
COMMENT

PROTECTING RENTERS FROM FLOOD LOSS

ELLEN R. HEIMAN†

INTRODUCTION784

I. A CONFLUENCE OF RISK FACTORS: AN OVERVIEW OF THE
PROBLEM785

II. CURRENT THEORIES OF OBLIGATION AND RECOURSE.....793

 A. *Obligations Before a Flood*793

 1. *State Statutes*793

 2. *Municipal Codes*.....796

 B. *Recourse After a Flood*797

 1. Landlord-Tenant Law797

 2. Tort Law800

III. SOLUTIONS802

 A. *A Proposed Solution: Mandatory Disclosure*802

 B. *A Federal Solution: NFIP*805

 1. Required Mitigation and Disclosure807

 2. Mandatory Map Updating808

 3. Expanding the SFHA.....808

CONCLUSION809

INTRODUCTION

In the summer of 2020, Amanda Daniels found herself, for the third time, in a flooded apartment that she rented in Chicago.¹ Over the past five years, Daniels had lost \$10,000 worth of personal belongings and rented three separate apartments that she learned, too little too late, were prone to flooding during storms.² None of Daniels' landlords alerted her to the possibility that those rentals might flood, and she could not recoup her losses, as her general renters' insurance did not cover flood damage.³

Just over one-third of all people living in the United States are renters.⁴ Renters bear a disproportionate risk of sustaining flood-related harms because they enjoy far fewer legal and economic protections than homeowners. First, renters' insurance, which is often required by landlords, does not cover flood damage.⁵ Second, the National Flood Insurance Program ("NFIP"), which homeowners living in the Special Flood Hazard Area ("SFHA") *must* buy into,⁶ is only optional for renters.⁷ With limited

[†] Executive Editor, Volume 170, University of Pennsylvania Law Review; J.D. Candidate, University of Pennsylvania Carey Law School, 2022. I am particularly grateful to Vice Provost Wendell Pritchett for providing feedback and guidance throughout this project and Professor John Miller for a compelling introduction to the need for more research into and reform in flood protection, insurance, and mitigation for renters. I am also appreciative of Professors Kellen Zale and Sarah Schindler, whose feedback and research informed my work. Thanks also to Emily Horwitz and Madeline Verniero, whose support and accountability helped me complete this Comment, and to the editors of the *University of Pennsylvania Law Review* who helped bring this Comment to publication. Finally, this Comment is dedicated to the millions of individuals who are displaced by climate change-related disasters each year. This September, I ironically found myself a part of this group when Hurricane Ida brought record flooding to Philadelphia. I owe a tremendous debt to my friends and the law school administration who helped house and feed me while I was displaced; the great privilege it was to have a warm and dry place to sleep while my home was underwater is not lost on me.

¹ Rebecca Hersher, *Most Tenants Get No Information About Flooding. It Can Cost Them Dearly*, NPR (Oct. 22, 2020, 4:50 AM) [hereinafter *Most Tenants*], <https://www.npr.org/2020/10/22/922270655/most-tenants-get-no-information-about-flooding-it-can-cost-them-dearly> [https://perma.cc/2BND-C9M3].

² *Id.*

³ *Id.*

⁴ *Renters and Owners*, NAT'L MULTIFAMILY HOUS. COUNCIL (Nov. 2020), <https://www.nmhc.org/research-insight/quick-facts-figures/quick-facts-resident-demographics/renters-and-owners> [https://perma.cc/8X6H-8ZL2] (reporting that 36% of American households were renter-occupied and 34% of American residents were renters).

⁵ See Jen Rice, *New Bill Would Require Texas Landlords to Inform Renters if a Home Has Flooded*, HOUS. PUB. MEDIA [hereinafter *New Bill*], <https://www.houstonpublicmedia.org/articles/news/politics/2020/11/30/386855/next-year-texas-renters-could-receive-information-about-a-property-s-flood-risk-when-apartment-hunting> [https://perma.cc/4M4M-58NF] (Nov. 30, 2020, 10:37 AM) ("Flood damage isn't covered by most rental insurance policies.").

⁶ See *infra* note 144 and accompanying text.

⁷ Press Release, FEMA, Yes, Renters Can Buy Flood Insurance (Mar. 18, 2021), <https://www.fema.gov/press-release/20210318/yes-renters-can-buy-flood-insurance> [https://perma.cc/VVK2-MB8G].

protections and only limited recourse available—generally retroactive and expensive enforcement options⁸—concerted policy action will be necessary to protect renters as climate change increases storm frequency and magnitude.⁹

To close these information and coverage gaps, some states and municipalities have proposed or passed legislation that requires landlords to disclose to prospective renters if their properties have either flooded in the recent past, are at serious risk of flooding, or both;¹⁰ these requirements, however, still fail to capture the full picture of flood risk for all at-risk properties.

In this Comment, I will 1) survey the current body of research cataloguing increased flood risk, particularly in urban areas with high proportions of renters and low-income and historically Black communities, 2) analyze the current protective doctrine under landlord-tenant and tort law, along with state and municipal codes that require flood risk disclosure to renters, and 3) argue that these disclosure laws, while perhaps a necessary step in increasing transparency and communication with renters, fail to promote equity because disclosures rarely change consumer behavior and renters often do not have bargaining power or the flexibility to seek higher ground. Rather, the disclosure must be required *along with* NFIP reform that requires landlords to properly mitigate all rental properties to reduce flood risk, update flood maps every five years, and incorporate future flood risk and stormwater risk into flood maps.

I. A CONFLUENCE OF RISK FACTORS: AN OVERVIEW OF THE PROBLEM

Flooding is increasing across the globe. A warming atmosphere¹¹—like ours—can hold, and subsequently release, more water.¹² The United States

⁸ By retroactive enforcement, I refer to litigation against a landlord following flood damage. This type of response both fails to avoid the harms inherent to flood risk and is prohibitively expensive for many. See *infra* Section II.B.

⁹ See sources cited *infra* note 12; see also *Most Tenants*, *supra* note 1 (“[C]limate change drives more frequent major hurricanes.”).

¹⁰ See *infra* Section II.A.

¹¹ It is indisputable that the temperature of Earth’s atmosphere is rising at an alarming acceleration due to human activity and will persist without serious, concerted action. IPCC, SUMMARY FOR POLICY MAKERS 4-5 (2018); see also Martin A. Vezér, *Computer Models and the Evidence of Anthropogenic Climate Change: An Epistemology of Variety-of-Evidence Inferences and Robustness Analysis*, 56 STUD. HIST. & PHIL. SCI. 95, 97 fig.1 (2016) (depicting global warming across various datasets).

¹² A study by the National Oceanic and Atmospheric Administration (“NOAA”) found that “torrential rains” and “devastating floods” are at least 40% more likely and 10% more intense because of climate change. *Climate Change Increased Chances of Record Rains in Louisiana by at Least 40 Percent*, NAT’L OCEANIC & ATMOSPHERIC ADMIN. (Sept. 7, 2016), <https://www.noaa.gov/media-release/climate-change-increased-chances-of-record-rains-in-louisiana-by-at-least-40-percent> [<https://perma.cc/3FEY-5C5P>]; see also Quirin Schiermeier, *Increased Flood Risk Linked to Global*

experiences this increase in frequency and magnitude; recent estimates that account for climate-driven weather find that about 15 million properties in the US are currently at significant risk of flooding.¹³ Relatedly, the Federal Emergency Management Agency (“FEMA”) has found that by 2100, the SFHA—the areas in our country that are within the 1% annual chance floodplain—will increase by 40% to 45%.¹⁴ The world will see significant increases in storms, flooding, and flood damage over the rest of this century.¹⁵ With global yearly economic losses from flooding regularly in the tens of

Warming, 470 NATURE 316, 316 (2011) (reporting on studies linking rising greenhouse gas levels with the growing intensity of rain in the Northern Hemisphere and increased flooding in the United Kingdom); P. Allamano, P. Claps & F. Laio, *Global Warming Increases Flood Risk in Mountainous Areas*, GEOPHYSICAL RSCH. LETTERS, Dec. 24, 2009, at 1 (predicting that a two-degree Celsius mean temperature would increase the frequency of “100-year flood[s]” by five times in mountainous regions); Lorenzo Alfieri, Berny Bisselink, Francesco Dottori, Gustavo Naumann, Ad de Roo, Peter Salamon, Klaus Wyser & Luc Feyen, *Global Projections of River Flood Risk in a Warmer World*, 5 EARTH’S FUTURE 171, 175-76 (2017) (predicting both increases in maximum precipitation and a significant increase in flooding events in river basins); GILBERT M. GAUL, THE GEOGRAPHY OF RISK: EPIC STORMS, RISING SEAS, AND THE COST OF AMERICA’S COASTS 206 (2019) (“It was becoming hotter, bogger, and more saturated—an ideal prescription for otherwise ordinary storms to go ballistic.”).

¹³ Leslie Kaufman, Mira Rojanasakul, Hayley Warren, Jason Kao, Brittany Harris & Prashant Gopal, *Mapping America’s Underwater Real Estate*, BLOOMBERG GREEN (June 29, 2020), <https://www.bloomberg.com/graphics/2020-flood-risk-zone-us-map> [<https://perma.cc/Y8PC-7Z8N>] (estimating at least 14.6 million US properties are at risk of flooding). This risk is not only borne on the coasts. See Christopher Flavelle, Denise Lu, Veronica Penney, Nadja Popovich & John Schwartz, *New Data Reveals Hidden Flood Risk Across America*, N.Y. TIMES (June 29, 2020), <https://www.nytimes.com/interactive/2020/06/29/climate/hidden-flood-risk-maps.html> [<https://perma.cc/JN66-3TZE>] (reporting that because FEMA’s flood maps are not intended to show flooding caused by heavy rain, tens of thousands of properties at risk are not shown on the map).

¹⁴ AECOM, THE IMPACT OF CLIMATE CHANGE AND POPULATION GROWTH ON THE NATIONAL FLOOD INSURANCE PROGRAM THROUGH 2100, p. ES-6 (2013), https://aecom.com/content/wp-content/uploads/2016/06/Climate_Change_Report_AECOM_2013-06-11.pdf [<https://perma.cc/GZU5-4NZG>]. Beyond this expansion of the SFHA to homes newly at risk, the number of properties experiencing repeat flooding has increased. See Thomas Frank, *More U.S. Homes Are at Risk of Repeat Flooding*, SCI. AM.: E&E NEWS (July 7, 2020), <https://www.scientificamerican.com/article/more-u-s-homes-are-at-risk-of-repeat-flooding> [<https://perma.cc/5R58-8XTQ>] (reporting that the number of repeatedly flooded properties rose 43%—from 150,000 in 2009 to 214,000 in 2018).

¹⁵ See IPCC, SUMMARY FOR POLICY MAKERS 9 (2021) (projecting with high confidence “increases in frequency, intensity, and/or amount of heavy precipitation”); see also Paul Kirshen, Chris Watson, Ellen Douglas, Allen Gontz, Jawon Lee & Yong Tian, *Coastal Flooding in the Northeastern United States Due to Climate Change*, 13 MITIGATION & ADAPTATION STRATEGIES FOR GLOB. CHANGE 437, 448 (2008) (“[C]limate change-driven sea level rise will lead to significant elevation increases in storm surges by at least 2050 at all locations but particularly at Boston, Massachusetts and Atlantic City.”). As flood frequency and magnitude have increased, so have costs. See Jacob Bradt & Carolyn Kousky, *Flood Insurance in the US: Lessons from FEMA’s Recent Data Release (Part I)*, WHARTON RISK MGMT. & DECISION PROCESSES CTR. (Jan. 14, 2020), <https://riskcenter.wharton.upenn.edu/lab-notes/lessonsfromfemadatapart1> [<https://perma.cc/C6T8-LAFA>] (“There has . . . been an increase over time in the average value of residential claims, adjusted for inflation.”).

billions of dollars, flooding is not only a climate and a housing crisis, but an economic one, too.¹⁶

Beyond the challenge of flooding generally, the problem of urban flooding presents unique risks.¹⁷ Urban flooding is “a growing source of significant economic loss, social disruption, and housing inequality.”¹⁸ The Center for Disaster Resilience and the Center for Texas Beaches and Shores have done extensive research to understand why urban flooding happens; significant factors include old and inadequate drainage systems, runoff increase due to large amounts of impermeable surface, sewage and stormwater backups, changes to infrastructure and physical conditions that impair drainage, and failures to maintain drainage systems adequately.¹⁹ These factors, which are often unique to dense urban areas, exacerbate the problem of flooding in America’s larger cities. In turn, urban flooding creates acute public health concerns, both direct health concerns including exposure to storm impact and post-storm hazards like power outages and secondary health concerns like contaminated drinking water and floodwaters, mold and moisture in affected housing, and trauma and stress experienced during and after a flood event.²⁰ With renters making up over half

¹⁶ See, e.g., Oliver E.J. Wing, Paul D. Bates, Andrew M. Smith, Christopher C. Sampson, Kris A. Johnson, Joseph Fargione & Philip Morefield, *Estimates of Present and Future Flood Risk in the Conterminous United States*, 13 ENV’T RSCH. LETTERS, 1, 1 (2018) (“In 2016, . . . losses as a result of flooding totalled \$56 [billion] . . . , with \$10 [billion] of this accounted for by the August floods in Mississippi and Louisiana alone.”); cf. GAUL, *supra* note 12, at 106 (noting that over the past two decades, hurricane damage has cost \$725 billion).

¹⁷ See Thomas Frank, *Flooding Disproportionately Harms Black Neighborhoods*, SCI. AM.: E&E NEWS (June 2, 2020), <https://www.scientificamerican.com/article/flooding-disproportionately-harms-black-neighborhoods> [<https://perma.cc/7R47-PX6P>] (“The [flood] risk to the nation is concentrated in the metro areas” (quoting Doug Plasencia)); see also Suresh Hettiararchchi, Conrad Wasko & Ashish Sharma, *Increase in Flood Risk Resulting from Climate Change in a Developed Urban Watershed—The Role of Storm Temporal Patterns*, 22 HYDROLOGY & EARTH SYS. SCIS. 2041, 2041 (2018) (“This increase in the likelihood of extreme rainfall and its intensification creates a higher risk of damaging flood events that cause a threat to both life and the built environment, particularly in urban regions where the existing infrastructure has not been designed to cope with these increases.”).

¹⁸ CTR. FOR DISASTER RESILIENCE & CTR. FOR TEX. BEACHES & SHORES, *THE GROWING THREAT OF URBAN FLOODING: A NATIONAL CHALLENGE* 42 (2018), https://cdr.umd.edu/sites/cdr.umd.edu/files/resource_documents/COMPRESSEDurban-flooding-report-online-compressed-0319.pdf [<https://perma.cc/XHT3-49CY>].

¹⁹ *Id.* at 21-23.

²⁰ See Kathryn Lane, Kizzy Charles-Guzman, Katherine Wheeler, Zaynah Abid, Nathan Graber & Thomas Matte, *Health Effects of Coastal Storms and Flooding in Urban Areas: A Review and Vulnerability Assessment*, J. ENV’T & PUB. HEALTH, May 30, 2013, at 2 (finding a range of public health outcomes related to Superstorm Sandy, Hurricane Katrina, and other storms); see also JEFF GOODELL, *THE WATER WILL COME: RISING SEAS, SINKING CITIES, AND THE REMAKING OF THE CIVILIZED WORLD* 214 (2017) (“Flooding is also a grave public health hazard. [Lagos, Nigeria] is a city of 13 (or 21) million people and no municipal sewage system. In the slums, kids develop rashes and pinkeye after floods, and cholera outbreaks are not uncommon.”); cf. Jie Han & Shanshan He, *Urban Flooding Events Pose Risks of Virus Spread During the Novel Coronavirus (COVID-19)*

of the residents in many major American cities, urban flooding makes the risk of flood damage even more salient to renters.²¹

Any thorough discussion about flood risk to renters must recognize the intersectionality of the problem—that is, that an interconnected and compounding system of disadvantage affects individuals who possess multiple historically disadvantaged social identities.²² To start, people of color are more likely to rent than to own²³ for a host of reasons: discriminatory housing,²⁴ tax,²⁵ income,²⁶ and real estate and banking policies,²⁷ to name a few. These same policies are responsible for the disproportionate number of people of color who live in flood prone areas.²⁸ Further, research suggests that

Pandemic, SCI. ENV'T, Sept. 23, 2020, at 2 (“In the event of severe urban flooding, sewages containing untreated human wastes mixed with stormwater runoffs could spread quickly and widely into communities, presenting a nuisance and a threat to public health.”).

²¹ See *Most Tenants*, *supra* note 1 (“More than half of Chicago residents are renters, according to 2019 census data. The same is true in other major cities, including Atlanta, New York, Los Angeles, and Houston.”).

²² When I say that the problem is intersectional, I am referencing the framework that Professor Kimberlé Crenshaw articulated in 1989, that recognizes that a “failure to embrace the complexities of compoundedness . . . imports a descriptive and normative view of society that reinforces the status quo.” Kimberlé Crenshaw, *Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics*, U. CHI. LEGAL F. 139, 166-67 (1989). Intersectionality proposes that “placing those who currently are marginalized in the center” is the most effective way to ensure liberatory policy and “resist efforts to compartmentalize experiences . . .” *Id.* at 167. In the context of protecting renters from flood risk, this might mean centering the experiences of Black and brown low-income renters or low-income renters with disabilities and understanding how our current system creates disproportionate risk for these members of our communities.

²³ See *Most Tenants*, *supra* note 1 (“[M]ore than 70% of white Americans own homes, while fewer than 50% of Black and Latinx Americans do.”).

²⁴ See generally RICHARD ROTHSTEIN, *THE COLOR OF LAW: A FORGOTTEN HISTORY OF HOW OUR GOVERNMENT SEGREGATED AMERICA* 20-24 (2017) (cataloguing the history of discriminatory federal and local policies that segregated America and made homebuying nearly impossible for Black Americans).

²⁵ See Dorothy A. Brown, *Shades of the American Dream*, 87 WASH. U. L. REV. 329, 334-35 (describing how federal tax laws disadvantage Black taxpayers and discourage homeownership).

²⁶ See Robert Manduca, *Income Inequality and the Persistence of Racial Economic Disparities*, 5 SOCIO. SCI. 182, 182 (2018) (“In 1968, shortly after the passage of the Civil Rights Act, the median family income of African Americans was 57 percent that of whites. In 2016, after almost 50 years of anti-discrimination legislation, attempts to equalize access to education, and cultural change, it was 56 percent.”).

²⁷ See ROTHSTEIN, *supra* note 24, at 75 (2017) (describing a pattern of the United States government’s commitment to racially segregating neighborhoods by federally insuring mortgages for only all-white neighborhoods). For a more thorough discussion of the ways the real estate industry has undermined and discourage Black homeownership, see generally KEEANGA-YAMAHTTA TAYLOR, *RACE FOR PROFIT: HOW BANKS AND THE REAL ESTATE INDUSTRY UNDERMINED BLACK HOMEOWNERSHIP* (2019).

²⁸ Recent research shows that people of color are overrepresented in flood prone areas. Eric Tate, Md Asif Rahman, Christopher T. Emrich & Christopher C. Sampson, *Flood Exposure and Social Vulnerability in the United States*, 106 NAT. HAZARDS 435, 450 tbl.6 (2021); see also Frank, *supra*

the risk of flooding and a lack of understanding about that risk hurts low-income communities more than wealthier communities because of a lack of savings and safety nets.²⁹ More so, underground and basement level units are often the most affordable, again exposing more affordable units to higher risks of flooding.³⁰ Finally, low-income people are less likely to succeed in gaining access to disaster assistance following a flood.³¹

Flood damage is a risk for all renters and homeowners. But it presents compounded concerns for people of color and low-income renters. As Professor Kimberlé Crenshaw pointed out when she first wrote about intersectionality, if we keep the urgency of the problem for the most disadvantaged renters at the forefront, all renters will benefit.³² This approach, recognizing the “diverse social, economic, and ecological concerns” that impact the safety of a community, is exactly what environmental justice advocates propose.³³ Protecting renters from flood damage is an issue of racial and economic justice.

The problem of flood risk is further exacerbated because people generally misunderstand (that is, underestimate) their home’s flood risk.³⁴ This is due

note 17 (“[N]early 20% of [NFIP] claim dollars were paid in ZIP codes where at least one-quarter of the residents are black. Those ZIP codes, however, made up only 13% of the U.S. population, suggesting that flooding disproportionately affects neighborhoods with a substantial black population.”). This heightened vulnerability results from social stratification and related barriers. Tate et al., *supra*, at 436.

²⁹ See Rebecca Hersher, *Living in Harm’s Way: Why Most Flood Risk Is Not Disclosed*, NPR (Oct. 20, 2020, 4:50 AM), <https://www.npr.org/2020/10/20/921132721/living-in-harms-way-why-most-flood-risk-is-not-disclosed> [<https://perma.cc/EG3H-4ZJV>] [hereinafter *Harm’s Way*] (“The long-term costs of vulnerable groups being exposed to flood risks are really high, . . . because a house is usually a family’s biggest asset, and there are no savings to fall back on.” (quoting Lala Ma)); see also Flavelle et al., *supra* note 13 (“In more than two-thirds of states, . . . more minority residents also had a greater share of unmapped flood risk than the statewide average.”). Research points to lower property values and the development of multifamily housing in floodplains as factors that push low-income people into floodplains. Dalbyul Lee & Juchul Jung, *The Growth of Low-Income Population in Floodplains: A Case Study of Austin, TX*, 18 KSCE J. CIV. ENG’G 683, 691 (2014).

³⁰ See *Most Tenants*, *supra* note 1 (reporting that basement units are often the most affordable option in cities with significant climate-driven flooding, including Chicago, Philadelphia, Boston, and Washington, D.C.); see also Flavelle et al., *supra* note 13 (reporting that 87% of insurance claims for Chicago flood damage were from people in communities of color).

³¹ Lee & Jung, *supra* note 29, at 683.

³² Crenshaw, *supra* note 22, at 167 (“If [our] efforts instead began with addressing the needs and problems of those who are most disadvantaged and with restructuring and remaking the world where necessary, then others who are singularly disadvantaged would also benefit.”).

³³ Giovanna di Chiro, *Teaching Urban Ecology: Environmental Studies and the Pedagogy of Intersectionality*, 16 FEMINIST TCHR. 98, 99 (2006).

³⁴ See Ryan Kellman, Rebecca Hersher & Lauren Sommer, *Undisclosed: Most Homebuyers and Renters Aren’t Warned About Flood or Wildfire Risk*, NPR (Oct. 18, 2020, 9:00 AM), <https://www.npr.org/2020/10/18/918725965/undisclosed-most-homebuyers-and-renters-arent-warned-about-flood-or-wildfire-risk> [<https://perma.cc/GQA9-CBHK>] (describing the misleading nature of flood maps to potential homebuyers and lack of clarity of existing flood and fire disclosure laws).

to incomplete or poorly timed disclosure requirements,³⁵ outdated maps,³⁶ and an in-or-out dichotomy that communicates a false sense of safety.³⁷ We have robust data about flood history and risks, but people do not receive the information they need in a way that is useful in making decisions.³⁸ Even in localities where disclosure is required,³⁹ disclosure is incomplete: it requires disclosure of recent flood *history*, or sometimes disclosure of whether the property is in the SFHA. However, disclosure that a property is in the SFHA is *still* incomplete, as the United States' flood maps do not present a comprehensive picture of flood risk in our communities.⁴⁰

Discussion of the shortcomings of SFHA flood maps and their impact of renters' and homeowners' underestimation of flood risk requires some background on the purpose and creation of the SFHA maps. FEMA publishes flood maps that delineate the 1% annual chance floodplain (known as the "100-year flood") and the 0.2% annual chance floodplain (known as the "500-year flood") and is required to update flood maps every five years.⁴¹ Technically, if the map is not reassessed within that five-year window, the level of flood risk is "unknown," as risk changes over time due to a myriad of factors, including development and changing land use.⁴²

³⁵ See Carolyn Kousky, *How America Fails at Communicating Flood Risks*, BLOOMBERG CITYLAB (Oct. 11, 2018, 9:50 AM), <https://www.bloomberg.com/news/articles/2018-10-11/why-flood-risk-information-doesn-t-reach-the-american-public> [<https://perma.cc/W65N-48YE>] (arguing that efficient disclosure would include information about *how much* damage renters or buyers would sustain during a flood alongside how often such flooding is likely to occur and that such information should be "fast, easy, and free" to get); see also Kellman et al., *supra* note 34 ("[F]lood and fire disclosure laws that do exist provide information in confusing ways or give too little information too late in the homebuying process.").

³⁶ See *infra* notes 43–44 and accompanying text.

³⁷ See Kousky, *supra* note 35 ("Properties are either 'in' the flood zone or they are 'out' of it. This creates a false perception that on one side of an imaginary line, homes are safe, while on the other, they are at risk of flooding.").

³⁸ See *id.* (describing the obstacles homeowners and renters face in trying to access information about flood risk, even though robust flood data exists).

³⁹ Many states bearing the brunt of climate-change-driven flooding require no flood risk disclosure at all. See *How States Stack Up on Flood Disclosure*, NAT'L RES. DEF. COUNCIL, <https://www.nrdc.org/flood-disclosure-map> [<https://perma.cc/K3SW-VL95>] [hereinafter *Flood Risk Disclosure Laws*] (showing that 21 states, including Massachusetts, Virginia, and Florida have no disclosure requirements).

⁴⁰ See, e.g., Andrew Royal & Margaret Walls, *Flood Risk Perceptions and Insurance Choice: Do Decisions in the Floodplain Reflect Overoptimism?*, 39 RISK ANALYSIS 1088, 1088 (2019) ("68% of Houston homes that flooded in Hurricane Harvey in 2017 were located outside the 100-year floodplain" (citation omitted)); GAUL *supra* note 12, at 209 ("A surprising number of affected homes were located in places that weren't supposed to flood. The houses were in the so-called X Zones on the government's flood maps. In theory, they were outside the geography of risk.").

⁴¹ Joel Scata, *FEMA's Outdated and Backward-Looking Flood Maps*, NRDC: EXPERT BLOG (Oct. 12, 2017), <https://www.nrdc.org/experts/joel-scata/femas-outdated-and-backward-looking-flood-maps> [<https://perma.cc/8GBC-X976>].

⁴² *Id.*

But most flood maps are outdated.⁴³ New research estimates that the total number of those exposed to serious flooding in the United States is 260 to 310% higher than FEMA's maps suggest, due to a few fatal flaws in FEMA's methodology: FEMA relies only on past flood data, rather than future risk based on increased storm frequency and magnitude and sea-level rise, and it has failed to update over half of the nation's flood maps.⁴⁴

Beyond just the maps' outdatedness, their in-or-out standards of what *is* in a flood zone and what *is not* give a false impression of safety to those outside the SFHA.⁴⁵ Use of the phrase "100-year floodplain" even minimizes the very salient risk to those homes and properties within the SFHA—it makes a major flood event seem like a distant and rare occasion!⁴⁶

Our flood maps fail to account for key risk factors, leading to vast underestimation of which properties are at flood risk. FEMA's flood maps do not account for all sources of risk, and perhaps most notably, exclude rainfall flooding!⁴⁷

Finally, our flood maps do not take future risk into account.⁴⁸ In so excluding future risk, they fail to capture the existential truth that soon, taking into account the effects of climate change, these "100-year floods" will become annual occurrences in parts of the nation.⁴⁹

Given the flaws in how we perceive flood risk as binary, how often our flood maps are updated, and the incomplete metrics we use to assess flood risk, our flood maps vastly underestimate who is at risk of flood damage,

⁴³ See *id.* (discussing a recent Department of Homeland Security report that found that over half of all FEMA flood maps are either out-of-date or inaccurate); see also DIANE P. HORN & BAIRD WEBEL, CONG. RSCH. SERV., R44593, INTRODUCTION TO THE NATIONAL FLOOD INSURANCE PROGRAM (NFIP) 4 (2021) ("Flood maps adopted across the country vary considerably in age and in quality.").

⁴⁴ Wing et al., *supra* note 16, at 3.

⁴⁵ Risk is not binary and varies far more than is communicated. Bradt & Kousky, *supra* note 15.

⁴⁶ The same statistical likelihood captured by "100-year floodplain" could be articulated as "a 26-percent chance of a flood of a [sic] least one flood over the course of a 30-year mortgage." Kousky, *supra* note 35. This articulation in a more relevant timeframe (for homeowners) captures the way in which the "100-year floodplain" or even the "1% annual chance" fails to communicate the gravity of the risk. *Id.*; cf. Wanyun Shao, Hamed Moftakhari & Hamid Moradkhani, *Comparing Public Perceptions of Sea Level Rise with Scientific Projections Across Five States of the U.S. Gulf Coast Region*, 163 CLIMATIC CHANGE 317, 319 (2020) ("Unlike rapid onset climate-related hazards such as floods and hurricanes, [sea level rise] occurs in a gradual manner. As a gradual phenomenon, [sea level rise] is perceived both temporally and spatially distant by coastal residents.").

⁴⁷ Bradt & Kousky, *supra* note 15.

⁴⁸ See Scata, *supra* note 41 ("FEMA's flood maps look backwards in time and determine the size of the 100-year and 500-year floodplain based on past events.").

⁴⁹ Reza Marsooli, Ning Lin, Kerry Emanuel & Kairui Feng, *Climate Change Exacerbates Hurricane Flood Hazards Along US Atlantic and Gulf Coasts in Spatially Varying Patterns*, 10 NATURE COMM'NS 1, 2 (2019).

which in part explains why so many of those individuals experiencing flood damage in recent history believed they were not at risk.⁵⁰

Despite the lack of transparency around flood risk, residents must seek flood insurance independently, as it is not included in either renter's or homeowner's insurance.⁵¹ Coupled with the underestimation of risk plaguing both homeowners and renters, this creates a perfect storm for financial ruin for individuals who experience flood damage but did not purchase flood insurance because they had no awareness that their home was at risk of flooding.⁵² Renters may, at their discretion, buy into the NFIP.⁵³ Doing so requires a renter to first be in the SFHA, to know that they are at risk of flood damage, and to believe the cost of flood insurance is worth the saliency of the risk. Since most federal aid programs post-flood give aid to homeowners, rather than to renters who need help recovering belongings, relocating, or making repairs, renters are particularly at risk.⁵⁴

And, of course, there are no standard requirements for what flood risk disclosure should or must include. Most disclosure laws only require disclosure to homebuyers; even then, only twenty-nine states require disclosure to homebuyers.⁵⁵ In the two states with state-wide mandatory

⁵⁰ See Leslie Kaufman, Mira Rojanasakul, Hayley Warren, Jason Kao, Brittany Harris & Prashant Gopal, *Mapping America's Underwater Real Estate*, BLOOMBERG GREEN (June 29, 2020), <https://www.bloomberg.com/graphics/2020-flood-risk-zone-us-map> [<https://perma.cc/5H69-VX3M>] (reporting that, even using the in/out 1% annual risk standards FEMA employs, FEMA's flood maps underestimated the number of properties in the SFHA by 67%). Recent research found the flooding that occurred outside the 100-year floodplain during Hurricane Harvey in 2017 disproportionately impacted neighborhoods with more Black and Hispanic residents. See Kevin T. Smiley, *Social Inequalities in Flooding Inside and Outside of Floodplains During Hurricane Harvey*, 15 ENV'T RSCH. LETTERS 1, 7 (2020) (highlighting the compounding harms and risks associated with flood damage for people of color).

⁵¹ *Most Tenants*, *supra* note 1.

⁵² America's current system of separating the flood insurance risk pool from general homeowner's insurance and other disaster insurances is likely adding to the financial problems with the NFIP. There is significant scholarship on how including all disasters in the same insurance pool would prepare more people to respond to disasters and would be more economically efficient. See WORLD BANK GRP., SOVEREIGN CLIMATE AND DISASTER RISK POOLING 8 (2017).

⁵³ Two key differences in renters' policies from the NFIP are that renters' policies are optional and do cover personal belongings or contents that are damaged during a flood event. *Yes, Renters Can Buy Flood Insurance*, *supra* note 7.

⁵⁴ See *Most Tenants*, *supra* note 1 ("Federal disaster programs 'end up funneling aid to homeowners rather than renters' . . ." (quoting Dr. Miyuki Hino)). Disaster relief is just one of many ways in which homeowners are favored over renters in law and policy. See Sarah Schindler & Kellen Zale, *How the Law Fails Tenants (and Not Just During a Pandemic)*, 68 UCLA L. REV. DISC. 146, 153 (2020) (including disaster aid among the ways renters are treated as second-class, along with federal mortgage tax deductions, disproportionate amounts of single-family residential use zoning, and laws that require notice to homeowners, but not to renters, when new construction or zoning variances are proposed).

⁵⁵ *Flood Risk Disclosure Laws*, *supra* note 39.

disclosure to renters,⁵⁶ disclosure is premised on either flood history alone⁵⁷ or is premised on risk based on FEMA's flood maps⁵⁸ which, as discussed, are less than helpful.

This confluence of risk—that is, increased flooding across the board, the unique challenges of urban flooding, little to no federal disaster assistance for renters, disparate impacts faced by people of color and low-income residents, and minimal, if any, statutory requirement for information-sharing with renters—against the backdrop of general underestimation of risk, outdated and inaccurate flood maps, and a warming atmosphere, rising tides, and more, more intense storms, creates a dire situation requiring attention and action to protect renters.

II. CURRENT THEORIES OF OBLIGATION AND RECOURSE

To evaluate solutions to the problem of renters' flood vulnerability properly, I will first discuss the current obligations landlords have to their tenants regarding flooding, as well as renters' rights as they pertain to flood damage.⁵⁹ The current legal landscape provides both obligations before a flood and recourse options after flood damage has occurred. I will discuss them in turn.

A. Obligations Before a Flood

Landlords' legal obligations before a flood are generally statutorily imposed requirements of disclosure of flood risk, flood history, or both. As discussed above, this type of legal obligation is mandated at the state or local level, and far more states require disclosure to homeowners than renters. Even there, it is surprising how many states, particularly those on the coast and those who bear the brunt of climate-driven flood risk, do not require any type of flood disclosure.⁶⁰

1. State Statutes

Georgia and California, at the time this Comment was written, are the only states with state-wide requirements to disclose to renters any

⁵⁶ See discussion *infra* subsection II.A.1.

⁵⁷ GA. CODE ANN. § 44-7-20 (2015).

⁵⁸ CAL. GOV'T CODE § 8589.45 (West 2018).

⁵⁹ Although I plan to discuss the shortcomings in the current protective options for renters, this Part can also act as an overview of the options for renters who have suffered flood damage and wish to seek recourse.

⁶⁰ Twenty-one states have no state-wide requirements of flood risk or history disclosure to potential homebuyers. *Flood Risk Disclosure Laws*, *supra* note 39.

information regarding flood risk.⁶¹ Georgia's code covers flood history only; the law requires a landlord to provide written notice to potential tenants, before they sign a lease, if the property is prone to flooding. Specifically, the property is prone to flooding if "[it] has damaged any portion of the rented living space three times during the preceding five-year period."⁶² In the properties to which the statute applies, if a flood damages a renter's personal property and the landlord failed to provide the required notice, the landlord can be held liable for the damage.⁶³ Georgia defines flooding as water that enters the unit from "a river, stream, drainage ditch, or pool of collected rainwater."⁶⁴ Unfortunately, legislative history is lacking and the impetus for the disclosure law is not well-documented.

California law now requires that landlords must disclose to renters in every lease that meets the following conditions:

- (1) That the property is located in a special flood hazard area or an area of potential flooding, if the owner has actual knowledge of that fact. For purposes of this section, "actual knowledge" includes the following:
 - (A) The owner has received written notice from any public agency stating that the property is located in a special flood hazard area or an area of potential flooding.
 - (B) The property is located in an area in which the owner's mortgage holder requires the owner to carry flood insurance.
 - (C) The owner currently carries flood insurance.⁶⁵

Additionally, the California law requires landlords to include that tenants can find information regarding flood hazards through the Office of Emergency Services, that the landlord's insurance does not cover tenant personal property losses, and that the landlord has no further obligation to provide information concerning flood risk.⁶⁶ Although this information is required in the lease itself, the California Civil Code also requires any leasing

⁶¹ GA. CODE ANN. § 44-7-20 (2015). A curious quirk regarding Georgia's tenant disclosure requirement is that Georgia has no statutory or regulatory requirements for a seller to disclose a property's flood risk or past flood damage to a buyer. *Flood Risk Disclosure Laws*, *supra* note 39.

⁶² STATE OF GA. DEPT OF CMTY. AFFS., GEORGIA LANDLORD TENANT HANDBOOK 12 (10th ed. 2012), https://www.gwinnettcountry.com/static/departments/planning/pdf/Georgia_Landlord_Tenant_Handbook.pdf [<https://perma.cc/T7UF-RQKW>].

⁶³ *Id.* at 13.

⁶⁴ *Id.*

⁶⁵ CAL. GOV'T CODE § 8589.45(a)(1)(A)–(C) (West 2018).

⁶⁶ *Id.* at (a)(2)–(4).

agent to provide written notice that the unit is located with the SFHA prior to execution of a lease or rental agreement.⁶⁷

These disclosure requirements followed severe flooding in San Jose that forced the evacuation of 14,000 residents and caused significant damage.⁶⁸ After those storms, the California legislature found that tenants within impacted neighborhoods were not aware that the properties they rented were at risk of flooding and declared that landlords who have actual knowledge of flood risk must disclose such information.⁶⁹

Georgia and California's respective disclosure laws demonstrate the weaknesses in various disclosure strategies, as they currently stand. Since Georgia's code covers flood history only, landlords are not obligated to disclose whether the unit is in the SFHA.⁷⁰ Of course, SFHA-status is an imperfect metric, and although California's law requires disclosure to renters considering units in the SFHA, such disclosure excludes the two-thirds of properties that are flood-prone but *not* captured in FEMA's flood maps.⁷¹

In the wake of Hurricane Harvey, Texas lawmakers passed a bill that requires sellers to disclose more information about flood risk to potential homebuyers.⁷² Although representatives filed a separate bill that would require landlords to provide similar information to tenants, that bill failed.⁷³ However, Representative Armando Walle (D-Houston) has filed another version of the bill in hopes of it passing in the 2021 legislative session.⁷⁴ As written currently, the bill would require landlords to provide notice to tenants who reside in property located within the SFHA.⁷⁵ The bill also requires all landlords to provide notice and confirm if they are *unaware* of the property's

⁶⁷ CAL. CIV. CODE § 8589.3(a)(2) (West 2018).

⁶⁸ B. Edward McCutchan, Jr., *Now Prospective Tenants Must Also Be Informed if a Property Is in a Special Flood Zone*, CRES INS. (July 31, 2018), <https://www.cresinsurance.com/now-prospective-tenants-must-also-be-informed-if-a-property-is-in-a-special-flood-zone> [<https://perma.cc/3SKC-TU3Z>].

⁶⁹ *Id.*

⁷⁰ See GA. CODE ANN. § 44-7-20 (2015) (“[N]otify the prospective tenant . . . if flooding has damaged any portion of the living space covered by the lease . . . at least three times during the five-year period immediately preceding the date of the lease.”). Importantly, the Georgia statute makes no mention of the SFHA. *Id.*

⁷¹ See *supra* notes 43–44 and accompanying text.

⁷² Jen Rice, *Texas Lawmakers Gave More Flood Risk Disclosure Protection to Home Buyers, but Not Renters*, HOUS. PUB. MEDIA (May 31, 2019, 3:24 PM), <https://www.houstonpublicmedia.org/articles/news/2019/05/31/335237/texas-lawmakers-gave-more-flood-risk-disclosure-protection-to-home-buyers-but-not-renters> [<https://perma.cc/R4JF-X58F>].

⁷³ *Id.* Interestingly, the bill requiring disclosures to homeowners was filed by Republican representatives, while the bill requiring disclosures to renters was filed by Democrats. *Id.* For more about the partisan differences in flood risk policy, see Shao et al., *supra* note 46, at 320 where the authors found that Democrats were more likely to see sea level rise as a salient threat than Republicans.

⁷⁴ *New Bill, supra* note 5.

⁷⁵ H.B. 531, 87th Gen. Assemb., Reg. Sess. (Tex. 2021).

residence in the SFHA.⁷⁶ The bill provides for disclosure of flood history as well, and it requires disclosure if the landlord “knows that flooding has damaged any portion of a dwelling at least once during the five-year period immediately preceding the effective date of the lease”⁷⁷ The bill also excuses a landlord from disclosure if the property has been raised “above the 100-year floodplain flood levels in accordance with federal regulations.”⁷⁸ If passed, the bill would take effect January 1, 2022 and would be the first state-wide mandate requiring landlords to disclose to renters both whether their rental property resides within the SFHA and whether the property has been damaged by recent flooding.⁷⁹

2. Municipal Codes

Currently, city and similar local-level codes are likely the most salient source of law explicitly requiring flood disclosure to potential renters and protecting renters’ interests *before* a flood. Land use laws and building codes are almost exclusively managed by cities and municipalities, with some state and federal laws addressing more specific issues.⁸⁰ As has been discussed,⁸¹ Georgia and California are the only states with statewide requirements for mandatory flood disclosure. However, many municipalities fill in the gaps left by state laws.⁸²

For example, Lambertville, NJ City Code’s “Real Estate Disclosure of the Special Flood Hazard Area” provision requires disclosure to potential renters.⁸³ Lambertville requires that notification “includes a clear statement in writing informing him/her if the building or structure is all or in part mapped within the Special Flood Hazard Area (1% annual chance flood) on the effective FEMA Flood Insurance Rate Map. . . .”⁸⁴ Lambertville’s statute requires disclosure of both flood risk and flood history, and requires that, “[F]or potential renters, the disclosure shall note if the landlord has experienced flooding during his/her ownership.”⁸⁵ Lambertville’s code

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.*

⁸⁰ For example, federal law requires disclosure of any presence of lead-based paint to renters before signing a lease. Lead; Requirements for Disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards in Housing, 40 C.F.R. § 745 (1996).

⁸¹ See *supra* subsection II.A.1.

⁸² Although municipal laws are likely a strong source of protection for renters, surveying their existence and enforcement is a task far beyond the scope of this project, and is one that not even leading environmental or disaster legal groups have completed.

⁸³ LAMBERTVILLE, N.J. CODE § 10-8 (2020).

⁸⁴ *Id.*

⁸⁵ *Id.*

includes both SFHA and flood history, but it still does not account for flood risk outside of the narrow bounds of the SFHA. As such, it does not account for climate-change driven flood risk. Lambertville's flood mitigation policies are premised on the city's understanding that it "faces dual threats from floods—localized flash floods caused by heavy rains, and the rising of the Delaware River due to higher water volumes generated upriver."⁸⁶ The city points to the heavy flooding that occurred during Tropical Storm Irene in 2011 as a key indicator that flood mitigation is necessary.⁸⁷

Recall that FEMA's flood maps do not often account for flood risk due to heavy rainfall. Lambertville recognizes that much of its flooding challenges are caused by flash floods.⁸⁸ However, their code uses the SFHA as the trigger for required disclosure to potential renters! This demonstrates the gap in disclosure for renters who live in areas prone to rainstorm-driven flooding and the need for reform either in how our maps and SFHAs are determined, obligations to potential renters, or both.

B. Recourse After a Flood

Common law notions of landlord-tenant relationships, tort law, and breach of duty may inform certain paths tenants have for legal recourse in the instance that they have *already* experienced flood damage. In many regions where there are no statutory or regulatory requirements for flood risk disclosure, these means of recourse may be the only protection for a renter who has experienced flood damage.

1. Landlord-Tenant Law

Of course, landlord-tenant law is a logical source to look to when determining what disclosures landlords owe to tenants. Most landlord-tenant law is state-specific, although much of it is grounded in common law principles, so state laws look generally similar.⁸⁹ While landlord-tenant law will overlap significantly with statute-based law discussed above,⁹⁰ and tort

⁸⁶ *Flood Mitigation Information*, CITY OF LAMBERTVILLE, <https://lambertvillenj.org/resident/flood-mitigation> [<https://perma.cc/5CV2-GMSN>].

⁸⁷ *Id.*

⁸⁸ Which, again, FEMA does not consider when creating flood maps. Wing et al., *supra* note 16, at 3.

⁸⁹ Although state and local law make up most landlord-tenant obligations, federal law *can* mandate certain requirements, like disclosure about the presence of lead-based paint in a rental unit. Natalie Barefoot, Abigail Fleming, Daniela Tagtachian, Gabriela Falla, Bethany Blakeman & Natalie Cavellier, *There Will Be Floods: Armoring the People of Florida to Make Informed Decisions on Flood Risk*, FLA. B.J., Sept.–Oct. 2020, at 28.

⁹⁰ For example, the Philadelphia Code requires all renters to receive a "Certificate of Rental Suitability" "at the inception of tenancy." PHILA. PROP. MAINT. CODE § 9-3903 (2020). However,

law discussed below, the implied warranty of habitability unique to residential lease agreements persists across states and is a key theory when asserting renters' rights *after* flood damage has occurred.

The "implied warrant of habitability" is read into residential leases in most United States jurisdictions, and it requires that landlords keep their property "habitable."⁹¹ Generally, this warrant implies that tenants can withhold rent while landlords make repairs.⁹² Oftentimes, this warranty is coupled with protections for tenants to complain of housing code violations and provides for a tenant to break their lease without penalty.⁹³ Of course, the question of habitability is one of scope: what makes a lease uninhabitable? What is not included in the warranty?

For example, Philadelphia's "Certificate of Rental Suitability" requires the property to be habitable, but habitability is only measured by whether the property has working fire and smoke alarms.⁹⁴ In Texas, the warranty of habitability is explicit, and it only requires landlords "repair conditions that affect the physical health and safety of ordinary tenants."⁹⁵ Determining what affects physical health and safety and who the law considers an "ordinary tenant" are *huge* questions of fact. These vague terms give judges considerable power and make it likely that well-resourced or lawyered landlords can defeat tenants' claims.

The implied warranty of habitability can be used by tenants "as a sword . . . as well as a shield," that is, to seek damages after flooding has occurred and to seek abatement in rent.⁹⁶ In *George Washington Univ. v. Weintraub*, the tenants sued to recover damages for losses arising from flooding caused by maintenance, including reimbursement for hotel expenses and damage to their personal property.⁹⁷ Here, although the court found that the tenants could not recover on negligence grounds, it awarded damages to compensate "for expenses incurred in connection with occupancy of alternative housing

the certificate only requires working fire and smoke detection systems and does not include other measures of suitability. *Id.* at (2)(b)(iii).

⁹¹ *Implied Warranty of Habitability*, LEGAL INFO. INST., https://www.law.cornell.edu/wex/implied_warranty_of_habitability [<https://perma.cc/7MXK-Q7E3>].

⁹² *Id.*

⁹³ *Id.*

⁹⁴ PHILA. CODE § 9-3903 (2020).

⁹⁵ *Know Your Rights: Flood Water Damage if You're a Renter*, ABC13 HOUS. (Sept. 6, 2017) [hereinafter *Know Your Rights*], <https://abc13.com/harvey-hurricane-houston-texas/2384526> [<https://perma.cc/YR6D-JMNZ>] (describing Texas' Landlord-Tenant obligation, which is like obligations common across states and stems from the common law).

⁹⁶ 458 A.2d 43, 46 (App. D.C. 1983).

⁹⁷ *Id.* at 44-45.

following the flood and for personal property losses proximately caused by the flood.”⁹⁸

There are two important takeaways from this case as it applies to flooding caused by storms. First, the court here found that tenants could recover for personal property damages proximately caused by the flooding; it is unlikely this would be the case for flooding caused by storms.⁹⁹ Second, the management company argued that the exculpatory clause in the tenants’ leases relieved them of liability; the court, however, followed multiple jurisdictions and held that the warranty of habitability can never be waived by a private agreement of parties to a lease.¹⁰⁰

Case law has also described some other considerations pertaining to the implied warranty of habitability. First, the implied warranty of habitability may be applied to developers only when the developer knew or should have known about the latent defect, thus applying a more lenient negligence standard to developers.¹⁰¹ However, strict liability may apply to landlords who breach the implied warranty of habitability, obviating the requirement of a tenant to prove that the landlord was negligent and a proximate cause of the property’s inhabitability.¹⁰² Second, the implied warranty of habitability is an available claim for class action suits in most jurisdictions.¹⁰³ These holdings suggest that the implied warranty of habitability applies in situations where storms cause flood damage by maintaining a strict liability standard for the landlord. Further, the cases imply that groups of similarly situated plaintiffs, perhaps residents from various rental units owned by the same landlord, can bring a cause of action as a class.

The implied warrant of habitability holds great potential for tenants seeking recourse after flood damage, but it does not necessarily require any disclosure of flood risk or history before renting. Of course, there are limits

⁹⁸ *Id.* at 46.

⁹⁹ See, e.g., *Hernandez-Ortiz v. 2 Gold, LLC*, 96 N.Y.S.3d 18 (App. Div. 2019) (affirming that defendant landlord was not responsible for plaintiff’s damages caused by Superstorm Sandy—“an act of God”); *Hutchings v. Anderson*, 452 S.W.2d 10, 17 (Tex. Civ. App. 1970) (holding that the landlord and other defendants were not negligent, and thus not responsible, for basement flooding and property damage caused by a “sudden and unprecedented downpour of rain”); *Know Your Rights*, *supra* note 95 (“Landlords are not responsible for loss or damage to your personal belongings.”). However, in states where disclosure is required, like Georgia, a failure to disclose that leads to flood damage may evince a landlord’s negligence and thus lead to a plaintiff’s recovery for flood damage. See *supra* notes 61–64 and accompanying text.

¹⁰⁰ *Weintraub*, 458 A.2d at 47.

¹⁰¹ See, e.g., *Stillwater of Crown Point Homeowner’s Ass’n v. Kovich*, 820 F. Supp. 2d 859, 879 (N.D. Ind. 2011).

¹⁰² See, e.g., *Gottesman v. Graham Apartments, Inc.*, 47 Misc. 3d 1213(A), at *82–84 (N.Y. Civ. Ct. 2015).

¹⁰³ See *Menna v. Maiden Lane Props., Inc.*, No. 157710/15, 2018 N.Y. Misc. LEXIS 1482, at *11 (App. Div., Apr. 23, 2018) (granting class certification of a group of renters claiming breach of implied warranty of habitability against their landlord and property manager following Hurricane Sandy).

to the potential of landlord-tenant law. Obligations imposed by this body of law generally do *not* include a warranty to cover the loss or damage to personal belongings.¹⁰⁴ This exception further serves to highlight the importance of greater protection for renters subject to flood risk.

2. Tort Law

Tort actions arise when the legal duties between individuals are breached. Tort law can support a duty to disclose flood risk and history on the grounds that a landlord-tenant relationship creates a duty (as the tenant pays the landlord, the landlord must act in good faith) and typically establishes that the tenant justifiably relies on information from the landlord about the property in question. This type of duty is typically understood as the duty to disclose material information, and a breach of this duty could sustain a claim of negligent concealment or misrepresentation.¹⁰⁵ This understanding of the relationship between the landlord and the tenant, and the duty that flows from it, may be enough to both require disclosure and seek damages in the event that flood damage, whose risk should have been disclosed but was not, occurs. Importantly, like elsewhere in tort law, the existence of the landlord's duty to the tenant can eliminate any need to prove intent to deceive on the part of the landlord.¹⁰⁶

The theory of caveat emptor (or, perhaps "caveat lessee" is more apropos here) has been used to limit the duty to disclose. *Nelson v. Wiggs* describes this idea well.¹⁰⁷ In *Nelson*, homebuyers sought rescission of their purchase after their new home was inundated with seasonal flooding in the Everglades, which the seller did not disclose and which the homebuyers claimed to know nothing about.¹⁰⁸ Relying on the "buyer beware" rule, the court held that sellers *only* have a duty to disclose those material facts that are *not* "readily observable."¹⁰⁹ The court held that, because the buyers had lived in Florida for over ten years (though a different part of Florida, with different weather patterns), had not asked the seller about the risk or history of flooding, and could have learned about the seasonal flooding through "diligent attention,"

¹⁰⁴ See *supra* note 99 and accompanying text. But see *Weintraub*, 458 A.2d at 46 (holding landlord liable for property damaged caused by maintenance-responsible flooding).

¹⁰⁵ See *Nelson v. Wiggs*, 699 So. 2d 258, 260-61 (Fla. Dist. Ct. App. 1997).

¹⁰⁶ See *Wigod v. Wells Fargo Bank, N.A.*, 673 F.3d. 547, 574-75 (7th Cir. 2012) (describing that intent to deceive is not a required element of a claim under the ICFA).

¹⁰⁷ See 699 So. 2d at 260 (stating that the seller of a house is only under a duty to disclose facts materially affecting the value of the property when such facts are not readily observable or known to the buyer).

¹⁰⁸ *Id.* at 259-60.

¹⁰⁹ *Id.* at 260.

they could not recover.¹¹⁰ This idea that the buyer (or renter) is responsible for inspecting and obtaining information about risks that are readily observable limits the potential of tort law to protect renters, but also presents the question of *what* exactly is considered readily observable.

The dissent in the *Nelson* case makes a compelling case for striking down the caveat emptor defense altogether. For one, flood conditions are not necessarily “readily observable,” and here, there was no evidence that the buyers affirmatively understood the risk.¹¹¹ Further, an asymmetry of information places large administrative costs of seeking out information on buyers when the same information is readily available from a seller for little to no cost.¹¹² Finally, the caveat emptor doctrine seems to compel buyers to embark on searching expeditions and interview neighbors about conditions and risks, raising questions about the legal responsibility of a neighbor.¹¹³

While the dissent in *Nelson* seeks to get rid of caveat emptor shields to liability altogether, the defense is still protecting property owners from liability. In *Shaw v. Robertson*, the plaintiff sued the vendor from which she purchased a home for fraud, claiming that the vendor failed to disclose the property’s flood risk in bad faith.¹¹⁴ The plaintiff purchased the property in 2003, and approximately 18 months later, the property flooded during Hurricane Ivan.¹¹⁵ Following the flood, the plaintiff’s neighbor informed her that her property was within the SFHA and that FEMA had bought the property across the street because of its location in the SFHA.¹¹⁶ The plaintiff argued that her claim was viable under the passive concealment exception to the general rule of caveat emptor, which allows for claims of fraud or misrepresentation where defects are concealed to the extent that a purchaser could not detect them in the exercise of due diligence.¹¹⁷ The court determined that the plaintiff did not qualify for the concealment exception because due diligence would have revealed that, according to FEMA’s mapping, the property was at risk for flooding.¹¹⁸ The passive concealment exception presents an interesting option for renters who live in a flood-prone area not demarcated by FEMA’s maps and whose flood history was not disclosed to

¹¹⁰ *Id.* at 260-61.

¹¹¹ *Id.* at 262 (Sorondo, J., dissenting).

¹¹² *Id.* at 262 (“[I]t’s not common knowledge for every body [sic], but if you find the right people, the agencies that deal with it, it’s pretty common, commonly known.”).

¹¹³ *Id.* at 264 (“I am not prepared to conclude that a purchaser of residential property is obligated to canvass potential neighbors to determine whether there are any unseen problems with the neighborhood.” (internal quotation marks omitted)).

¹¹⁴ 705 S.E.2d 210, 211 (Ga. Ct. App. 2010).

¹¹⁵ *Id.*

¹¹⁶ *Id.* at 212.

¹¹⁷ *Id.*

¹¹⁸ *Id.* at 213.

them; while *Shaw* does not answer this question, it demonstrates that the passive concealment exception, while it exists, may be difficult to establish.

Tort law should seek efficient outcomes that protect individuals from avoidable risks. The caveat emptor defense, while regularly cited and used as a shield from liability, may begin to lose steam as it becomes clear that the most economically efficient option, and the one that protects renters the most, is one that gives the duty of disclosure to the party best suited to find and disclose flood risk information.

III. SOLUTIONS

Current means of protecting renters from flood loss include common law doctrine that can be used to assert the rights of renters following flood damage and seeking recovery. In certain states and municipalities, renters are warned about the flood history or risk of the unit ahead of signing their lease or rental agreement; however, these warnings are insufficient, as they are limited to those renters who are inside the demarcated SFHA, which can exclude up to two-thirds of all flood-prone property.¹¹⁹ The problem still stands that renters should have full, transparent information about the flood history and risk of their potential home prior to rental, as well as protection from unnecessary or unmitigated flood risk. Although legal recourse is an important failsafe in the case of disaster, preemptive solutions—so far, disclosure—can be more efficient in saving both renters and landlords time, money, and often, injury, casualty, and heartbreak. In this Part, I will discuss the movement to require disclosure to renters, challenges posed by that solution, and complementary options.

A. *A Proposed Solution: Mandatory Disclosure*

Much of the current conversation around protecting renters from flood damage highlights the disparity between disclosure requirements for homeowners and disclosure requirements for renters, and in doing so seems to advocate for greater flood risk and history disclosure to renters as the solution in and of itself.¹²⁰ Economists argue that people make better, more

¹¹⁹ See Wing et al., *supra* note 16, at 3 (finding that the number of Americans exposed to severe flooding is two to three times higher than what FEMA's maps suggest); see also Kaufman et al., *supra* note 50 (reporting that even when using FEMA's metrics, the flood maps underestimate at-risk properties by 67%); cf. Royal & Walls, *supra* note 40, at 1088 (finding that 68% of Houston homes that flooded during Hurricane Harvey were located outside of FEMA's mapped SFHA).

¹²⁰ See, e.g., *Flood Risk Disclosure Laws*, *supra* note 39 (comparing flood risk disclosure laws across states); *Most Tenants*, *supra* note 1 (arguing that the root cause of renters' flood damage is lack of information, and thus, the solution is requiring disclosure); *New Bill*, *supra* note 5 (reporting on a proposed bill requiring flood history disclosure to potential renters).

economically efficient, and less risky decisions when they are presented with valuable and relevant information.¹²¹ Others argue that mandatory disclosure will lead to greater mitigation efforts.¹²² Because so many individuals impacted by flood damage did not even know they were at risk, the seemingly obvious solution is to put them on notice.

For example, Florida lawyers have proposed that comprehensive disclosure should relate to three separate matters: the structures, the land, and the insurance in question.¹²³ Comprehensive disclosure would disclose damage from disaster, flooding history, and drainage problems; the nature and frequency of defects; and whether the property is located in the flood hazard zone.¹²⁴ Importantly, disclosure must be at the beginning of the transaction, so that renters feel that they have the information at a time when they can still use it to change their behavior.¹²⁵ If the disclosure occurs too far into any transaction, mounting sunk costs, feelings of duress, and practical concerns of cost, time, the need to find housing, and already having secured financing can functionally lock in a renter to a lease, even before it is signed.¹²⁶ Notice that this type of requirement would go beyond the NFIP requirements of disclosure of location within the SFHA and flood history; it would protect and inform even those renters who typically believe they are safe simply because they are outside of the SFHA.

* * *

Current articulations of the solution see disclosure as the pre-flood solution to renters' misunderstanding about their flood risk and vulnerability to flood damage.¹²⁷ In fact, I initially set out to propose just that in this paper; I saw required disclosure as *the* necessary pre-flood obligation to protect renters, rather than *one of many* necessary protections. However, disclosure alone is not enough, particularly when accounting for the equity considerations laid out in Part I.¹²⁸ While there is a lack of data on how

¹²¹ See Kousky, *supra* note 35 (“[P]articipants in [the] market need full information. Without it, they make decisions that are suboptimal.”).

¹²² See, e.g., Cristian Salazar & John Baker, *Opinion: Reform Flood Insurance So New Yorkers Know Their Risk*, CITYLIMITS (Oct. 26, 2020), <https://citylimits.org/2020/10/26/opinion-we-need-to-reform-flood-insurance-so-new-yorkers-know-their-risk> [<https://perma.cc/S9MV-Z3NY>] (“If we give people this information, they will be more prepared when making important and life-changing financial decisions, such as buying a house or renting an apartment.”).

¹²³ See Barefoot et al., *supra* note 89 (describing the ideal comprehensive disclosure requirement).

¹²⁴ *Id.*

¹²⁵ *Id.*

¹²⁶ *Id.*

¹²⁷ See *supra* notes 120–125 and accompanying text.

¹²⁸ See *supra* notes 22–33 and accompanying text.

disclosure of flood risk and history impacts renter behavior (again, there are only a few locations where it is currently required), I predict it will not have as much of an impact as proponents would like.¹²⁹ If anything, landlords will lower the prices of now-less-desirable, flood-prone rentals as demand decreases, and landlords who can say their units are *not* flood-prone can sell their units at a premium as demand for them increases.¹³⁰ Research on contract terms that disclose unfavorable information supports that the disclosure of negative terms has little impact on consumer behavior *ex ante* and suppresses litigation and remedy-seeking *ex post*.¹³¹ So, rather than levelling the playing field and increasing protection for renters, disclosure may inadvertently make flood-prone property more affordable up-front and further expose low-income renters to flood risk.¹³² Renters who do not have the luxury to spend time seeking out a unit on higher ground or the budget to pay for an in-demand, flood-safe unit will still rent the flood-prone units out of necessity. And because these renters were told their units might flood, their landlords now have defenses to liability when renters seek remedies for

¹²⁹ While there is a dearth of research on flood risk disclosure to renters, research on disclosures to homeowners in the real estate context demonstrates that such disclosures do not always have the intended protective effect. Dee Pridgen, *Putting Some Teeth in TILA: From Disclosure to Substantive Regulation in the Mortgage Reform and Anti-Predatory Lending Act of 2010*, 24 LOY. CONSUMER L. REV. 615, 618 (2012) (“In the ensuing years after the passage of TILA, it became clear that the TILA disclosures were too complex and too poorly presented to achieve their goals of promoting a competitive consumer credit market. The disclosures did not have much impact because consumers could not understand them and did not have the opportunity to use them for comparison shopping.”). Applying Pridgen’s conclusion to flood disclosure to renters aligns with what we understand regarding both the pitfalls of when we present flood risk information to consumers and also renters’ lack of bargaining power. See Kousky, *supra* note 35 (arguing that we provide flood risk and history information at the wrong times for consumers to act upon such information); Daniel D. Barnhizer, *Inequality of Bargaining Power*, 76 U. COLO. L. REV. 139, 170 n.130 (2005) (“Courts often hold, for example, that tenants have no bargaining power in dealing with prospective landlords . . .”).

Of course, if the goal of disclosure is simply to have renters purchase flood insurance, disclosure together with a lease term requiring flood insurance may be effective. Here, I suppose the question becomes what goals are sought when disclosing flood risk.

¹³⁰ See, e.g., Gladys Chigozie Gerald-Ugwu, Charles Chukwunwike Egolun & Fidelis Ifeanyi Emoh, *An Investigation of Factors Accelerating Rise in Building in the Flood Prone Areas of Port-Harcourt*, 3 ICONIC RSCH. & ENG’G J. 375, 382 (2019) (“[R]esiding in flood prone areas has a link with affordability since the rents passing in such areas are cheaper than [sic] what is obtainable in flood free areas.”).

¹³¹ See Tess Wilkinson-Ryan, *The Perverse Consequences of Disclosing Standard Terms*, 103 CORNELL L. REV. 117, 136 (2017) (“As such, most contracts are comprised almost entirely of terms that will never attract enough attention to change consumer behavior.”). Professor Wilkinson-Ryan finds that unfavorable contract clauses do very little, if anything, to influence consumer behavior *ex ante*, but that those same unfavorable (and in her paper, often unenforceable) clauses make consumers feel responsible *ex post* for having read and being beholden to those clauses. *Id.* at 166 (“[L]ook to parties’ own understandings at the time of assent . . . [it] is a question of the nature of the deal the court thinks the parties understood themselves to have assented to *ex ante*.”).

¹³² See Gerald-Ugwu et al., *supra* note 130, at 382 fig.1 (reporting survey data demonstrating that most individuals who knowingly rented in flood-prone areas did so because the rent was cheaper).

the flood damage they sustain. Yes, disclosures will enable well-resourced renters to make more informed decisions about where to live, but I predict that in doing so, disclosure alone will serve to continue the de facto segregation of low-income renters and renters of color.¹³³

B. *A Federal Solution: NFIP*

The question then becomes how to make flood risk information easily accessible to renters while properly accounting for the necessary equity considerations outlined above. Although the NFIP faces significant criticisms and challenges,¹³⁴ leveraging the program is one viable option that is already in place and could provide protection and relief to renters following reform and reauthorization. Congress has until midnight on September 30, 2022 to reform and reauthorize the NFIP,¹³⁵ and with a democratic House and Senate, the stage seems set to write in major reforms and protections, including protections for renters.¹³⁶ The federal government, and thus taxpayer dollars, subsidize the residential flood insurance through the NFIP. When storms cause billions of dollars' worth of damage on the coasts or along riverbanks, causing insurance claims far greater than the NFIP's budget, federal taxpayers subsidize homeowners' repairs, over and over.¹³⁷ However, the NFIP regularly faces difficulty in Congress when it comes time to reform

¹³³ Providing avenues for adaptation that only benefit the wealthy is what Stan Riggs, a coastal geologist, calls "climate gentrification." GAUL, *supra* note 12, at 229. The same concern arises if disclosure creates a context where wealthier renters can seek higher ground and safer units and poorer renters are priced out of flood-safe options and left only with the ability to pay for flood-prone units.

¹³⁴ See, e.g., Scott Gabriel Knowles & Howard C. Kunreuther, *Troubled Waters: The National Flood Insurance Program in Historical Perspective*, 26 J. POL'Y HIST. 327, 343 (2014) ("A key critique that has plagued the NFIP . . . over the years is the 'moral hazard' argument—a view that federal disaster-relief programs do not promote risk-averse behavior, but instead entice people to take risks they should not (like living on a flood-prone coastline)—and reward them when their luck (inevitably) runs out."); Mary Williams Walsh, *A Broke, and Broken, Flood Insurance Program*, N.Y. TIMES (Nov. 4, 2017), <https://www.nytimes.com/2017/11/04/business/a-broke-and-broken-flood-insurance-program.html> [<https://perma.cc/V8AN-3HLN>] ("This hurricane season, as tens of thousands of Americans seek compensation for storm-inflicted water damage, they face a problem: The flood insurance program is broke and broken."); @SamLMontano, TWITTER (Apr. 17, 2021, 8:19 AM), <https://twitter.com/SamLMontano/status/1383394691186495492> [<https://perma.cc/ZAZ2-JF4S>] (showing a picture of a record player on a sidewalk with a sign that says, "DOES NOT WORK BUT COULD BE FUN TO FIX!", with the caption, "The National Flood Insurance Program trying to get our attention.").

¹³⁵ *Congressional Reauthorization*, FEMA, <https://www.fema.gov/flood-insurance/rules-legislation/congressional-reauthorization> (Mar. 15, 2022) [<https://perma.cc/75TB-HRVF>].

¹³⁶ FEMA itself recognizes the need for serious reform to strengthen the NFIP's protections. See *id.* ("The level of damage from recent catastrophic storms makes it clear that FEMA needs a holistic plan to ready the nation for managing the cost of catastrophic flooding under the NFIP.").

¹³⁷ See GAUL, *supra* note 12, at 5-7 (describing the perverse incentives created by the current NFIP system and the ways in which federal taxpayers have subsidized billions in repairs and rebuilds, much of it for "vacation homes and investment properties").

and reauthorize the bill.¹³⁸ Representatives and constituents alike have concerns about the property value decline in coastal cities, particularly in vacation and resort towns.¹³⁹ Because of this, the NFIP rarely, if ever, receives the major reforms it needs—namely, better calibrated insurance premiums, larger SFHAs, and greater inclusion in the risk pool.¹⁴⁰

A discussion of the NFIP's potential to protect renters necessitates an introduction to the NFIP's history, purpose, and idiosyncrasies. The NFIP was first introduced in 1968, and it has twin goals: to offer primary flood insurance to properties with significant flood risk, and to reduce flood risk through the adoption of floodplain management standards.¹⁴¹

It is helpful to explain the second goal first. In order for homeowners to purchase insurance through the NFIP, their township or municipality must follow the floodplain management standards outlined in the program.¹⁴² When a community participates in the NFIP, the community agrees to implement particular flood-mitigating practices to qualify for the opportunity to purchase insurance through the NFIP and, if the community practices excellent mitigation, to qualify for lower insurance premiums.¹⁴³ For homeowners within the SFHA with federally backed mortgages, carrying a Standard Flood Insurance Policy ("SFIP") is mandatory.¹⁴⁴ An individual cannot be denied an SFIP, even if their home has flooded multiple times.¹⁴⁵ For homeowners in an NFIP-participating community, but outside the SFHA, lower-cost Preferred

¹³⁸ Since 2017, the NFIP has received 16 short-term reauthorizations to extend coverage while Congress attempted to come to a consensus on the contents of a longer-term modernized NFIP. Danielle Ling, *House Vote Prevents NFIP Lapse, Pending Senate Approval*, PROP. CAS. 360 (Sept. 24, 2020, 5:00 AM), <https://www.propertycasualty360.com/2020/09/24/house-vote-prevents-nfip-lapse-with-1-year-extension-pending-senate-approval/?slreturn=20210411160647> [<https://perma.cc/KA5E-ZXUJ>].

¹³⁹ See GAUL, *supra* note 12, at 103-07 ("Ironically, some of the strongest proponents of free markets support the demands of wealthy coastal homeowners. It results in a big income transfer from the poor to the rich." (quoting Kerry Emanuel)).

¹⁴⁰ See generally GAUL, *supra* note 12 (2019) (describing the reforms necessary to improve the NFIP and the lack of reform that has taken place in recent years).

¹⁴¹ HORN & WEBEL, *supra* note 43, at 1-2.

¹⁴² See *id.* at 9 ("In a community that participates or has participated in the NFIP, owners of properties in the mapped SFHA are required to purchase flood insurance as a condition of receiving a federally backed mortgage.").

¹⁴³ See *id.* at 20 (describing the Community Rating System, which encourages communities to improve upon minimum floodplain management standards and provides the opportunity to earn discounts on insurance policy premiums).

¹⁴⁴ *Id.* at 9-10. Of course, this mandatory purchase requirement may exclude homeowners with private mortgages or no mortgage. See *id.* at 11 ("[A] personal mortgage . . . or a mortgage issued by a private mortgage company . . . may not require flood insurance."). And, despite the mandatory purchase requirement, not all covered mortgages actually carry the insurance required. *Id.*

¹⁴⁵ *Id.* at 22. Some critics argue that this is a flaw of the NFIP, in that it promotes and rewards the risky behavior of living on the coast by continuing to subsidize it. See GAUL, *supra* note 12, at 107 (describing the rewards provided to coastal homeowners who cannot lose coverage on risky homeowning practices).

Risk Policies (“PRPs”) are available.¹⁴⁶ Individuals seeking PRPs *can* be denied coverage if there is “significant loss history” for their property.¹⁴⁷ For the most part, insurance premiums through the NFIP attempt to reflect true actuarial risk.¹⁴⁸ A final important aspect of the NFIP is that pre-FIRM buildings—those that were “constructed or substantially improved before . . . FEMA [had] published the first Flood Insurance Rate Map for the community”—receive a subsidy on their premiums.¹⁴⁹

Although the NFIP certainly has some challenges, I argue it could be enhanced to 1) require landlords to effectively mitigate flood risk at rental units and disclose any remaining flood risk and history prior to qualifying for flood insurance; 2) enforce the requirement that maps be updated every five years to accurately depict risk; and 3) incorporate future, climate-change-driven risk and storm-water flooding into flood risk analysis, so our flood maps do not only rely on flood history when determining risk.

1. Required Mitigation and Disclosure

Ensuring that landlords and property managers can only receive insurance claims and get recovery after a storm if they have done due diligence in ensuring that their tenants are aware of the flood risks of the property, too, is one necessary and important first step in protecting renters by ensuring transparent flood risk disclosure. To achieve this effect, the NFIP must include the requirement that landlords can only purchase flood insurance after proving that they have disclosed to tenants both flood history *and* flood risk, accounting for effects of anthropogenic climate change. In the most recent statute reauthorizing the NFIP (NFIP-Re), the authors included a provision, section 417, that would require “the disclosure of flood risk and prior flood damage to lessors and homebuyers prior to transfer.”¹⁵⁰ If passed, this requirement would represent a significant step towards ensuring transparency and ensuring that renters have the requisite information for making important decisions.

However, disclosure on its own is not enough to ensure equity in flood risk burden. The NFIP must also require landlords to perform necessary mitigation, such as raising units above the floodplain, before they may qualify for NFIP insurance. This requirement would ensure that low-income renters

¹⁴⁶ HORN & WEBEL, *supra* note 43, at 12.

¹⁴⁷ *Id.*

¹⁴⁸ *Id.* at 16.

¹⁴⁹ *Id.* Critics also argue here that this encourages owners to delay necessary flood mitigation. GAUL, *supra* note 12, at 107.

¹⁵⁰ National Flood Insurance Program Reauthorization and Reform Act of 2019, S. 2187, 116th Cong. § 417 (2019).

are not functionally forced into purchasing more flood-risky property than their wealthier renting peers.

2. Mandatory Map Updating

In order for mitigation and disclosure to capture all foreseeable flood risk, provisions in Title II of the NFIP-Re must be passed and enforced as well, including provisions enabling map modernization.¹⁵¹ FEMA currently claims that its mandate only requires it to *consider* updating the flood maps every five years, not to actually update the flood maps that often.¹⁵² However, flood risk is always changing as development continues and land-use patterns change.¹⁵³ To communicate the most recent understanding of a community's risk, maps must be updated more regularly.

3. Expanding the SFHA

The NFIP, in its current form, only protects renters living in the SFHA. Although research shows that the SFHA area will grow by at least 45% by 2100,¹⁵⁴ properties outside the SFHA, which represent about one-third of all flood damaged properties, need protection and transparency as well.¹⁵⁵ To address this, Congress must mandate the expansion of the SFHA. SFHA currently does not include future risk or risk of storm-driven flooding.¹⁵⁶ We could capture the other two-thirds of flood-risk properties simply by including these salient indicators of risk.

To further broaden the properties that are protected, I recommend that Congress mandate that the flood maps identify any property in the 5% or 10% annual chance floodplain (or, in other words, the 20-year or 10-year floodplain) and require disclosure as well as the opportunity to purchase flood insurance to renters in these floodplains. This would expand the SFHA, as well as the NFIP insurance pool, to include properties that are already experiencing the deleterious effects of climate change.

¹⁵¹ *Id.* § 208. The NFIP-Re's Title II also includes provisions for mitigation of high-risk properties, specific opportunities for urban mitigation, and other necessary mitigation reforms. *Id.* §§ 201–10.

¹⁵² HORN & WEBEL, *supra* note 43, at 4 n.20 (2021) (“FEMA is required to ‘assess the need to revise and update all floodplain areas and flood risk zones’ every five years, but not necessarily update the maps.” (quoting 42 U.S.C. § 4101(e))).

¹⁵³ See Scata, *supra* note 41 (“Flood risks change over time due to a variety of factors, like changing land use patterns.”).

¹⁵⁴ See AECOM, *supra* note 14, at ES-7 (“[T]he average increase in the SFHA by the year 2100 is projected to be about 40% or 45% . . .”).

¹⁵⁵ See *Harm's Way*, *supra* note 29 (“In fact, nearly one-third of flood damage happens outside official flood plains . . .”).

¹⁵⁶ See *supra* notes 47–50 and accompanying text.

CONCLUSION

As storms become more frequent and more severe, America must address the great costs—both economic and otherwise—inflicted on those who suffer flood damage. Renters are acutely vulnerable to flood risk and are currently under protected both before and after flooding. At first blush, the arguments for flood history and risk disclosure are pragmatic and benefit both renters and landlords; disclosure equips renters with the information to prepare for and mitigate potential losses and people need to and deserve to make thoroughly informed decisions about big investments. However, I caution that disclosure, as efficient and protective it seems in a theoretical sense, will not alone produce the desired effects of promoting transparency, ensuring informed decisions, and promoting public health.¹⁵⁷ Rather, I argue that disclosure will have the inadvertent effect of further shielding landlords from liability and continuing de facto segregation by driving down prices of flood-prone units. To truly protect renters, disclosure is necessary, as are greater requirements to mitigate and protect rental units in floodplains, and inclusion of future risk in updated SFHA maps.

¹⁵⁷ Barefoot et al., *supra* note 89.

* * * * *