone but also fund a means-tested subsidy for some policyholders. 133 The most specific plan was put forth by Prof. Howard Kunreuther and his colleagues, including Carolyn Kousky and Erwann Michel-Kerjan. 134 They propose a means-tested program using vouchers coupled with loans for mitigation renovations. 135 Even though many details would need to be worked out, and politics may prevent passage of such a plan, it would represent a significant improvement over the current situation.

D. Congress Should Pass a Comprehensive Climate Change Plan

Finally, Congress should pass a regulatory scheme to deal with floods and climate change. 136 Even with the improvements suggested above, such as gradual removal of subsidies, if climate change and sea level rise predictions come to pass, the reforms will be insufficient.

CONCLUSION

Flood insurance presents few easy issues, particularly given increasing flood risks, structural limitations on federal power, human behavior towards flood risk, and how politically challenging it is to take away government benefits after they have been given. But despite these challenges, we need to have a broader conversation about flood risk and how we are going to deal with it as a society. This conversation must take place between now and 2017, when Congress revisits the program. Continuation of the current government insurance regime, with its incentives to increase the amount of new property at risk and to retain older high-

132. HOMEOWNERS INSURANCE, supra note 114, at 5.
134. Kousky & Kunreuther, supra note 133, at 3.
135. Id. at 1; see KUNREUTHER ET AL., supra note 17, at 333.
risk homes, makes little sense. Developing excellent maps, gradually moving to risk-based rates, and developing a needs-based voucher program would substantially improve the current system. Further, these improvements would begin to point us in the right general direction of dealing with the challenges presented by climate change.