HISTORICAL PRESERVATION LAWS AND LONG-TERM CLIMATE ADAPTATION:

CHALLENGES AND OPPORTUNITIES



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PROJECT BACKGROUND

This white paper is one outcome of a four-state regional project funded by the National Oceanic Atmospheric Administration Office of Coastal Management, Florida Sea Grant, Georgia Sea Grant, South Carolina Sea Grant, and North Carolina Sea Grant (Project No.: FY2014-2018: NA14OAR4170084). Coastal communities are increasingly becoming aware of the risks to their ecosystems, homes, and economies because of increased flooding, more extreme storm surges, and sea level rise. Reducing risk on the coast will be achieved by means of a variety of approaches, including policy and regulatory changes, natural resource protection, structural and non-structural intervention and investment, and retreat. A project team involving researchers, legal and policy experts, and law students have assisted coastal communities in four states – Florida, Georgia, South Carolina, and North Carolina – to prepare for present vulnerabilities and projected future conditions based on likely sea-level rise scenarios. This paper is part of the project's objective to analyze legal and policy factors affecting adaptation responses, focusing on the state and local levels. Additional white papers associated with this project may be found at http://gacoast.uga.edu/.















INTRODUCTION

uring October 2012, Superstorm Sandy became the largest Atlantic hurricane on record, ravaging the US Eastern Seaboard.¹ While the storm caused billions of dollars in property damage and clean-up costs, it also provided a wake-up call to the risks faced by our historic national treasures. Ellis Island, the gateway to the American dream for millions of immigrants, was completely submerged under the massive storm surge caused by the hurricane.² Liberty Island, home to the iconic Statute of Liberty, was 75% submerged and faced tens of millions of dollars of damage.³ The intensity of Superstorm Sandy and its aftermath revealed that rising sea levels and aberrant weather events are increasingly placing our nation's historic landmarks and sites of cultural heritage at risk. While the impacts of climate change may potentially devastate historical sites, hope is not lost. As oceanographer John Englander points out, we are given a "blessing" in some ways because, "unlike a storm, rising sea level does give us time to prepare."⁴

To protect precious historic resources in the face of climate change, the first thing that must be "adapted" is our nation's overall preservation approach. The importance of preserving historic and archeological sites has long been recognized in the nation, with a comprehensive preservation scheme codified with the passing of the 1966 National Historic Preservation Act.⁵ This landmark piece of legislation embodied the traditional concepts of preservation: that historic buildings and their cultural landscapes should remain intact, in their original locations, with their original features.⁶ However, a changing climate will challenge the traditional approach. Treasured historic properties are becoming increasingly vulnerable in their current conditions and locations. Many of the sites crucial to the development of the nation are located along the coasts and are at most risk from rising sea levels.⁷ Flood–proofing measures and adaptation plans will be critical strategies for withstanding sea level rise in the decades to come, but many of these strategies are incompatible with federal, state, and local historic preservation laws. Raising the elevation of a historic home or refurbishing it with modern materials may make the property more resilient, for example, but will fundamentally change its look and be inconsistent with the character of a historic district.

To promote adaptation and protect precious resources, preservationists therefore should re-evaluate what it means to "save" a historic building or cultural landmark.⁸ Given rising sea levels, maintaining a structure as is, in its historical location, could end up being a death sentence

^{1.} Todd Gutner. 2012, October 28. "Hurricane Sandy Grows to Largest Atlantic Tropical Storm Ever." 4WBZ CBS Boston. Retrieved from https://boston.cbslocal.com/2012/10/28/hurricane-sandy-grows-to-largest-atlantic-tropical-storm-ever/.

^{2.} National Park Service. 2018, January 31. "Hurricane Sandy Recovery." Retrieved from www.nps.gov/stli/after-hurricane-sandy.htm.

^{3.} Ibid.

^{4.} Ibid.

^{5.} National Historic Preservation Act, 54 U.S.C. § 100101 (2014).

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^{7.} See IPCC Report: www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf.

^{8.} Anthony Veerkamp. 2015, Summer. "Preservation in a Changing Climate: Time to Pick Up the Tab." National Trust for Historic Preservation Forum Journal. The article explains that we are facing "a hard truth: the threats posed by climate change are enormous, and we won't be able to save everything. Eventually, much of our heritage, along with other trappings of our civilization, will be lost."

for the structure in its entirety; introducing flexibility into the standards for gaining and retaining historical designations will be needed. This white paper maintains that both the federal government and local governments will have large but different roles to play in adaptation efforts designed to conserve the nation's history and culture under the existing national preservation framework.

Section I examines the statutory schemes behind two major federal laws that impact decision-making regarding historic structures: the National Historic Preservation Act and the National Flood Insurance Program. The section then highlights the relationships between the regulatory schemes promulgated under these federal laws and suggests how new adaptive measures and incentives can be built in to encourage resiliency planning and action for vulnerable buildings. Section II moves away from individual historic property decision making and suggests how climate change resiliency strategies can be incorporated into the review procedures required by the National Historic Preservation Act when federal agency actions affect historic properties. Section III maintains that while changes to federal regulations will be important for a long-term and cohesive preservation response to climate change, local governments will be on the frontline of identifying and protecting their most vulnerable and cherished historic assets. This section highlights important local work being done to preserve cultural heritage and suggests a model for other susceptible coastal cities to undertake while waiting for policy change on a national scale.

SECTION I.

Federal Legislative Schemes Impacting Historic Properties: Overview and Adaptations

The importance of preserving historic and archeological sites has long been recognized in the United States. Beyond maintaining the physical integrity of such sites, communities have recognized that historic buildings have important ramifications for community development, economic interests, and the preservation of cultural heritage. The first historic preservation organization was the Mount Vernon Ladies' Association, which established the early notions and values of preservation in the mid-19th century.9 A national push for preservation arose from the post-World War II development booms, the establishment of the highways system under the National Interstate and Defense Highways Act of 1956,10 and the Urban Renewal Program,11 which all led to rapid destruction of historic buildings and districts.12

^{9.} www.mountvernon.org/preservation/mount-vernon-ladies-association/

^{10.} Federal-Aid Highway Act of 1956, Pub. L. No. 84-627, 70 Stat. 374-402 (1956).

^{11.} Quentin Johnstone. 1958. "The Federal Urban Renewal Program." University of Chicago Law Review 25(2), 301–303.

^{12.} In response to concerns about losing cultural heritage, a document entitled With Heritage So Rich was issued in 1965. See preservation50.org/about/with-heritage-so-rich/. It inventoried properties that were important to the nation's history and suggested mechanisms to protect them. It had the greatest impact on the writing and passing of the NHPA in October 1966.

THE NATIONAL HISTORIC PRESERVATION ACT OF 1966: Structure and Requirements for Historic Properties

The 1966 National Historic Preservation Act (NHPA) established the federal standards for historic preservation and is the most comprehensive preservation scheme enacted into legislation in the United States.¹³ It created the National Register of Historic Places, the Advisory Council on Historic Preservation, state historic preservation offices, and the Section 106 review process for projects with federal involvement.¹⁴ The Department of the Interior is tasked with administering the law on a federal level.¹⁵ Each state manages its historic properties through its state historic preservation office.¹⁶ This section of the paper focuses on the requirements for listing on the National Register, and the effect of historical designation on federal taxes and regulations under the National Flood Insurance Program.

The National Register is the federal government's official list of properties deemed worthy of preservation. To qualify for the National Register, a property must meet the criteria set forth by the National Park Service, a bureau within the Department of the Interior.¹⁷ The property must be a district, site, building, structure, or object and must possess significance in American history, architecture, archeology, engineering, or culture.¹⁸ Additionally, it must retain the historic integrity of the features necessary to convey its significance.¹⁹ Typically, the property must be at least 50 years old, unless it has some exceptionally important significance to American history or culture. More than 90,000 individual properties are listed on the National Register and represent approximately 1.4 million individual cultural resources.²⁰

To be included on the National Register, a property must be nominated by either a state historic preservation office, a federal agency, or by others directly to the National Park Service.²¹ If the boundaries of a property are changed, there must be a new nomination to the National Register.²² Historic properties may be moved only if there is no feasible alternative for preserva-

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13. Ibid.
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- (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) that are associated with the lives of persons significant in our past; or
- (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) that have yielded, or may be likely to yield, information important in prehistory or history.
- 20. www.nps.gov/Nr/about.htm
- 21. 36 C.F.R. § 60.5.

^{14.} Ibid.

^{15.} Ibid.

^{16.} Ibid.

^{17. 36} C.F.R. § 60.4.

^{18.} Ibid

^{19. 36} C.F.R. § 60.4. Criteria for Evaluation: The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and

^{22. 36} C.F.R. § 60.14(a). Four justifications exist for altering a boundary: professional error in the initial nomination, loss of historic integrity, recognition of additional significance, and additional research documenting that a larger or smaller area should be listed.

tion.²³ Without a proper proposal and approval, a moved property will be automatically deleted from the National Register.²⁴

Listing on the National Register is critical to gaining access to the Federal Historic Preservation Tax Incentive Program administered by the National Park Service in conjunction with the Internal Revenue Service.²⁵ Only "certified historic structures" may receive a 20% tax credit on the total cost of a certified rehabilitation project.²⁶ As the structures face the wear and tear of time, restorative measures are necessary to maintain their physical integrity and protect the features of historic significance. The Secretary of the Interior has promulgated specific "Standards for the Treatment of Historic Properties," which are codified in the federal register and address four treatments: preservation, rehabilitation, restoration, and reconstruction.²⁷ Structures undergoing one of these four treatments with federal grant money, or projects hoping to obtain the federal tax credit, must certify with the National Park Service that the project is consistent with all of the Standards.²⁸ The Standards set forth the appropriate building materials, external features and internal structures to which a historic property must conform to in order to retain its historical designation.²⁹ Nonconformance with a code section or poorly executed attempts at compliance can lead to a de-listing and, ultimately, loss of federal money.30 Absent the prospect of federal monetary assistance, owners of historic properties are not always incentivized to undertake preservation measures, and the structures risk falling into total disrepair or abandonment.

Notably, even if a property is listed on the National Register, the NHPA does not place any restrictions on the actions of private owners of historic properties if they are not interested in federal money.³¹ However, communities may enact ordinances that require owners of historic properties to meet the Secretary of the Interior's Standards for treatment or other standards derived from the local historic character.

RECOMMENDATION: Update the Secretary of the Interior's standards to include a flexible balancing mechanism.

As the physical effects of rising sea levels and increased flooding become more evident, vulnerability and resiliency must be considered in building and restoration decisions. The Federal Historic Preservation Tax Incentive Program was designed to attract private investment in the rehabilitation of historic properties that give communities their unique and traditional characteristics.³² Additionally, it has encouraged the development of moderate- and low-income housing in historic warehouses, factories, hotels, and the like, while maintaining the key features of their

^{23. 36} C.F.R. § 60.14(b).

^{24. 36} C.F.R. § 60.14(b). The proposal submitted to the National Park Service must document the reason for the move, the effect on the historical integrity, a description of the nature of the new location, and photographs of the proposed location.

^{25.} See www.nps.gov/TPS/tax-incentives/taxdocs/about-tax-incentives-2012.pdf.

^{26.} See ibid. Tax Reform Act of 1986 (PL 99-514; Internal Revenue Code Section 47).

^{27.} www.nps.gov/tps/standards/four-treatments/treatment-guidelines.pdf

^{28.} www.nps.gov/TPS/tax-incentives/taxdocs/about-tax-incentives-2012.pdf

^{29.} www.nps.gov/tps/standards/four-treatments/treatment-guidelines.pdf

^{30.} Ibid.

^{31. 54} U.S.C. § 100101 (2014).

^{32.} www.nps.gov/TPS/tax-incentives/taxdocs/about-tax-incentives-2012.pdf

historic character.³³ This program has been instrumental in revitalizing communities, creating jobs, and increasing property values.³⁴ As mentioned previously, the tax credit is available only to projects undertaken on both a certified historic structure and in a manner consistent with the Secretary of the Interior's Standards.³⁵ If restoring a historic property in a manner consistent with the Standards leaves it vulnerable to damage or destruction as a result of climate change—induced flooding, private individuals or development groups face a major risk of loss. Conversely, undertaking a restoration project with adequate techniques to mitigate the impacts of flooding could risk loss of historic designation and the tax credit offsetting restoration costs.³⁶ This could lead to a strong disincentive to preserve at-risk historic structures.

To combat this disincentive and continue to promote restoration and rehabilitation of coastal historical areas, the Secretary of the Interior should amend the Standards to look at the totality of the circumstances when determining whether a proposed project will allow the structure to retain its historic designation required for federal tax and grant purposes. The National Park Service should take a case-by-case approach to each proposal and consider factors such as the location of the building or district, the increased risk of loss due to flooding, and projected sea level rise, as well as historical flood damage to the structure and surrounding area. The greater the risk of future flood damage, the more additional flood-proofing techniques should be tolerated when considering whether the structure has maintained adequate historical character to retain its designation on the National Register.

The ultimate question for the National Park Service should be whether the modification is so extreme that it is essentially the same as the loss of all of the structure's historical significance. For example, one of the major techniques to improve flood resiliency is to elevate the lowest floors of the building above the base flood elevation (BFE).³⁷ If a structure is located in the 100-year floodplain and the owner would like to raise the building above the BFE, this modification should be considered less of an adverse impact on historic character than if the building were located somewhere with zero flood risk. Another example would be to allow more use of "dry flood proofing" techniques in areas with higher flood risk. In the historic building context, this would mean reconstructing portions below the BFE with more flood-resistant materials and using sealants that do not comport with traditional building characteristics but would increase resiliency in the event of a flood. In the most extenuating circumstances, the Standards should also permit a balance between the impact to cultural significance that relocation of the whole structure would have versus remaining in its present location and either requiring extreme modifications to protect it from potential damage related to sea level rise undergo or risking total loss if no modifications are made.

^{33.} Ibid.

^{34.} Ibid.

^{35. &}lt;a href="https://www.nps.gov/tps/standards/treatment-guidelines-2017.pdf">https://www.nps.gov/tps/standards/treatment-guidelines-2017.pdf.

 $^{36. \ \}underline{www.nps.gov/TPS/tax-incentives/taxdocs/about-tax-incentives-\underline{2012.pdf}}$

^{37. &}lt;u>www.fema.gov/base-flood-elevation</u>; The base flood elevation (BFE) is the "computed elevation which floodwater is anticipated to rise during the base flood." The base flood is the 100-year storm event, which is a storm that has a 1% annual chance of occurring. See <u>water.usgs.gov/edu/100yearflood.html</u>.

A drawback to a balanced approach is the potential increase in administrative burden on the National Park Service in both determining the most important factors and assigning their relative weights. One way to ease this burden would be to encourage the state historic preservation offices³⁸ and certified legal governments (CLGs)³⁹ to develop their own guidelines and balancing factors that reflect more localized risks and the most effective mitigation techniques for those risks. The more local this balance is, the more likely that all important community character and development interests will be considered. Under the current state of the Federal Historic Preservation Tax Incentive Program, the National Park Service has final say in determining eligibility, and this could act as safeguard against abuse of the balancing approach by a state or CLG.⁴⁰

HISTORIC PROPERTIES UNDER THE NATIONAL FLOOD INSURANCE PROGRAM: Background and Recommendations

Historic structures covered by the National Flood Insurance Program (NFIP) face the greatest climate change—related risks. Because an official historic designation under the National Historic Preservation Act is a factor in a property owner's obligations under the NFIP, it is important to address both federal regulatory schemes.

Historically, flood insurance was not within the purview of the federal government. However, by the 1960s, property damage in floodplains had become so widespread that private homeowners insurance companies could no long profitably cover flood damage.⁴¹ In 1968, Congress passed the National Flood Insurance Act to enable property owners in participating communities to purchase flood insurance through the federal government.⁴² To participate in the program, the community must enact a floodplain management ordinance that sets forth the minimum standards for construction in high-risk areas of the floodplain.⁴³ The Federal Emergency Management Agency (FEMA) administers the program and provides communities with Flood Insurance Rate Maps (FIRMS), the official floodplain maps that must be used to development floodplain management regulations.⁴⁴ These regulations may be incorporated into zoning and subdivision ordinances, building codes, or sanitary regulations or via stand-alone floodplain ordinances.⁴⁵ Only homes located in communities with floodplain management plans certified by FEMA are eligible for coverage

^{38. 16} U.S.C. § 470a(b)(1) (setting forth the procedure for establishing state historic preservation offices (SHPO) to administer state preservation programs and act as integral parts of the Section 106 review process)

^{39. 16} U.S.C. § 470a. The NHPA provides for preservation planning on a local level through its Certified Legal Government (CLG) program. A CLG forms a partnership with the state's SHPO and the National Park Service that facilitates funding, technical assistance, and training for the community's preservation plan.

^{40.} National Park Service. Historic Preservation Tax Incentives. Retrieved from www.nps.gov/TPS/tax-incentives/taxdocs/about-tax-in-centives-2012.pdf.

^{41.} James M. Wright. 2000. The Nation's Response to Flood Disasters: A Historical Account. Madison, WI: Association of State Flood-plain Managers.

^{42. 42} U.S.C. § 4001.

^{43.} Ibid.

^{44. 44} C.F.R. § 60.3 (setting forth the minimum NFIP floodplain management requirements).

under the NFIP.⁴⁶ However, if FEMA designates an area to be exceptionally high risk — a location known as a special flood hazard area (SFHA) —then the local government must adopt an adequate plan or it is no longer eligible for future federal assistance.⁴⁷ A SFHA designation also requires that flood insurance be purchased by any properties that receive federally insured mortgages or grants from the federal government.⁴⁸

Historic structures are exempt from all current floodplain management requirements under the NFIP. For example, buildings that were in existence prior to a community's participation in the program do not have to conform to the floodplain requirements until they undergo a renovation in which "substantial improvements" are made.⁴⁹ No alterations to historic structures are considered to be "substantial improvements."⁵⁰ This reflects a policy decision made by FEMA in 1989 that historic buildings and landmarks within the floodplain are "unique and valuable to our national identity" in their historically preserved state.⁵¹ While this reflects a worthy policy goal, it may negatively affect the long-term preservation of a property facing sea level rise. If a historic structure has suffered flood damage, it must be rebuilt in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties and not in a way that will mitigate future damage and loss.⁵² This requirement places the owner in a tough situation: build the structure in a resilient nonconforming manner and lose the spot on the National Register, or follow the Secretary of the Interior's Standards and risk total destruction in the event of a flood.

The Secretary's Standards should integrate the minimum standards set forth by a community's floodplain management plan into the balancing process proposed above. If a historic property owner wants to rehabilitate his or her property more in accordance with requirements for non-historic properties in the same floodplain, this decision should be given some deference unless there would be a serious impact on the cultural significance of the property. Because participation in the NFIP requires a community to make important and legally binding zoning and ordinance decisions, they likely reflect the perceived risk of flood damage by the community. For example, if the community has agreed on a higher "freeboard" requirement, an additional height requirement above the BFE, it has subjected itself to higher building and regulatory compliance costs out of the recognition that the current burdens outweigh future costs. ⁵³

Another benefit to integrating floodplain management plans into the Standards would be the protection of the historic designation of a neighborhood that gets partially rebuilt because

^{46.} Ibid.

^{47.} Jenifer Eggleston and Jen Wellock. 2015, Summer. "The National Flood Insurance Program and Historic Resources." National Trust for Historic Preservation Forum Journal 29(4), p. 37.

^{48.} Ibid., p. 44.

^{49. 44} C.F.R. 59.1. "Substantial improvements" are any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. 50. 44 C.F.R. 60.6(a). "Variances may be granted for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure."

^{51.} Eggleston and Wellock, 2015, p. 34.

^{52. &}quot;Historic structures" are defined in 44 C.F.R. 59 and include National Register buildings, those on the state historic inventory, and local inventory buildings that have been approved by the state program or the Secretary of the Interior.

^{53.} See www.fema.gov/freeboard

of, or in anticipation of, a flood event. Under the present regulatory scheme, if this alteration significantly modifies the aesthetics or character of the neighborhood that supported its inclusion on the National Register, the entire neighborhood Flood insurance is expensive and will only get costlier as the program becomes overburdened through increasing climate change—related disasters.

could be at risk of losing its designation.⁵⁴ If the National Park Service recognizes that this change occurred so that the structure or neighborhood could come into accordance with floodplain standards, it could balance this in favor of supporting retained designation. Additionally, the National Park Service could offer support and guidance in concert with the state historic preservation office to develop best practices for preservation of the remaining structures in the neighborhood.

Flood insurance is expensive and will only get costlier as the program becomes overburdened through increasing climate change—related disasters.⁵⁵ If the National Park Service wants to encourage best management practices in historic communities along rivers and floodplains, it should be looking for ways to preserve historic designations and the benefits associated with listing. Otherwise, there is a risk of abandonment of whole neighborhoods, which would disproportionately affect low–income and minority communities.⁵⁶ Communities face a real risk of disparate loss of cultural heritage if the line for preservation gets drawn at who can still afford to pay their flood insurance and preserve their historic property.

SECTION II.

Incorporation of Climate Change Resiliency Strategies in the Section 106 Review Process of Federal Agency Action On Historic Properties

OVERVIEW OF THE SECTION 106 REVIEW PROCESS

One of the most important impacts of the NHPA from a regulatory standpoint was the establishment of the Section 106 review process. Section 106 requires federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings.57 The review process is procedural rather than substantive. This means that the NHPA does not establish particular standards that each project must meet, but rather outlines how the federal agency involved must evaluate the impact that its work will have on any historic properties within the area.⁵⁸ The review process is triggered whenever a project involves a federal "undertaking."⁵⁹

^{54. 36} C.F.R. § 60.4 (listing the criteria for inclusion on the National Register).

^{55.} See Eggleston and Wellock, The National Flood Insurance Program and Historic Resources, p. 45.

^{57. 36} C.F.R. § 800.1.

^{58.} See National Mining Association v. Fowler, 324 F.3d 752, 753 (mentioning that the NHPA is "essentially a procedural statute... [that] imposes no substantive standards..."); Narragansett Indian Tribe v. Warwick Sewer Authority, 334 F.3d 161, 166 (1st Cir. 2003) (holding that federal agencies subject to historic preservation laws are not directed to "reach particular outcomes"). 59. 36 C.F.R. § 800.1.

This generally involves any project with federal action, approval, or funding, although there has been significant litigation to determinate exactly what level of federal involvement will trigger a Section 106 review.⁶⁰ The prompting standards for federal historic preservation laws are very similar to the requirements for the National Environmental Protection Act (NEPA). Therefore, if an agency is undergoing a NEPA review for a project, it will likely need to carry out a Section 106 review process as well.⁶¹

If the project is deemed a federal "undertaking," then the federal agency involved is responsible for initiating the Section 106 review process. This process can begin as early as the pre-planning phase of a project, if activities and decisions made early on would "restrict the subsequent consideration of alternatives to avoid, minimize or mitigate the undertaking's adverse effects on historic properties." The first step in the process is to identify any historic resources that may be affected by the federal undertaking. The federal agency works directly with the SHPO to make a "reasonable and good faith" effort to identify all historic properties that may be impacted. Historic properties in the context of Section 106 review are not limited to those listed on the National Register; properties that are eligible for listings are required to be identified as well.

If historic properties are discovered, the federal agency must then make an assessment of all potential adverse effects to the property. An "adverse effect" occurs when the agency's actions directly or indirectly alter the characteristics of a historic property that qualify it for inclusion in the National Register. If adverse effects are found, the federal agency is required resolve adverse effects before the undertaking is approved. Adverse effects can be resolved either in consultation either with or without the ACHP, an independent federal agency that serves as a forum for influencing the federal activities and policies that impact historic properties. The ACHP, a 23-member council is based in Washington, DC, usually becomes involved in the review process when there is significant public controversy over a federal project or when the federal agency and consulting parties fail to reach an agreement on how to resolve adverse impacts to the historic properties.

60. Ibid. Pure block grants of federal money do not provide grounds for initiating the review process, unless a federal agency is in some way consulted about how the funds are spent. See, Business & Residents Alliance of East Harlem v. Jackson, 430 F.3d 584, 586 (2nd Cir. 2005) (holding that a nonfederal expenditure of block grant funds is not an undertaking under the NHPA); Maxwell Street Historic Preservation Coalition v. Board of Trustees of the University of Illinois, No. 00 C 4779, 200 WL 1141439, at *4 (N.D. Ill. 2000) (holding that there must be some form of federal approval, supervision, control, or consultation over the spending of the federal funds in order to trigger Section 106 review).

61. See generally, Sugarloaf Citizens Association v. Federal Energy Regulatory Commission, 959 F.2d 508 (4th Cir. 1992).

62. California Wilderness Coalition v. US Department of Energy, 631 F.3d 1072, 1098-99 (9th Cir. 2011).

63. 36 C.F.R. § 800.4.

64. 36 C.F.R. § 800.4(b)(1).

65. 36 C.F.R. § 800.4.

66. 36 C.F.R. § 800.5.

67. Examples of "adverse effects" include physical destruction or damage; alteration not consistent with the Secretary of the Interior's Standards; relocation of a property; change of use or physical features of a property's setting; visual, atmospheric, or audible intrusions; neglect resulting in deterioration; or transfer, lease, or sale of property out of federal ownership or control without adequate protections. 36 C.F.R. § 800.5(a)(2).

68. 36 C.F.R. § 800.6.

69. Ibid.

70. 36 C.F.R. § 800.7.

Without the ACHP, the agency can resolve adverse effects by either consulting with the SHPO and other consulting parties or the agency can use standard treatments under 36 C.F.R. § 800.14(d).⁷¹ If the ACHP is involved in the consultation, the agency will then consult with the ACHP, SHPO, and other consulting parties in order to determine ways to "avoid, minimize or mitigate the adverse effects" of agency plans.⁷²

Once the agency and consulting parties determine how to resolve adverse effects (either with or without the participation of the ACHP), the agency official and consulting parties involved must execute a MOA.⁷³ The MOA is a legally enforceable document that courts will treat as a contract between the consulting parties and the federal agency.⁷⁴ Until the agency resolves adverse effects in a MOA it will not meet requirements of section 106.⁷⁵

If an agency fails to identify historic properties that may be impacted within the scope of the project or does not conduct a meaningful adverse impact review for each property, the ACHP can issue a finding that the agency has not met the requirements of federal historic preservation law.⁷⁶ Courts may enjoin the federal agency from proceeding with the project until proper Section 106 review has been completed.⁷⁷ If an agency has issued a final decision on an undertaking without completing the Section 106 review or soliciting the ACHP's comments, courts may enjoin the agency from implementing the undertaking altogether.⁷⁸ However, due to the advisory nature of the ACHP, its comments are merely suggestions for the agency to take into consideration, and the agency has the discretion not to follow them and to proceed with the undertaking.⁷⁹

RECOMMENDED CHANGES TO THE SECTION 106 REVIEW PROCESS

Increased flooding caused by sea level rise and extreme weather events will not patiently wait for the outcome of a regulatory process before causing irreparable damage and loss to historic structures. While the Section 106 process is an important mechanism in the overall historic preservation scheme, it may have to be altered to accommodate evolving notions of preservation and what should be "saved."80

One suggestion is to encourage the Advisory Council on Historic Preservation to add a set of climate change resiliency strategies to its list of categorical exemptions from the Section 106 review process. The ACHP has the authority to exempt entire categories of development from the

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71. 36 C.F.R. § 800.6(b)(1).
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^{72. 36} C.F.R. § 800.6(b)(2).

^{73. 36} C.F.R. § 800.6.

^{74.} Ibid.

^{75.} Ibid.

^{76. 36} C.F.R. § 800.7.

^{77.} See, El Rancho La Comunidad v. United States, No. 90-113 (D.N.M. May 21, 1991); Fill the Pool Commission v. Village of Johnson City, No. 82-CV-762 (HGM) (N.D.N.Y. Aug. 19, 1982); Hall County Historical Society v. Georgia Department of Transportation, 447 F. Supp. 741 (N.D. Ga. 1978); Thompson v. Fugate, 347 F. Supp. 120 (E.D. Va. 1972).

^{78. 36} C.F.R. § 800.6(d).

^{79.} See Walsh v. US Army Corps of Engineers, 757 F. Supp. 781 (W.D. Tex. 1990) (holding that the NHPA imposes only procedural requirements).

historic preservation requirements of Section 106.81 The council has already exempted the effects of undertakings on portions of the federal interstate highway system as designated by the Federal Highway Administration from Section 106 review82 as well as undertakings on historic natural gas pipelines.83 It has also been suggested that the ACHP should adopt additional exemptions to remove impediments to building renewable energy infrastructure.84

As weather patterns and flooding become more erratic and extreme, federal agencies may need to act quickly and without significant administrative delay. The ACHP should coordinate efforts with the agencies most directly involved in climate change mitigation strategies to define the scope and activities included in the categorical exemption. For example, a potential exemption would be to allow the US Army Corps of Engineers to engage in all necessary flood mitigation activities in a special hazard flood zone as designated by FEMA. Another option would be to designate an entire category of flood-proofing measures as "no adverse impact" so that Section 106 review will be expedited. For example, the ACHP should allow dry flood-proofing measures that are either temporary or do not affect the exterior aesthetics.

Ultimately, it is doubtful that much more harm than good would be done with an expedited Section 106 review process. Because the review process is purely procedural in nature, actual mitigation is not required and the same harm may still occur. Litigation over the procedural elements can be time-consuming, expensive, and may lead to unsatisfactory results for the challenging groups. Effort would be best spent having the ACHP, state historic preservation offices, and local government groups give their input to the relevant agencies before rising sea levels make large-scale flood mitigation efforts imperative.

SECTION III.

Local Governments, Preservation Policy, and Climate Change Resiliency

While the standards and requirements reflected in the National Historic Preservation Act and National Flood Insurance Program pose risks for the structural integrity of historic properties in light of climate change, preservation policies generally provide an opportunity for resiliency on the local level. Amending the legislation or regulations associated with the NHPA and NFIP would inevitably be a long and politically contentious process; in the meantime, local governments have

^{81. 36} C.F.R. § 800.14(c)(1) ("[ACHP] may propose a program or category of undertakings that may be exempted from review under the provisions of subpart B of this part, if the program or category meets the following criteria: (i) The actions within the program or category would otherwise qualify as 'undertakings' as defined in § 800.16; (ii) The potential effects of the undertakings within the program or category upon historic properties are foreseeable and likely to be minimal or not adverse; and (iii) Exemption of the program or category is consistent with the purposes of the act.").

^{82.} See, Exemption Regarding Historic Preservation Review Process for Effects to the Interstate Highway System, 70 Fed. Reg. 11,928, 11,931 (Mar. 10, 2005).

^{83.} Exemption Regarding Historic Preservation Review Process for Projects Involving Historic Natural Gas Pipelines, 67 Fed. Reg. 16,364, 16,364 (Apr. 5, 2002).

^{84.} See David A. Lewis. 2015. "Identifying and Avoiding Conflicts Between Historic Preservation and the Development of Renewable Energy." NYU Environmental Law Journal 22, p. 274.

the tools at their disposal to act more quickly and in a manner that addresses the greatest threats to their community. Conversely, it has been suggested that preservation of cultural heritage itself can improve resiliency, because "embedded in cultural heritage are traditional knowledge and skills that have enabled diverse societies around the world to prepare for, withstand, and recover from past disasters." The threat of climate change may have a small silver lining in that it opens community dialogue about the importance of protecting historical resources and spurs action that otherwise would have been delayed.

LOCAL GOVERNMENTS SHOULD IDENTIFY CLIMATE CHANGE VULNERABILITIES AND HISTORIC PROPERTIES

The local knowledge base is a critical resource that should be tapped to understand both how climate change is affecting the community and which cultural resources are priorities for protection. Considering the general scientific consensus on sea level rise, it would never be too early for a coastal community to begin cataloging historic properties in especially vulnerable flood zones. Unfortunately, communities often do not have the time or the resources to adequately consider the impacts on historic properties when disaster strikes.⁸⁶ This is especially true for properties that may be eligible for, but not included on, the National Register. Another broad social justice concern is that some cultures and histories may be prioritized over others during the clean-up and restoration phases after a major flood event. Such a tragedy was experienced firsthand by African American communities in the historic Lower Ninth Ward District in New Orleans following Hurricane Katrina.⁸⁷

Therefore, a crucial step that local governments must take is to engage the public and concerned stakeholders before disaster strikes. Identifying which properties are valued most highly by the community at large is essential. Equally important is making an effort to engage minority groups who may have different historic areas that represent their history and culture. If all critical stakeholders do not have a seat at the table early on, some interests may be overshadowed.

^{85.} Anthony Veerkamp. 2015, Summer. "Preservation in a Changing Climate: Time to Pick Up the Tab." National Trust for Historic Preservation Forum Journal, p. 17; Rhit Jigyasu. 2013. Heritage and Resilience: Issues and Opportunities for Reducing Disaster Risks. Prepared for the 4th session of the Global Platform for Disaster Risk Reduction, May 19–23, Geneva, Switzerland.

^{86.} FEMA. 2005, May. Integrating Cultural Resources into Hazard Mitigation Planning: State and Local Mitigation Planning How-To Guide (Report No. FEMA 386-6). Retrieved from www.fema.gov/pdf/fima/386-6_Book.pdf.

^{87.} Ceci Connolly. 2005, October 3. "9th Ward: History, Yes, but a Future?" Washington Post. Retrieved from www.washingtonpost. com/wp-dyn/content/article/2005/10/02/AR2005100201320.html.



ANNAPOLIS, MARYLAND:

A Case Study for Developing a Cultural Resources Hazard Mitigation Plan

in the face of sea level rise. Annapolis has experienced severe flooding during storm events and is located in a geographical region projected to experience some of

the greatest sea level rise in the nation.⁸⁸ Historical structures define the character of the city and comprise a National Historic Landmark District. Once home to the nation's capital and currently to the Naval Academy, Annapolis is national treasure that preservationists, community members, and local government officials are desperate to save.

To address historic structure preservation in the face of increased tidal flooding, Annapolis developed a Cultural ResourceHazard Mitigation Plan. The city began efforts in 2013 and dubbed the initiative Weather It Together: Protecting Our Historic Seaport.⁸⁹ The city partnered with the National Historical Trust, the US Naval Academy, FEMA, and various federal and state preservation societies to begin assessing resources and flood risks. The initiative is following the approach recommended by FEMA's how-to-guide, "Integrating Cultural Resources into Hazard Mitigation Planning."90 This approach outlines four critical phases: (1) identify and organize the cultural resources, (2) identify hazards and assess losses to the community, (3) set mitigation priorities and goals, and (4) implement the mitigation plan and monitor progress. Currently, Annapolis has implemented the first three steps of the FEMA process. The city has identified all of the historic structures within the National Historic Landmark District and partnered with the US Army Corps of Engineers to create a "Nonstructural Mitigation Assessment for the City of Annapolis Historic District." This assessment identified 16 prototypical structures of historical value, consisting of residential and commercial buildings that are at risk of flooding. It then identified which potential flood risk adaptive measures would be best for each structure, and assessed the cost and effectiveness of each measure. The city's goal is to eventually complete this type of assessment for each of the 140 buildings within the historic district and to coordinate efforts with the Maryland State Historic Preservation Office to determine which mitigation strategies are most appropriate for the buildings.

In March 2018, Annapolis completed the third step of the FEMA process by incorporating mitigation priorities and goals in a (draft) Cultural Resource Hazard Mitigation Plan (CRHMP).⁹¹ The CRHMP follows the FEMA guidance on organizing the work around critical phases: The city took the problem statements from the first two phases, categorized them into

^{88.} Sea level rise projections for coastal Maryland are between 0.8 and 1.6 feet by 2050 and between 2.0 and 4.2 feet by the end of the 21st century. Boesch, D.F., et. Al., Sea-level Rise: Projections for Maryland 2018, University of Maryland Center for Environmental Science, Cambridge, MD, https://www.umces.edu/sites/default/files/Sea-Level%20Rise%20Projections%20 for%20Maryland%202018_0.pdf.

^{89.} Cultural Resources Hazard Mitigation Plan Archive, The City of Annapolis, Maryland, https://www.annapolis.gov/Docu-mentCenter/View/2175/City-of-Annapolis-Town-Hall-PDF (last visited Mar. 5, 2019).

^{90.} FEMA: Integrating Cultural Resources into Hazard Mitigation Planning: State and Local Mitigation Planning How-To Guide

^{91.} Weather It Together: A Cultural Resource Hazard Mitigation Plan [Draft]. Retrieved from www.annapolis.gov/Document-CenterView/9331/Consolidated-CRHMP-Report-Draft-March-2018?bidId=.

five mitigation categories, 92 and developed goals that respond to the problem statements. 93 The CRHMP prioritizes the mitigation actions according to three FEMA recommended methods: preservation hierarchy and areas of highest risk, using the STAPLEE approach to identify appropriate social, technical, administrative, political, legal, economic and environmental criteria for evaluating merits of alternative actions, 94 and benefit-cost analysis. After soliciting input from the community members, and public and private stakeholders, the Weather It Together core planning team pared down the list of action items into nine project areas for implementation. 95

The CRHMP also initiates step four of FEMA's recommended process by outlining the methodology for implementation and monitoring. The Weather It Together core planning team followed the model established by the Sendai Framework for Disaster Risk Reduction.⁹⁶ The CRHMP distilled goals of the model into the following five key considerations:

Step One: Consider Sensitivity of Information **Step Two:** Consider Required Regulatory Review

Step Three: Consider Interagency Coordination Agreements **Step Four:** Consider Evaluating and Updating the Plan

Step Five: Update the Inventory Data

The CRHMP was presented to the City of Annapolis Office of Emergency Management for distribution to the Maryland Emergency Management Agency/FEMA in December 2017 and was adopted by the Annapolis City Council in May 2018.97 The CRHMP will operates as a stand-alone document appended to the Annapolis 2018 Natural Hazard Mitigation Plan and can be used as a model document for other CRHMPs.98

The efforts in Annapolis have involved a wide range of federal, state, and local government agencies and have been funded through grants from the National Trust for Historic Preservation. A key feature has been its public engagement efforts. Weather It Together has developed an online visual preference survey that allows community members to rate the places that matter the most to their experiences in the historic district. The survey also invites the public to participate in future small group discussion or larger public meetings. Annapolis has even brought in renowned oceanographer and consultant John Englander to discuss the societal and economic impacts that sea level rise will have on Annapolis.

^{92.} Mitigation categories: prevention, property and resource protection, structural diversions, public education and awareness, and natural resource protection for historic landscape features and archaeological sites.

^{93.} Weather It Together, p. 64.

^{94.} Rebekah Green, Developing a Multi-Hazard Mitigation Strategy, Western Washington University. Retrieved from https://serc.carleton.edu/integrate/workshops/risk_resilience/activities/82149.html (last visited Mar. 5, 2019).

^{95.} Weather It Together, p. 71

^{96.} The Sendai Framework for Disaster Risk Reduction 2015–2030, United National Office for Disaster Risk Reduction.

^{97.} https://annapolismd.legistar.com/LegislationDetail.aspx?ID=3476466&GUID=22CAD600-A77A-44A9-BB8E-81480998 B334&Options=&Search=.

^{98.} Weather It Together, p. 72.

LOCAL GOVERNMENTS: UTILIZING ZONING POWERS TO PROTECT HISTORIC DISTRICTS AND INCREASE CLIMATE CHANGE RESILIENCY

The zoning power has long been used as a tool to promote historic preservation in cities and municipalities. An opportunity exists to expand its power to improve the adaptability of these historic districts to floods and to mitigate potential damage. The principles set forth in the National Historic Preservation Act are merely a starting point for local government protection of their cultural heritage resources. Local governments have expansive power to determine the character and future of historic structures and districts within their jurisdictions.

Local governments derive their power to zone from state enabling statutes, which can vary in their specific grants of power.⁹⁹ Broadly speaking, zoning allows a local government to divide land within its jurisdiction into separate, and sometimes overlapping, regions that contain varying regulations and restrictions on the utilization of private land.¹⁰⁰ Zoning ordinances can apply strict requirements for the size, location, and type of building on a parcel of land, or they may require a building permit conditioned on something, such as the grant of a public access easement. When zoning is used for historic preservation purposes, it typically seeks to "prevent unnecessary demolition of resources, to maintain historical integrity, to ensure that new development respects and complements historical resources and settings, and to integrate preservation of historic resources within economic development and redevelopment activities."¹⁰¹

To increase resiliency and promote adaptation, once communities identify and catalog the location and importance of their historic and cultural resources, they should amend their zoning ordinances to limit development in historic areas and preserve open space to the maximum practicable in the floodplain.¹⁰² These regions could be either established historic districts or areas where individual historic structures with especially significant cultural heritage reside.¹⁰³ Not only will doing so protect historical buildings, but limiting development will help mitigate damage to all buildings within the region during a flood event.

Open space preservation achieves two goals important in adapting to and achieving improved climate change resiliency.¹⁰⁴ By leaving land in the floodplain free of development, the risk of structural damage by floodwaters is reduced or eliminated in that area.105 Additionally, floodplains

99. www.okhistory.org/shpo/lpb/3a.pdf.

100. Ibid.

101. Pennsylvania Land Trust Association. "Local Regulation for Historic Preservation." Retrieved from ConservationTools.org: conservationtools.org/guides/87-local-regulation-for-historic-preservation.

102. See, FEMA "The Community Rating System works to Protect Natural Floodplains." Retrieved from https://www.fema.gov/media-library-data/1459276443255-663do2584edc3ac6cda2f4a7f3371oob/Natural-Functions-and-CRS.pdf.

103. See "Local Regulation for Historic Preservation." States such as Pennsylvania additionally have state statutes that enable municipalities to create designations of historic districts that are regulated by individual historic architectural review boards. Zoning is potentially a more flexible approach than imposing a historic district regulation and would be appropriate when a municipality does not have the "density or concentration of resources needed for designation of a ... historic district" or when there is "insufficient political will to impose HARB review on all structures."

104. FEMA: Fact Sheet – Community Rating System. (May 2016), www.fema.gov/media-library-data/1469718823202-3519e082e-89a8c78067obb03f167bbae/NFIP_CRS_Fact_Sheet_May_03_2016.pdf.
105. lbid., pp. 420-422.

in their natural state have an innate ability to reduce floodwater damage and preserve coastal biological resources.106 Given that the maintenance of both cultural heritage and physical integrity of the municipality are involved, communities should bring together scientists, historians, and urban planners to design ordinances and zoning regulations that create the most sustainable historic districts possible.

One potential issue for any downzoning to preserve open space and limit development in historic districts is the invitation for regulatory takings challenges.¹⁰⁷ This is especially true for cities and municipalities that rely on their historic character for tourist and economic activities. If faced with a challenge to new zoning laws, courts apply the multifactor test from *Penn Central Transportation Co. v. New York City.*¹⁰⁸ The factors are the economic impact on the claimant, the extent of regulatory interference with investment–backed expectations, and the extent/character of government action.¹⁰⁹

To avoid liability for such takings claims, municipalities should have a strong justification for the requirements of the new ordinances. This includes having a detailed record of flood and sea level rise vulnerability assessments done in the area. In addition, the technical data used in the decision-making process should show that enacting the ordinance is a valid exercise of the municipality's police power. Making the public aware of the decision to change an ordinance or involving residents in the process will help to reduce the strength of a claimant's investment-backed expectations. A full analysis of regulatory takings' jurisprudence is beyond the scope of this white paper, but such potential liability will be a crucial point of consideration for municipalities as they make plans to combat both climate change in general and its impact on their treasured historical and cultural resources.

^{106.} Ibid., pp. 110–12. Floodplains in their natural state reduce flood velocities, peak flows, and sedimentation.

^{107.} J. Peter Byrne. 2004. "Regulatory Takings Challenges to Historic Preservation Laws After Penn Central." Fordham Environmental Law Review 15. ("The Penn Central decision, in its most immediate concern, provided a legal framework within which local governments could enforce historic landmark restrictions without a regular constitutional requirement to pay 'just compensation.'")

^{108.} Penn Central Transportation Co. v. New York City, 438 U.S. 104, 98 S.Ct. 2646 (1978).

^{100.} See KC McFerson. 2014. Open Space Protection

^{110.} See KC McFerson. 2014. Open Space Protection in Medford, Oregon: A Menu of Legal and Planning Strategies (a White Paper from the University of Oregon Environmental and Natural Resources Law Center's Sustainable Land Use Project and the University of Oregon's Sustainable Cities Initiative).

^{111.} See generally Heal v. Hearings Bd., 96 Wn. App. 522 (1999) (holding that the adoption of a steep slope ordinance has to be based on the best scientific data available to support foreclosing building opportunities on parts of particular properties).

^{112.} See e.g., Koontz v. St. Johns River Water Management, 133 S.Ct. 2586 (2013); Dolan v. City of Tigard, 512 U.S. 374, 114 S.Ct. 2309 (1994); Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 112 S.Ct. 2886, 2888 (1992).

CONCLUSION

Traditional notions of historic and cultural resource preservation will be greatly challenged over the coming decades as the threat of sea level rise and climate change threaten some of the nation's most valued structures and symbols. Historic preservation techniques must adapt to these new challenges posed by climate change or risk catastrophic losses. At the same time, current techniques can be used to identify and protect cultural resources and ultimately make local coastal communities more resilient. While changing federal legislation and the regulations authorized by the National Historic Preservation Act and the National Flood Insurance Program would be helpful and provide uniform guidance for adding flood adaptive measures to historic properties, these measures will be slow to come about. In the meantime, local governments have at their disposal the best information and tools to take steps to protect their historic structures from increased flooding and rising sea levels.