Law's Disaster: Heritage at Risk

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Large-scale meteorological and geological events—including hurricanes, tropical storms, tornadoes, floods, blizzards, wildfires, earthquakes, extreme heat, and drought—have many consequences: loss of life, economic catastrophe, and destruction of homes among them. Perhaps less well-known are the threats to the historic and cultural sites that speak to human identity and create a sense of connection across generations. These sites are designated spaces of value, given their historical or cultural significance, and they are preserved to commemorate important moments in the story of the lived human experience. hurricanes can destroy old buildings, especially ones that have not been structurally reinforced. Extreme heat and intense precipitation can reduce the lifespan of historic material through weakened joints, eroded paint and other surface protections, and mold. Climate change has made many of these large-scale events more frequent and more intense. Further, the physical vulnerability of these places is deeply tied to social vulnerability of the populations they serve.

Given the climate's increasing risks to historic sites, one might assume that disaster-related planning, mitigation, and recovery efforts are being undertaken with increased urgency. Unfortunately, this is not the case.

This Article argues that historic places desperately need the protection of legal reforms at the intersection of disaster law and historic preservation law before they succumb to flame, water, wind, or the earth itself. It starts by explaining what is at stake: archaeological sites, vulnerable buildings, and even national landmarks like Mesa Verde and the Statue of Liberty. It then establishes the three stages where disaster-related legal

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protection of historic resources is needed: before, during, and after disaster. The Article next critiques the multi-governmental, federalist framework for heritage-related disaster law, and highlights two states and four local governments starting to make necessary reforms. While no physical or legal intervention will ever make historic sites last forever, we should change laws and policies to ensure these sites are more resilient in the face of obvious threats.

I. Introduction	490
II. Three Stages of Legal Protection	493
A. Before Disaster: Preparation	493
1. Cataloguing Historic Sites	493
2. Assessing Disaster Risks	495
3. Scenario Planning	496
B. During Disaster: Mitigation	496
C. After Disaster: Recovery	499
III. Federal Efforts	501
A. The Stafford Act	502
B. National Historic Preservation Act	504
C. National Flood Insurance Act	507
IV. State Efforts	509
A. An Overview	510
B. Connecticut	512
C. Louisiana	513
V. Local Efforts	515
A. An Overview	515
B. Annapolis	516
C. Philadelphia	517
D. Charleston	518
E. New Orleans	519
VI. Conclusion	521

I. INTRODUCTION

Climate change is disastrous for our historic places. Shotgun houses in New Orleans, California Modernist masterpieces, and entire Alaska Native villages may soon be engulfed by fire, water, wind, or the earth itself. Beloved national landmarks, such as Mesa Verde National Park, St. Augustine, and the

Statue of Liberty, are in harm's way.¹ Natural hazards to these sites include large-scale meteorological and geological events, as well as extreme weather conditions, including hurricanes, tropical storms, tornadoes, floods, blizzards, wildfires, earthquakes, extreme heat, and drought.

These places—historic and cultural sites and spaces—are significant to the people living in and around them, but they also hold meaning for the rest of us.² Historic places are more than just physical sites; they testify to shared history. They connect us to our past, often in deeply spiritual ways. They speak to human identity and create a sense of connection across generations. If we fail to act now, tangible cultural heritage, feats of architecture and engineering, and icons of our shared history could be lost forever.

Threats to historic sites thus have two intertwined dimensions: physical and social. As defined by disaster law scholar Robert Verchick,³ physical vulnerability refers to physical exposure to place-based risk, including built infrastructure, while social vulnerability refers to the susceptibility of a community's population to hazards.⁴ The intersection of these vulnerabilities is further highlighted by the fact that many historic places at risk are located in low-income communities.

When natural hazards harm human settlement, we call them disasters. Natural disasters can bring economic catastrophe, destroy homes and businesses, and kill people. Historic places

4. Id. at 38.

^{1.} See, e.g., Debra Holtz et al., Union of Concerned Scientists, National Landmarks at Risk: How Rising Seas, Floods, and Wildfires are Threatening the United States' Most Cherished Historic Sites (2014) (identifying thirty landmarks, from the Statue of Liberty to NASA facilities to Mesa Verde National Park, threatened with destruction from disasters resulting from natural hazards); David G. Anderson et al., Sea-Level Rise and Archaeological Site Destruction: An Example from the Southeastern United States using DINAA (Digital Index of North American Archaeology), 12 PLOS One (2017), available at https://perma.cc/V3VB-U8MK (finding that in the southeastern United States, a sea-level rise increase of one meter will destroy over 13,000 registered, and 1,000 unregistered, historic and prehistoric archaeological sites).

^{2.} For the best treatment of historic sites' emotional resonance, see THOMPSON M. MAYES, WHY OLD PLACES MATTER: HOW HISTORIC PLACES AFFECT OUR IDENTITY AND WELL-BEING (2013). As Mayes says: "These places spur our memory, delight us with beauty, help us understand others, give us a deep sense of belonging, and, perhaps most fundamentally, remind us who we are." *Id.* at xxii.

^{3.} See generally Robert R.M. Verchick, Disaster Justice: The Geography of Human Capability, 23 Duke Env't. L. & Pol'y Forum 23 (2012).

are particularly vulnerable because of their age and condition. An event such as a hurricane or earthquake could completely destroy an old building that has not been structurally reinforced. Unexpected conditions like extreme heat and intense precipitation can weaken joints, erode paint or other protections, and bring destructive mold. Climate change has made these events and conditions not only more frequent, but also more intense, reducing the lifespan of historic material.

Given the increasing risks to historic sites, one might expect more urgent disaster-related planning, mitigation, and recovery efforts. Unfortunately, this is not the case. Too often, disaster policy fails to incorporate or protect historic places. This Article argues that reforms at the intersection of disaster law and historic preservation law are desperately needed to protect historic sites before they are lost forever.

First, in Part II, this Article establishes the three stages where legal protection of historic resources is needed: before, during, and after disaster. Both explanation and critique, this Part finds U.S. disaster law ill-equipped to protect historic resources at each stage.

Second, it is important to understand the heritage-protection system currently in place. Parts III through V describe the multi-governmental, federalist framework for heritage-related disaster law. The requirements of federal disaster funding programs have introduced some uniformity to state and local governments' disaster mitigation planning. At the same time, federalism allows a significant amount of variation in the approaches of state and local governments in planning for, mitigating, and recovering from disasters caused by natural hazards. Here, the Article explores these variations, reviewing how two states and four cities have started integrating disaster mitigation and historic preservation considerations. Disasterrelated coordination among historic preservation authorities becomes less effective (sometimes even non-existent) the smaller a unit of government is. While local governments' efforts in a few cities are laudable, local reforms have not been adopted at the pace or scale needed.

The Article concludes by reiterating the specific steps that the United States must take to adequately protect its historic places. Making these changes will help us safeguard the physical and

emotional legacy of places to which people feel deeply connected, and which in turn connect us to each other. While no physical or legal intervention will ever make historic sites last forever, we should change laws and policies to ensure these sites are more resilient in the face of obvious threats.

II. THREE STAGES OF LEGAL PROTECTION

Historic resources are the product of a specific place and time. Age often makes the materials constituting a historical resource especially vulnerable to natural events; as a result, they require special treatment before, during, and after disasters.⁵ This Part broadly explains and critiques U.S. law at each stage, and previews the statutory deficiencies discussed in greater detail in Part III.

A. Before Disaster: Preparation

Before a disaster, communities should have a clear understanding of their resources and risk. To protect shared histories and value symbols, communities must catalogue their historic sites, assess disaster risks, and ensure they have planned for many scenarios.

1. Cataloguing Historic Sites

To maximize protection of historic sites, it is important to know where and what they are.⁶ In the United States, the most common mechanism for cataloguing historic resources is a register of historic places. Statutes, local ordinances, and agency regulations lay out a process and criteria for listing a site in an official register. After application and a formal evaluation,

^{5.} An alternate, and not necessarily incompatible, way of thinking about disaster is thinking about these stages as part of a cycle. See, e.g., Daniel A. Farber, Introduction: Legal Scholarship, the Disaster Cycle, and the Fukushima Accident, 23 DUKE ENV'T. L. & POL'Y FORUM 1, 2 (2012) (identifying "mitigation, emergency response, compensation, and rebuilding, with rebuilding completing the circle by including (or failing to include) mitigation measures"). Farber characterizes disaster phases as a cycle to tie the full context of a disaster to the emergency response stage, which often gets most of the attention.

^{6.} John T. Marshall & Ryan M. Rowberry, *Urban Wreckage and Resiliency: Articulating a Practical Framework for Preserving, Reconstructing, and Building Cities*, 50 IDAHO L. REV. 49 (2014) (identifying ways communities can catalogue their historic resources).

places designated as historic will have their names and locations added to these registers. At the federal level, the National Park Service maintains the National Register of Historic Places.⁸ States have state registers of historic places, as do some local governments that have established historic preservation programs.

Although various laws have created designation processes, registration through these processes is usually voluntary.9 Individuals must fill out a nomination form and submit fairly technical supporting documentation. As a result, a historic site may be unlisted not because it lacks significance, but because no one has had the time, funding, or knowledge to undertake the formal evaluation process. Another reason a site may be unlisted is that an owner may have expressly objected to a proposed listing. In addition, it is sometimes inadvisable to publicly list, and thereby expose to looting or destruction, certain tribal and archaeological artifacts and sites. Many—perhaps, even most—older resources are not listed on official registers of historic places.

Clear, uniform requirements for cataloguing designated properties can help standardize information needed to more The National Park Service should accurately assess risks. coordinate a major digitization and standardization project for the National Register of Historic Places and for the state registers through the 50 federally-funded State Historic Preservation Offices and Tribal Historic Preservation Offices. Eventually, this project should include local registers of historic places. In addition, even as standardization occurs, policymakers at all levels of government must ensure unlisted but qualifying historic places are counted. governments can use the age of the building as a proxy for

^{7.} See generally Sara C. Bronin & Ryan M. Rowberry, Historic Preservation Law IN A NUTSHELL ch. 2 (2nd ed. 2018) (identifying all relevant legal parameters for the designation process at the federal, state, and local levels).

^{8. 54} U.S.C. § 302101 (2018) (identifying buildings, structures, objects, sites, or districts eligible for listing on the National Register).

^{9.} The voluntary nature of designation differs among jurisdictions. For example, owners of properties proposed to be individually listed on the National Register of Historic Places have the right to object to having their property listed. 54 U.S.C. § 302105 (2018). However, owners of properties within a historic district do not have the same right, unless a majority of owners in the proposed district submit notarized statements. 36 C.F.R. § 60.6(g) (2020). State and local jurisdictions have different rules.

historic value, and encourage disaster researchers to model scenarios on neighborhoods, whether they have been historically designated or not. Formally, they can modify laws to expand listings on registers of historic places by establishing funding programs for independent nominators and relaxing certain technical requirements.

2. Assessing Disaster Risks

Because not all historic sites have been catalogued, it is difficult to assess the risks they may bear. If they were catalogued, we could accurately model the way natural hazards may impact them.

Scientists are already using models to make educated guesses about how disasters might threaten human settlement generally. For example, sea level-rise data can be used to assess flooding risks; data on the frequency of fracking can help predict earthquakes; and drought incidents can be correlated with wildfires and erosion. Yet only a handful of states and local governments, several of which are described in this Article, have applied predictive disaster modeling to historic places. Even where applied, the predictive models suffer because we have not identified and catalogued all of our historic resources in the first place.

In addition to the barriers to identifying sites as historic described above, data collection and integration present additional issues.¹⁰ Data on historic resources in the United States are not collected on or accessible via a single platform, either on a national or regional level. No central or searchable map for all designated resources exists. While some states and cities have digitized registers of historic places, these are typically not in an open-source format that can be used and manipulated by the public or researchers.

Without the ability to manipulate, compare, or even share data on historic sites, disaster models will fail to incorporate sites of historical and cultural importance into risk calculations

^{10.} See John T. Marshall & Ryan M. Rowberry, *Urban Wreckage and Resiliency: Articulating a Practical Framework for Preserving, Reconstructing, and Building Cities*, 50 IDAHO L. REV. 49, 74–76 (2014) (stating that indicators of urban resiliency include the existence of a historic resources inventory that documents the majority of a city's known historic resources utilizing GIS).

and preparation. Unifying data on disaster modeling and the catalogue of historic properties on a national scale is thus necessary to address the significant threats posted by natural hazards.

3. Scenario Planning

Given the many uncertainties that surround natural hazards, planning for many scenarios—with decision-making that adapts as conditions change—is required. The federal government uses funding processes to encourage state and local governments to prepare disaster plans, but the federal grants do not require these governments to actually incorporate historic properties into their disaster planning. Similarly, while the federal government can withhold funding from states that fail to engage in statewide preservation planning, there is no federal requirement that preservation plans take natural hazards into account. Parts III and IV identify a small group of state and local government whose planning and programs integrate both historic preservation and disasters.

Planning for different scenarios is important because it ensures that communities are able to take into account the risks of natural hazards on historic properties. A funded mandate for integrative planning that is embedded either in federal disaster programs or federal historic preservation programs would ensure state and local governments take these risks seriously, and understand how to act when the disaster occurs.

B. During Disaster: Mitigation

Even without a full national risk assessment, individual communities are using available information to mitigate the impacts of natural hazards on historic resources. Depending on the situation, the most effective mitigation techniques may involve a change to the resource, including elevating, moving, or even partly demolishing or significantly reinforcing it. Other forms of mitigation may include fortifying the resource through landscape interventions like sea walls or fire breaks. Any of these interventions have the potential to threaten the resource's historic character and material integrity.

Laws dictate whether and how a historic resource or its environs may be modified to protect against a disaster when it strikes. Most important among these guidelines are the Secretary of the Interior Standards for the Rehabilitation of Historic Properties, colloquially known as the Secretary's Standards (or the "Standards"). The Standards govern federal historic tax credits, federal agencies, and federally-funded projects. They have also been incorporated into state and local standards for rehabilitation by reference. Widespread incorporation in as many as 86% of local jurisdictions has expanded the Standards' impact beyond federal policy and properties on the National Register of Historic Places. In places with local historic commissions, property owners often must demonstrate compliance with the Standards (or the Standards with minor local modifications) before receiving permission to build.

The Secretary's Standards provide ten general guidelines, each no more than three sentences long, all with the primary goal of retaining the resource's historic character. Among other things, the Standards suggest avoiding significant alterations of historic materials while preserving distinctive features, finishes, and construction techniques. The Standards also prohibit chemical or physical treatments that can damage historic materials and urge the replacement of deteriorated materials in kind.

The National Park Service occasionally issues guidance in interpreting the Standards. In 2019, it published long-awaited guidance on how the Standards should be applied to historic resources at risk of one particular natural hazard: flooding.¹⁴

^{11.} See 36 C.F.R. § 67.7 (2020).

^{12.} For a full discussion about how the Secretary's Standards fail to ensure that historic places are adapted to climate change, see Sara C. Bronin, *Adapting National Preservation Standards to Climate Change*, in TOWARD SUSTAINABILITY AND EQUITY: ENVISIONING PRESERVATION POLICY REFORM (Erica Avrami ed., forthcoming 2021).

^{13.} Erica Avrami et al., Confronting Exclusion: Redefining the Intended Outcomes of Historic Preservation, 8 CHANGE OVER TIME 102 (2018).

^{14.} See Nat'l Park Serv., Guidelines on Flood Adaptation for Rehabilitating Historic Buildings (2019), available at https://perma.cc/N6UZ-RNSF. The Park Service has also published several guidance documents on the topic of historic and cultural resources and climate change. See, e.g., Nat'l Park Serv., Climate Change Response Strategy (2010), available at https://perma.cc/H5X4-VGBG; Nat'l Park Serv., A Call to Action (2015), available at https://perma.cc/MM5K-DM6V; Nat'l Park Serv., Climate Change Action Plan 2012-2014 (2012), available at https://perma.cc/Q3ZF-STAB; Nat'l Park Serv., Policy Memorandum: Climate Change and Stewardship of Natural Resources, available at https://perma.cc/4AXF-N33H. See also Anthony Veerkamp, Preservation in a Changing

The publication offers, for the first time, scenarios in which the elevation or moving of historic structures, or even the abandonment of the first floor, may be acceptable measures to mitigate flood risk. The Park Service goes so far as to recognize demolition as a treatment, stating, "in making land-use and planning decisions for a community or neighborhood, there may be situations when it is necessary to identify sacrificial historic sites or structures." While flooding guidance falls short in other areas, there are at least attempts to ensure the Standards adapt to growing climate concerns.

Flood-related guidance has helped property owners determine how to mitigate flood risks. The Park Service should issue similar official interpretations of the Standards for other disaster types. For example, hurricanes, tornadoes, and blizzards bring strong winds and precipitation that may require visible structural reinforcement or chemical preparations. The Standards do not explicitly address this issue, although a plainlanguage interpretation suggests that these resource-saving treatments may be prohibited.16 Similarly, a serious wildfire threat may require moving structures or changing landscapes to build fire buffers. But, again, the Standards do not anticipate such modifications, nor do they make explicit provisions for disasters. Reinforcement of historic properties in earthquakeprone areas is also needed—particularly for wood-frame buildings and unreinforced masonry buildings.¹⁷ Yet the Standards do not explain how necessary seismic retrofits will be treated.

In sum, the Park Service must clarify how the Standards might be interpreted for resource threats beyond flooding. This guidance must balance practicality with the need to preserve historic integrity.

Climate: Time to Pick Up the Tab, 29 FORUM J. 13–14 (2015), available at https://perma.cc/YT95-P8AH.

^{15.} NAT'L PARK SERV., GUIDELINES ON FLOOD ADAPTATION FOR REHABILITATING HISTORIC BUILDINGS 54 (2019), $available\ at\ https://perma.cc/N6UZ-RNSF..$

^{16. 36} C.F.R. § 67.7 (2020); see Bronin, supra note 12.

^{17.} RACHEL COX, NAT'L TRUST FOR HISTORIC PRES., CONTROLLING DISASTER: EARTHQUAKE-HAZARD REDUCTION FOR HISTORIC BUILDINGS (2001).

C. After Disaster: Recovery

After a disaster strikes, the law must ensure that recovery efforts consider historic resources. Like pre-disaster planning, post-disaster recovery hinges primarily on funding from congressional and state programs. In these programs, some funding may be devoted expressly to historic resources. As noted in Part II, federal funding may be subject to federal statutes, such as the National Environmental Policy Act and the National Historic Preservation Act, which require accounting for the effects of certain actions on particular historic resources. Review under these statutes sometimes results in denials for alterations that can protect a resource from future disasters.

Additionally, Congress and state legislatures have established policies governing insurance companies, requiring them to take certain things into account when insuring private property in areas prone to natural hazards. Insurance law dictates whether historic structures can feasibly be rebuilt, and whether coverage is available at all. Both the funding programs and insurance policies are covered in Part II in greater detail.

States have also begun to develop new policies for repeatedly-hit areas. The use of eminent domain to condemn private property through so-called "buyout" programs is one of the most controversial of these policies. Through these programs, states acquire vulnerable properties and prevent further activities from occurring on them. States may also demolish any structures on the properties, including historic properties. At least three states—New York, New Jersey, and Vermont—have developed buyout programs for properties that have experienced past flooding. New Jersey has allocated some funding specifically for condemning property within certain floodplains

^{18.} See John Travis Marshall, Weathering NEPA Review: Superstorms and Super Slow Urban Recovery, 41 Ecology L. Q. 81, 120–121 (2014), available at https://perma.cc/9HEQ-FUYK (explaining how these federal statutes impede long-term recovery in urban areas because of the way they integrate with federal funding and articulating five principles the federal government should incorporate in a new unified federal review process).

^{19.} See generally Stellina Napolitano, Proactive Natural Disaster Recovery and Resilience in the Northeast: Should Governments Exercise Buyout Programs and, if Necessary, Eminent Domain, to Prevent Disaster?, 33 PACE ENV'T. L. REV. 325 (2016), available at https://perma.cc/8F8K-WFCF.

for conservation purposes,²⁰ but it is not clear that it has made any provisions for the treatment of historic structures that are condemned. Provisions to relocate, document, or otherwise protect historic fabric should be incorporated into buyout programs, which will become increasingly relevant as climate change makes extreme weather events stronger and more frequent.

Preservationists must also consider how the law treats debris that results from a disaster, including building-material debris that is historically significant, or archaeological or tribal artifacts disturbed by the disaster. When post-disaster debris has traveled across property lines or debris from multiple properties is intermingled, it may be difficult to determine ownership priority for the purpose of determining who may collect the debris. State law dictates who owns archaeological resources found on private land, but it is less clear to what extent such rules apply in the case of randomly distributed debris.²¹ Debris that includes tribal artifacts covered by the Native American Graves Protection and Repatriation Act of 1990 may have to be identified and go through the process of repatriation to the relevant tribe.

Finally, preservationists must be part of the decision-making process for post-disaster recovery techniques and funding allocations. Their role is pivotal. First, they can help to salvage historic debris, prevent debris intermingling, and ensure that debris is protected from disaster recovery activities. Even ensuring that site operators delineate what is called "lay down" space to put historic debris slated for sorting would have an important effect. Second, they can ensure that damaged historic resources are only demolished as a last resort. And third, they can advise on treatments that reduce damage to historic resources and that most appropriately respond to specific

^{20.} See, e.g., Blue Acres Floodplain Acquisitions, N.J. DEP'T OF ENV'T. PROT. (Apr. 1, 2021), available at https://perma.cc/H87P-9W3W.

^{21.} Ryan M. Seidemann et al., How Do We Deal with this Mess? A Primer for State and Local Governments on Navigating the Legal Complexities of Debris Issues Following Mass Disasters, 61 U. MIAMI L. REV. 1135, 1162–63 (2007) (identifying this issue and stating: "[i]t may be unconstitutional for a government to return the artifacts to individuals without evidence of their place of origin because doing so may constitute a divestiture of the true landowner's private property rights in the event that the artifacts are given to an incorrect recipient. There seems to be no clear or correct answer regarding what to do in such situations.").

weather incidents. Federal disaster programs do have a historic preservation component, as noted in Part II. But not all state and local governments engage preservationists during the recovery phase—or protect historic artifacts at all.

* * *

Disaster policy requires close coordination between preservation officials, disaster management officials, and property owners. These stakeholders must be jointly involved in preparation, mitigation, and recovery. Policymakers should ensure that the law plays a formal role in ensuring this participation. With this basic critique of the three stages of legal protection in mind, we turn next to specific relevant programs at the federal, state, and local levels.

III. FEDERAL EFFORTS

Federal law reigns supreme over all other law.²² Put in very simple terms, when Congress enacts a statute, that statute preempts contrary state and local laws, except where the power to legislate in a particular arena has been expressly reserved for the states. For these reasons, it is important to start the discussion about disaster-related legal protections for historic places at the federal level.

Three key federal laws impact state and local decision-making in preparing for, mitigating, and recovering from disaster impacts on historic properties. The first is the Stafford Act, which offers funding and other assistance to state and local governments, and thus has the most direct impact on their decision-making. Second, the National Historic Preservation Act requires federal agencies to consider the effects of any "undertaking," including certain disaster management strategies, on historic properties. Finally, the National Flood Insurance Act impacts the ability of historic property owners to

^{22.} U.S. CONST. art. VI, cl. 2, states: "This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the Supreme law of the land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding."

rebuild or rehabilitate their properties after flooding, the most common type of natural hazard.

Together, these laws establish the conceptual framework within which state and local governments protect (or ignore) historic places. This framework hinders effective protection. Even the administration of these laws is fragmented: while the National Historic Preservation Act is largely administered by the National Park Service, the other two laws are administered by the Federal Emergency Management Agency.

A. The Stafford Act

The Robert T. Stafford Disaster Relief and Emergency Assistance Act, ("the Stafford Act") delineates the powers of the Federal Emergency Management Agency (FEMA) and authorizes federal aid for tribal nations, states, local governments, and individuals in the event of a major disaster.²³ This financial, logistical, and technical aid is available for both disaster preparations and post-disaster recovery.

In order to qualify for FEMA assistance, would-be recipients must satisfy an extensive set of requirements derived from agency rules, policies, and guidelines. For example, for planning grants distributed through FEMA's hazard mitigation program, the Stafford Act encourages "development of land use and construction regulations" and requires state and local governments to develop an approved mitigation plan. Since the passage of the Disaster Mitigation Act (which amended the

^{23. 42} U.S.C. § 5121 et seq (2018). A major disaster is defined to include "any natural catastrophe (including any hurricane, tornado, storm, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under this Act to supplement the efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby." *Id.* § 5121. The Stafford Act also covers emergencies, which can encompass other types of catastrophes. The Stafford Act has been amended several times since passage, including in 2000, 2006, 2013, and 2018.

^{24. 42} U.S.C. § 5121(b)(5) (2018).

^{25. 42} U.S.C. § 5131(c)(1) (2018) (requiring "a comprehensive and detailed State program for preparation against and assistance following, emergencies and major disasters"); see also 42 U.S.C. § 5133(g)(7) (2018) (allowing the President of the United States to take into account the submission by a state or local government of a mitigation plan in determining whether to award technical or financial assistance).

Stafford Act in 2000), many FEMA grant programs also require that state and local governments adopt hazard mitigation plans.²⁶ Because such plans are subject to FEMA approval,²⁷ there is some degree of uniformity among state and local plans. But not all of these plans include historic properties.

In 2005, FEMA issued a report about integrating historic property and cultural resource considerations into hazard mitigation planning directed at states, local governments, and tribal officials.²⁸ The report recognized that "[t]he loss of these resources is all the more painful and ironic considering how often residents rely on their presence after a disaster, to reinforce connections with neighbors and the larger community, and to seek comfort in the aftermath of a disaster."29 Accordingly, FEMA suggested governments follow four steps: organize resources, assess risks, develop a mitigation plan, and implement the plan and measuring progress. In 2008, the Department of the Interior issued similar guidance as part of the Preserve America federal-government-wide initiative, directed at the same audience as the 2005 FEMA report.³⁰ As noted below, some jurisdictions have followed this guidance and created cultural resource hazard adaptation and mitigation plans. But too many have not.

In 2013, the Sandy Recovery Improvement Act amended the Stafford Act to establish a process for unifying and expediting federal environmental and historic preservation review in the event of a major disaster.³¹ A memorandum of understanding, signed by 14 agencies, outlines the particulars of that review process.³² It includes the creation of a formal guidance document

^{26.} See, e.g., 42 U.S.C. § 5165 (2018).

^{27.} Id.

^{28.} FEMA, INTEGRATING HISTORIC PROPERTY AND CULTURAL RESOURCE CONSIDERATIONS INTO HAZARD MITIGATION PLANNING (2005), available at https://perma.cc/CW63-DE89.

^{29.} *Id*. at v.

^{30.} Susan West Montgomery, U.S. Dep't of the Interior, Preparing to Preserve: An Action Plan to Integrate Historic Preservation into Tribal, State, and Local Emergency Management Plans (2008), available at https://perma.cc/7UJX-NFLT (suggesting that state, local, and tribal governments integrate historic resources into risk assessment, hazard mitigation planning, and emergency response and recovery).

^{31. 42} U.S.C. § 5189(g) (2018).

^{32.} U.S. DEP'T OF HOMELAND SEC. ET AL,, MEMORANDUM OF UNDERSTANDING ESTABLISHING THE UNIFIED FEDERAL ENVIRONMENTAL AND HISTORIC PRESERVATION

establishing the process and mechanisms for this agency review, as well as the use of a 2013 protocol developed by the Advisory Council on Historic Preservation about FEMA's duties to review its impacts on certain historic resources, discussed further below.³³ FEMA's obligations arise from Section 106 of the National Historic Preservation Act, discussed next.³⁴

B. National Historic Preservation Act

The National Historic Preservation Act imposes duties on federal agencies to analyze the impacts of certain activities on resources either listed on or eligible for the National Register of Historic Places.³⁵ The Act also creates State Historic Preservation Offices (SHPOs), which administer various federal programs and reviews at the state level. These SHPOs are usually responsible for maintaining state registers of historic places, and for establishing a procedure by which Native American groups can create Tribal Historic Preservation Offices. The Park Service has also established a certified local government program.³⁶ Only local governments that qualify as certified local governments through this program are eligible for federal funding. Despite these formal decision-making structures, as noted above, the federal historic preservation regime neither requires nor facilities a catalogue of threatened properties.

For purposes of this discussion, the key part of the National Historic Preservation Act is its most central regulatory provision, commonly known as Section 106. Section 106 requires the head of any federal agency with jurisdiction over an "undertaking" to "take into account the effect of the undertaking on any historic property."³⁷ Federal regulations define an undertaking to include any "project, activity, or program funded in whole or in part" by a federal agency, including non-federal

REVIEW PROCESS FOR DISASTER RECOVERY PROJECTS (2014), available at https://perma.cc/6DJZ-FSFE.

^{33.} *Id*.

 $^{34.\,\}mathrm{FEMA},\,\,\mathrm{HMA}$ EHP RESOURCES AT-A-GLANCE GUIDE 2 (2013), available at https://perma.cc/448F-RZUP.

^{35. 54} U.S.C. § 300101 et seq (2018).

^{36.} NAT'L PARK SERV., CERTIFIED LOCAL GOVERNMENT PROGRAM, available at https://perma.cc/8MAF-BGXT.

^{37. 54} U.S.C. § 306108 (2018).

programs carried out by federal assistance and activities requiring a federal permit.³⁸ The contours of this term have been hotly contested in the courts.³⁹

Generally not contested, however, is the way federal agencies apply Section 106 during post-disaster emergency response. 40 Federal financial assistance, such as the FEMA disaster relief funds discussed above, would trigger Section 106 review for historic properties because the funding itself counts as a federal undertaking under the National Historic Preservation Act. 41

Federal regulations allow agencies to adopt alternate procedures for dealing with historic properties during "operations which respond to a disaster or emergency declared by the President, a tribal government, or the Governor of a State or which responds to other immediate threats to life or property."42 The regulations also offer guidance circumstances in which a local government official is serving as the federal agency official for Section 106 purposes, which may be the case when the local government is receiving federal funds for disaster recovery. In such circumstances, the chief elected official or local legislative body may declare an imminent threat to public health or safety. As a result, actions that would otherwise be considered undertakings are exempt from Section 106 procedures if neither the State Historic Preservation Office nor the federal agency called the Advisory Council on Historic Preservation objects within a week.⁴³

Other provisions apply for undertakings implemented within thirty days of a disaster or declared emergency. Federal regulations offer a blanket exemption from all Section 106 requirements for "[i]mmediate rescue and salvage operations

^{38. 36} C.F.R. § 800.16(y) (2020).

^{39.} See Sara C. Bronin & Ryan M. Rowberry, Historic Preservation Law in a Nutshell 80–89 (2nd ed. 2018).

^{40.} See Role of Section 106 in Disaster Response, ADVISORY COUNCIL ON HISTORIC PRES., available at https://perma.cc/R6W2-KXVR (2019). It is important to note that although FEMA funding is featured in this Article, other federal funding programs may trigger Section 106, including the Bureau of Land Management Emergency Management Program and the Emergency Preparedness Disaster Assistance Program of the Small Business Administration. See id.

^{41.} FEMA, supra note 28.

^{42. 36} C.F.R. § 800.12(a) (2020).

^{43. 36} C.F.R. § 800.12(c) (2020).

conducted to preserve life or property."⁴⁴ The Advisory Council on Historic Preservation has further explained that the relevant federal agency must determine whether an action can be delayed to allow for notification or consultation with normally-required consulting parties without endangering people's lives or property.⁴⁵ If so, the federal action will not be considered exempt under this regulation.⁴⁶ In theory, this exemption suggests that historic buildings affected by a disaster could be demolished. In practice, widespread destruction of historic sites within thirty days of a disaster is rare. More commonly, it takes months or even years for a community to grapple with the effects of a disaster.

In addition to the blanket Section 106 exemption for immediate rescue and salvage, the National Historic Preservation Act also allows for "programmatic agreements" that allow federal agencies to deviate from standard Section 106 procedures.⁴⁷ A programmatic agreement may be used for undertakings where effects "cannot be fully determined prior to approval of an undertaking" and "[w]here other circumstances warrant a departure from the normal section 106 process."⁴⁸ The Advisory Council on Historic Preservation may also designate an agreement as a "prototype" programmatic agreement that can be used for particular types of undertakings.⁴⁹ Pursuant to this authority, the Council worked with the National Conference of State Historic Preservation Officers, the National Association of Tribal Preservation Officers, and the Federal Emergency Management Agency to designate in 2013 a prototype for

^{44. 36} C.F.R. § 800.12(d) (2011). There is another potential waiver for another part of the National Historic Preservation Act, the so-called Section 110, which protects an elite category of historic sites, known as the National Historic Landmarks. A federal agency head must determine that emergency action necessary to preserve human life or property would be impeded if it undertook its Section 110 responsibilities. *See* 36 C.F.R. § 78.3(a) (2007).

⁴⁵. Advisory Council on Historic Pres., supra note 40.

^{46.} Id. This guidance document offers these examples of non-exempt responses: "cleanup activities after a tornado has passed; permanent replacement of utilities damaged by a disaster; and repair of buildings and structures that have been damaged by a disaster but are not endangering people or other properties."

^{47.} See 36 C.F.R. § 800.14(b) (2020).

^{48.} See 36 C.F.R. \S 800.14(b)(1)(ii), (v) (2020).

^{49.} See 36 C.F.R. \S 800.14(b)(4) (2020).

disaster recovery.⁵⁰ There are current programmatic agreements between FEMA and State Historic Preservation Offices of several states, including California, New Jersey, Wisconsin, and Hawaii, as well as many federally recognized Indian tribes.⁵¹

The National Historic Preservation Act is not the only "stop, look, and listen" procedural constraint on federal agencies. The National Environmental Policy Act also requires federal agencies to review their impact on properties listed on or eligible for the National Register of Historic Places before they conduct what the statute calls "major federal actions." Often, actions subject to both Section 106 and the National Environmental Policy Act will be reviewed simultaneously by the agency. While this Article will not delve into any greater detail about the National Environmental Policy Act, it is important to note that agencies seeking to abide by that statute confront, often in parallel, many of the same issues that arise in Section 106.

C. National Flood Insurance Act

The National Flood Insurance Act also establishes important federal policies related to historic preservation during the post-disaster stage.⁵³ Specifically, the Act establishes the National Flood Insurance Program, which offers insurance to property owners and encourages local governments to regulate and manage activity within floodplains.⁵⁴

The Program has special provisions for historic structures, which the Act defines to include not only properties listed on or eligible for the National Register of Historic Places, but also certain properties on state and local registers.⁵⁵ Federal regulations exempt alterations of these historic structures from strict compliance with Program requirements, as long as "the

^{50.}FEMA Prototype Programmatic Agreement, ADVISORY COUNCIL ON HISTORIC PRES., available at https://perma.cc/R88R-LNDE (last accessed May 22, 2020).

^{51.} Section 106 Agreement Database and Disaster Recovery Programmatic Agreements Database, HUD EXCHANGE, https://www.hudexchange.info/resource/3675/section-106-agreement-database/ (click on "Disaster Recovery Programmatic Agreements Database") (last accessed Apr. 10, 2021).

^{52. 42} U.S.C. § 4332(C) (2018); see also FEMA, HMA EHP RESOURCES AT-A-GLANCE GUIDE 2 (2013), available at https://perma.cc/HZ7A-WJL5.

^{53. 42} U.S.C. §§ 4001-128 (2018).

^{54. 42} U.S.C. § 4011 (2018).

^{55. 44} C.F.R. § 59.1 (2020) (definition of "historic structure").

alteration will not preclude the structure's continued designation as a 'historic structure." The procedure for variances, or express waivers of the regulations, covers all historic structure repairs and rehabilitations.⁵⁷ provisions mean that property owners rebuilding historic structures after a disaster will not have to comply with Program requirements that a structure be moved, or that a site be regraded. Theoretically, an owner could even decline rebuilding the structure at all.

The rationale behind the exemption for historic properties appears to be that the preservation of historic fabric in situ is of higher value than the mitigation of flood risks. The exemptions may appear consistent with a plain reading of the Secretary's Standards. But in reality, the exemption has had a more detrimental effect on historic places. They enable property owners to take risks in siting resources, financially supporting the repair and rebuilding structures in flood-prone locations.⁵⁸ Until the National Park Service issued its flood-related interpretations of the Secretary's Standards in 2019,59 the Standards also appeared to prohibit the very changes—such as raising or moving structures—that would enable historic places to withstand future risks. As a result, for many years, the National Flood Insurance Program rules did not help prevent the destruction of historic resources. Rather, they may have in fact made damage more likely.

Prior to 2012, historic buildings were eligible for subsidized flood insurance, but this provision was phased out over four years by the Biggert-Waters Act. 60 Criticisms of the National Flood Insurance Program notwithstanding, the loss of this subsidy may have negative effects on both individual landmarks and historic neighborhoods. 61 People will be less likely to invest

^{56. 44} C.F.R. § 59.1 (2020) (definition of "substantial improvement").

^{57. 44} C.F.R. § 60.6 (2020).

^{58.} Many believe that the National Flood Insurance Program has subsidized rebuilding in floodplains, when in reality, it should have been designed to prevent rebuilding in floodplains altogether.

^{59.} See NAT'L PARK SERV., GUIDELINES ON FLOOD ADAPTATION FOR REHABILITATING HISTORIC BUILDINGS (2019).

^{60.} FEMA, HISTORIC STRUCTURES AND THE BIGGERT-WATERS FLOOD INSURANCE REFORM ACT OF 2012 FACT SHEET (2013), available at https://perma.cc/3NTM-NNLL.

^{61.} Jenifer Eggleston & Jen Wellock, The National Flood Insurance Program and Historic Resources, 29 FORUM J. 34, 45 ("We may potentially see entire neighborhoods

in historic places if it becomes financially infeasible to secure their investment. The Program has therefore become another element of federal disaster law that discourages or thwarts historic preservation.

IV. STATE EFFORTS

While federal disaster-related laws are insufficient in key respects, state laws might be even less well-coordinated. State governments may choose to address the risks of natural hazards to historic places through pre-disaster planning, including a State Historic Preservation Plan, a State Hazard Mitigation Plan, or both. These plans have the potential to guide and coordinate policies, priorities, and funding allocations. While some states have formally connected historic preservation and disaster policies, many have done so only superficially. Some do not require any coordination whatsoever between disaster management and historic preservation officials.

Unfortunately, as demonstrated by a 2016 study further discussed below, fewer than half of all states address historic preservation in their hazard mitigation plans, and only half of state historic preservation plans address natural hazards in a significant way.⁶² A handful of states have achieved somewhat greater coordination in pursuit of these important goals. This Part provides an overview of states' efforts and then describes two states' approaches in greater detail.

Of pre-disaster planning, mitigation, and post-disaster recovery, states have primarily played a reactionary role in two stages: mitigation to avoid the effects of disaster itself, and post-disaster recovery. No state has enacted clear, statewide policies regarding the construction, reinforcement, relocation, or selective demolition of historic resources to account for effects during a disaster. Moreover, state disaster recovery programs are typically shaped by federal emergency management protocols, which, as noted above, typically do not take historic properties into account. This Part therefore focuses on pre-

abandoned as the cost to own and maintain a property becomes more and more prohibitive.").

^{62.} Douglas Appler & Andrew Rumbach, Building Community Resilience Through Historic Preservation, 82 J. Am. Plan. Ass'n 92, 95 (2016).

disaster planning, where at least some states have tried to make progress.

A. An Overview

State planning for disaster in a way that accounts for historic resources can take several forms. States may choose to adopt State Historic Preservation Plans (SHPPs), State Hazard Mitigation Plans (SHMPs), or both. The National Historic Preservation Act requires each state to produce a SHPP if it seeks to take advantage of federal support for its State Historic Preservation Office. 63 There are no explicit requirements for these plans to include disaster preparation for historic places. However, states have a strong incentive to develop SHMPs. As noted above, most federal disaster relief funding may hinge on whether a state has adopted a SHMP. These two planning documents have the potential to coordinate and complement each other, but in practice the plans are often developed in isolation.

According to a 2016 study, 32 states address the need to consider heritage preservation in disaster management planning in a significant way.⁶⁴ The study analyzed how preservation and disaster planning has become integrated by looking at both SHPPs and SHMPs in all 50 states.⁶⁵ The study found that "historic preservation is not well accounted for in SHMPs," that 60% of plans "do not include a representative from historic preservation on the core planning team or as an active member of the planning process," and that only 26% of SHMPs "explicitly discuss the protection of historic resources in the mitigation strategy as a goal, objective, or specific action item."66

^{63. 36} C.F.R. § 61.4(b)(1) (2020) ("The SHPO must carry out a historic preservation planning process that includes the development and implementation of a comprehensive statewide historic preservation plan that provides guidance for effective decision making about historic property preservation throughout the State.").

^{64.} Appler & Rumbach, supra note 62, at 95-96. The states cited by the study as having adequate heritage preservation is a priority in disaster planning include: Alaska, California, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Montana, Nevada, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, Virginia, Washington, and Wisconsin.

^{65.} Id.

^{66.} Id. at 96.

Looking at both of these criteria combined, the study found that half of all states had neither in their SHMPs.⁶⁷ Similarly, the study found that half of SHPPs "did not address natural hazards in a significant way."⁶⁸

Even the states with "adequate" plans may be lacking. California, for example, fails to mention historic resources in any substantive way in its 2018 Hazard Mitigation Plan, although the state is regularly threatened by flooding, earthquakes, and Similarly, its latest Historic Preservation Plan wildfire.69 devotes just one short paragraph to natural hazards.⁷⁰ Respondents to a survey in that plan ranked natural disasters twenty-second on a list of twenty-five threats to historic sites. and ranked natural disaster recovery dead last in a long list of "important" programs offered by the State Historic Preservation Office.⁷¹ Interestingly, California's legislature has adopted laws that deal with life safety issues related to historic properties. For example, the California Unreinforced Masonry Building Law requires local governments in the most intense seismic zone to enact programs to mitigate hazards from potentially dangerous historic buildings.⁷²

The following sections consider two states—Connecticut and Louisiana—with integrated planning policies, which may result from longstanding preservation programs and ongoing, immediate needs to prepare for disasters. In the case of Louisiana, these policies also touch on necessary mitigation of negative effects during a disaster.

^{67.} Id.

^{68.} Id. at 96-97.

^{69.} See Cal. Governor's Office of Emergency Servs., State of California

HAZARD MITIGATION PLAN (2018), available at https://perma.cc/U5DJ-6E4L.

^{70.} CAL. STATE PARKS, SUSTAINABLE PRESERVATION: CALIFORNIA'S HISTORIC PRESERVATION PLAN 36 (2013), available at https://perma.cc/HPP7-MH7A.

^{71.} Id. at 70, 73.

^{72.} See Cal. Gov't Code §§ 8875-8875.95 (2020). The local building department must notify property owners of unreinforced buildings and may create a hazardous building program, require stronger buildings, change occupancy levels, allow demolition, upgrade structural standards, or create certain financial incentives for repairs. Id. § 8875.2(b). See also Ronald B. Reiss, California's S.B. 547: Local Government Balancing of Public Safety and Historic Preservation, 26 URB. LAW. 347 (1994).

B. Connecticut

Connecticut has focused on the pre-disaster stage in integrating historic preservation with disaster policy. Planning documents that help to integrate these two concerns include the Connecticut SHPP⁷³ and SHMP,⁷⁴ as well as a pair of companion reports: Resilient Historic Resources: Best Practices for Planners⁷⁵ and Historic Preservation and Resiliency Planning in Connecticut.⁷⁶

Several goals within these documents confirm the state's commitment to resiliency in historic places. The SHPP's Goal 4, "Develop a Resiliency Strategy for Historic Resources," lays out four specific objectives to help Connecticut preserve its historic resources in the face of natural hazards, including those that are likely to intensify with climate change. Similarly, the Connecticut SHMP includes Goal 59, which is to "[i]ncrease support for state-level cultural and natural resources initiatives to increase resiliency of cultural and natural resources from disasters" and to "[e]xpand [State Historic Preservation Office] resiliency-focused technical assistance." The SHMP also includes a goal to conduct outreach to owners and stewards of historic properties that may be at risk.

Connecticut's State Historic Preservation Office issues resilience planning companion reports, and these stipulate best practices for local governments. 80 Resilient Historic Resources, for example, identifies four steps to resilience for historic resources: prepare, withstand, recover, and adapt. 81 The preparation step includes locating historic resources and understanding their vulnerabilities, planning for risk,

^{73.} CONN. STATE HISTORICAL PRES. OFFICE, SHARED STEWARDSHIP: 2018–2023, STATEWIDE HISTORIC PRESERVATION PLAN (2018), available at https://perma.cc/T6UL-5LT9.

^{74.} CONN. DEP'T. EMERGENCY SERVS., 2019 CONNECTICUT NATURAL HAZARDS MITIGATION PLAN UPDATE (2019), available at https://perma.cc/EAH8-ZKTE.

^{75.} R. Christopher Goodwin et al., Resilient Historic Resources: Best Practices for Planners (2019).

^{76.} R. CHRISTOPHER GOODWIN ET AL., HISTORIC PRESERVATION AND RESILIENCY PLANNING IN CONNECTICUT (2019).

^{77.} CONN. STATE HISTORICAL PRES. OFFICE, supra note 73, at 28-29.

^{78.} CONN. DEP'T. EMERGENCY SERVS., supra note 74, at 507.

^{79.} Id. at 506.

^{80.} R. CHRISTOPHER GOODWIN, ET AL., supra note 75, at 2 (2019).

^{81.} Id. at 9.

integrating planning documents, educating stakeholders, and planning for mitigation.⁸² The "withstand" step is the work that would take place during a disaster and includes implementing and executing the plans created in the first step.⁸³ The recovery step, triggered immediately following the disaster, includes executing the disaster recovery protocol, enforcing design guidelines and requirements during rebuilding, and good communication and collaboration between stakeholders.⁸⁴ Finally, the guide recommends an adaptation phase, where stakeholders revise and update planning documents in light of what was learned during the preceding disaster.⁸⁵ While the guide is Connecticut-specific, it is designed to be used and adapted by other jurisdictions, whether state or local.⁸⁶

Importantly, Connecticut has completed a mapping project that combines field assessments and data for coastal archaeological resources with projected sea level rise and flood plain data. Similar documentation and mapping remain to be done for other historic resources throughout the state and for other types of natural hazards.

So far, Connecticut's efforts have been largely confined to predisaster preparations, and there is more work to do. But it has gone farther than most states in taking federal guidance and marshaling state-specific expertise to address historic properties at risk.

C. Louisiana

Louisiana, which lost hundreds of historic buildings to Hurricane Katrina and subsequent hurricanes between 2005 and 2008, is another state that has taken significant steps to integrate historic preservation into disaster planning, as well as to coordinate some statewide mitigation efforts. The Louisiana Historic Preservation Plan originated from a strong partnership between the State Historic Preservation Office and the Governor's Office of Homeland Security and Emergency

^{82.} *Id*.

^{83.} Id.

^{84.} Id.

^{85.} *Id*.

^{86.} Id. at 4.

Preparedness.⁸⁷ Like Connecticut, Louisiana has begun to create a cultural resources map. Currently, the map includes information on historic structures located in twenty coastal parishes most at risk of future storm damage.⁸⁸ According to the State Historic Preservation Office, the map allows the state to "respond to disasters quickly while considering potential impacts to historic properties."⁸⁹

Louisiana has also taken steps to help local governments and historic property owners undertake an important mitigation practice for historic buildings in flood-prone areas: building elevation. The Louisiana Department of Historic Preservation has published extensive guidance for elevating historic buildings while preserving their integrity.⁹⁰ The guidelines were developed in order for the U.S. Department of Housing and Urban Development to comply with Section 106 of the National Historic Preservation Act in funding the rehabilitation of historic houses in the Gulf Opportunity Zone. 91 As noted in Part II.B. above, Section 106 requires federal agencies to take into the account the effect of its actions on historic places. Although many federally funded state disaster actions have triggered Section 106 review, it is unusual that the Section 106 process resulted in permanent construction guidelines. This is an interesting model to consider for other states receiving disaster funding in the future.

* * *

Only a handful of states have undertaken efforts to harmonize laws involving the preparation for, mitigation of, and recovery from disaster with laws protecting historic places. That I could find only two states' regimes worth highlighting in this Article suggests that in the vast majority of the country, state historic preservation and disaster laws are not at all well-integrated.

 $^{87.\,\}mathrm{LA.}$ State Historic Pres. Office, Ingredients for Preservation Partnerships in Louisiana 2017 to 2025 7 (2017), available at https://perma.cc/UZ6C-KCQ8.

^{88.} Id. at 31-32.

^{89.} Id. at 31.

^{90.} La. Office of Cultural Dev., Elevation Design Guidelines for Historic Buildings in the Louisiana GO Zone 5 (2014), $available\ at\ https://perma.cc/8L4K-V63T.$

^{91.} Id. at 2.

Moreover, there is an overemphasis on flooding risks, and very little attention to other natural conditions—especially wind-related, fire-related, and extreme heat—that can have a devastating effect on historic places. And there is an almost exclusive focus on planning, when the other two legal stages of protection—mitigation and recovery—are equally, if not more important.

V. LOCAL EFFORTS

With critiques of relevant federal and state laws as background, we finally turn to the role of local governments in ensuring that historic places are protected from disaster. There are over 35,000 general-purpose sub-county local governments in the United States.⁹² While a handful of these—probably fewer than twenty—have tried to address disaster-related heritage preservation in earnest, the overwhelming majority have not.⁹³ The truth is that local governments are not the ideal level of government to address this issue, given the complex nature of natural hazards. This Article nonetheless reviews a few cities' efforts to integrate planning, hazard mitigation, and heritage protection.

A. An Overview

Local governments in the United States often have significant autonomy to determine their own laws, policies, and procedures. State constitutions or state legislatures may grant local governments specific enabling authority or broader "home rule" authority. Alternatively, a state may be silent as to whether it intends to exercise the police power in a certain arena, or whether it intends to preempt local governments in particular areas of policymaking. Some jurisdictions interpret that silence as granting local governments authority to act.

^{92.} U.S. Census, Census of Governments tbl.3 (2017), available at https://perma.cc/3XES-ZMNA.

^{93.} See Andrew Rumbach et al., Are We Protecting Our History? A Municipal-Scale Analysis of Historic Preservation, Flood Hazards, and Planning, J. Planning Ed. & RSCH. (2020) (finding that 74 percent of Colorado's National Register-listed historic districts overlapped with floodplains yet almost uniformly lacked basic legal protections).

governments with authority may address the intersection between historic preservation and disaster in a variety of ways. Among them are local hazard mitigation plans and local historic preservation guidelines. Some communities are using FEMA's guidelines, discussed above, to create Cultural Resource Hazard Adaptation and Mitigation Plans. On the preservation front, there are at least 4,000 municipalities regulating locally-designated historic districts throughout the country.94 Usually, a locally-designated historic district has some local regulation, which typically allows a historic district commission to review applications for demolition, alteration, and new construction within the district. 95 Local laws require the vast majority of these reviews to adhere to the federal Secretary's Standards which, as discussed in Part I.B., fail to address natural hazard risk in any meaningful way.

Local governments generally do not have the funding, staff capacity, or expertise to undertake the concerted, coordinated effort required to effectively protect historic sites from natural hazards. Doing so may involve documentation of disaster risks, creation of mitigation plans, identification of vulnerable historic resources, new funding programs, or some combination of these actions. Annapolis, Philadelphia, Charleston, and New Orleans have each taken a different approach, and we turn to their efforts next.

B. Annapolis

Annapolis, Maryland, has focused on integrating climate disaster and historic resource preservation planning in several ways.⁹⁶ The city has developed a Cultural Resource Hazard Mitigation Plan (CRHMP) following the approach recommended by FEMA.97 Per the CRHMP recommendations, the city is

^{94.} Sara C. Bronin, A Census of Local Historic District Legislation (May 12, 2021) (unpublished manuscript) (on file with author). See also Julia H. Miller, National TRUST FOR HISTORIC PRESERVATION, A LAYPERSON'S GUIDE TO HISTORIC PRESERVATION LAW (2008) (counting 2,300 locally-designated districts).

^{95.} See Sara C. Bronin & J. Peter Byrne, Historic Preservation Law 268-71, 328 (2012) (discussing the criteria and procedures of local historic district regulation).

^{96.} See Lessons from Keeping History Above Water: Annapolis, U.S. NAT'L COMM. OF THE INT'L COMM, ON MONUMENTS AND SITES, available at https://perma.cc/25AB-4SMN. 97. Lisa Craig, Weather It Together: Annapolis' Model Planning Effort, 29 FORUM J. 47, 49-50 (2015).

updating its comprehensive plan to include recommendations for responding to sea level rise. The CRHMP also recommends revisions to its historic preservation ordinance, and the development of design guidelines for preventive mitigation measures and procedures for salvage and recovery operations. The city has adopted tax credit incentives to encourage preventive mitigation and has created hazard mitigation priorities in its capital improvements plan. 99

The Maryland Historical Trust, a statewide nonprofit organization, promotes the CRHMP as a model planning document for historic districts. Yet other Maryland towns have not chosen to adopt the same type of planning documents, despite the fact that many of the shoreline communities are subject to similar risks.

C. Philadelphia

Like Annapolis, Philadelphia has focused on planning efforts, particularly regarding flooding. Philadelphia's efforts included a significant investment in a data collection effort about historic properties and their risks. This effort stemmed from a partnership between FEMA, the Pennsylvania State Historic Preservation Office, and the Pennsylvania Emergency Management Agency (PEMA) to integrate hazard mitigation and historic preservation planning.¹⁰¹ According to the State Historic Preservation Office, this Disaster Planning for Historic Properties Initiative "represent[ed] the first time that a major U.S. city's historic resources have been assessed in terms of their level of risk to natural hazards, and the first time that the information resulting from such analysis will be incorporated into a major U.S. city's FEMA-approved hazard mitigation plan."102

The project focused only on the hazard of flooding. After identifying over 500 flood-prone historic structures in the city,

^{98.} Id. at 54.

^{99.} *Id*.

^{100.} Id. at 56.

^{101.} Jeremy R. Young, Before the (Next) Storm: The Disaster Planning for Historic Properties Initiative, Pennsylvania Historic Preservation (2015), available at https://perma.cc/Q6WJ-2PN3.

^{102.} Integrating Disaster Planning into Historic Resource Survey, PENN. HIST. & MUSEUM COMM'N, available at https://perma.cc/T8UV-XBHA.

the State Historic Preservation Office commissioned a survey of those resources "to update documentation and collect new information on character-defining features that may be susceptible to flood damage." ¹⁰³ Each resource now has a survey that includes this information as well as elevation information, which can help hazard mitigation planners "understand how and when Philadelphia's historic buildings may become damaged during various flood scenarios, and to develop sensitive risk reduction measures accordingly." ¹⁰⁴

The second phase of the project created "property sheets" for various building typologies in Philadelphia, which includes information about how high flood waters might reach during a 100-year flooding event as well as a list of recommended sensitive hazard mitigation actions tailored to each typography's style and historic features. The significant data collection was only possible because of coordination among federal and state disaster management agencies and state historic preservation agencies. This kind of coordinated, detailed analysis should be conducted for all historic resources, for all types of risks. To date, however, it has not even been conducted in a second city in Pennsylvania.

D. Charleston

The historic buildings of Charleston, South Carolina, are under threat from sea level rise. In recent years, the city has shifted its preservation strategy, focusing on mitigation, and specifically ensuring that property owners can alter buildings so they survive disaster. The city has published Preservation and Architectural Guidelines for owners of historic buildings. The guidelines include elevation considerations relevant to the streetscape, context, site, foundation design, preservation, and architecture. The guidelines also relax approval requirements for certain buildings, based on a rating system by which buildings are rated by their preservation value.

^{103.} Id.

^{104.} Id.

^{105.} Id.

¹⁰⁶. City of Charleston Bd. of Architectural Rev., Design Guidelines for Elevating Historic Buildings (2019).

^{107.} Id.

Buildings that are categorized as "exceptional" or "excellent" still require Board of Architectural Review approval, and the guidelines are mandatory. Owners of these buildings are encouraged to use the FEMA variance process to minimize the elevation change only to the height necessary to avoid flood hazard. For buildings in lower categories, the guidelines are not mandatory, and elevations of three feet or less may be approved by city staff instead of by the board, making it easier for certain historic buildings to be elevated to avoid flooding. Owners of buildings in all categories must also provide thorough documentation of the building's current state, including as-built elevations, floor plans, a site plan, and photographs.

E. New Orleans

New Orleans, Louisiana, has seen significant destruction of property due to natural hazards in recent years. With one of the oldest local preservation law regimes in the country, it has more effectively integrated historic resources than most places. 109 preparation and mitigation Charleston, New Orleans has Guidelines Storm Preparedness and Resilience, written by the Historic District Landmarks Commission.¹¹⁰ These provide recommendations for building elevation, including opportunities for appeal, although in some cases the recommendations are somewhat conservative. For example, the Guidelines discourage building elevation that exceeds the greater of base flood elevation plus one foot, or three feet. 111 The commission also will not approve the elevation of buildings with raised basements. 112 Elevation of building systems and equipment "in a manner that is visually unobtrusive from a public way" can be approved by staff without the need for commission review, but visually obtrusive equipment elevation and building elevation within

^{108.} Id. at 1.

^{109.} But see Annie Christoff, House of the Setting Sun: New Orleans, Katrina, and the Role of Historic Preservation Laws in Emergency Circumstances, 95 GEORGETOWN L.J. 781 (2007) (suggesting that the local laws be revised to include emergency procedures for historic properties).

^{110.} New Orleans Historic Dist. Landmarks Comm'n, Guidelines for Storm Preparedness & Resilience (2019).

 $^{111.\} Id.$ at 13-6.

^{112.} Id. at 13-7.

recommended height guidelines requires commission review. Property owners can petition the commission to elevate a building more than the recommended amount. Unlike in Charleston, the same requirements apply to all categories of building in a historic district, whether they are significant, contributing, or non-contributing.

The Guidelines also differ from Charleston's in that they emphasize the role of maintaining buildings and protecting critical building components in storm preparedness and resilience. New Orleans Guidelines The recommendations for affirmative maintenance, protection of roof systems, doors, windows, porches and balconies, and overall structural integrity. 113 For example, the Guidelines suggest the use of removable fabric storm panels instead of permanently attached plastic storm protection panels. 114 According to the Guidelines, several types of applications may be approved by staff, without onerous public hearings. For example, the installation of appropriate fasteners to allow for quick installation of such panels before a storm can be approved by staff, as can the installation of visually unobtrusive structural modifications. 115 Generally speaking, all other storm protection and structural modifications that are visually obtrusive require commission review for all categories of buildings in a historic district.116

* * *

These four communities represent a tiny fraction of the tens of thousands of local jurisdictions across the country. So, although it is important to understand what cities *can* do in responding to natural hazard risk, it is equally important to reflect on what so many cities *have not done* and *cannot do*, due to lack of resources or lack of understanding of the risks. Local governments tend to focus on school budgets, building code reviews, election administration, and park maintenance. Addressing the rather specialized issue of historic preservation as it intersects with

^{113.} Id. at 13-2-13-5.

^{114.} Id. at 13-3.

^{115.} Id. at 13-8.

^{116.} Id.

disaster law may understandably be beyond local expertise. Natural hazards know no jurisdictional bounds. State and federal governments should either help with or direct local government efforts in this important regard.

VI. CONCLUSION

Historic preservation and disaster policies have long resided in their own distinct silos. Now, however, as climate change increases the risk of disaster damage to historic resources, preservationists and emergency managers are increasing their coordination. Best practices have emerged in the area of predisaster planning, particularly for flooding. As this Article notes, however, both mitigation and post-disaster recovery are largely unaddressed. The effect of American federalism upon disaster-related preservation policy has contributed to this deficiency. Reforms are needed before the United States can maximize protection of its heritage in the face of disaster.

Among the three levels of legal protection identified in this Article, we have made the most progress on pre-disaster planning. Still, at a very basic level, we do not really know where all of our historic resources are located, or the natural hazard risks associated with them. It is difficult to protect the unknown from the unknown. Legal reforms can make it easier to expand our registers of historic places, and gather data about them. When that happens, scientists can more accurately assess disaster threats to historic sites.

We should also work to establish guidelines as to how historic properties can be changed to mitigate the impact of the disasters themselves. The National Park Service deserves praise for issuing guidance for rehabilitating historic properties with high flood risk. But what about every other type of natural hazard? Guidance that interprets the seemingly rigid Secretary's Standards will also help state and local decision-makers who have adopted the Standards understand what alterations are appropriate.

Finally, we must push to integrate historic preservation into post-disaster recovery. With just thirty-two states integrating preservation into disaster policy in any significant way, it is clear that the voluntary approach toward integration is not fulfilling federal policy, enshrined in the National Historic Preservation Act, to protect historic places. Congress should condition post-disaster federal assistance to states on the adoption of hazard mitigation plans, emphasizing state planning over local planning. Similarly, the National Flood Insurance Program should be amended to encourage the modification or moving of historic structures, and the Secretary's Standards should follow suit. Moreover, the federal government should subsidize insurance for historic places once again. Expansion of the Flood Insurance Program to other types of natural conditions causing disasters, including fires and wind, could also be an important next step.

Only with these steps will we see more public and private efforts integrating historic resources into disaster policies and practices. The models highlighted in this Article, while laudable, are simply not enough—especially because climate change will make disasters more frequent and more ferocious, and because the necessary quantities and scales of public investment and government intervention necessary are so large. With so much loss on the horizon, it is important to work now to protect the places that connect us to our shared heritage, to our culture, and to each other.