

KEEPING HISTORY ABOVE WATER



MAY 7-9, 2023

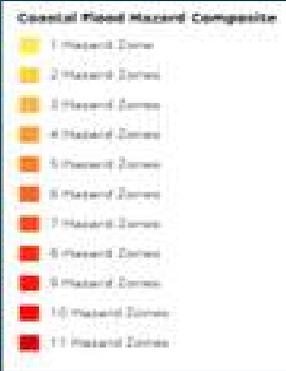
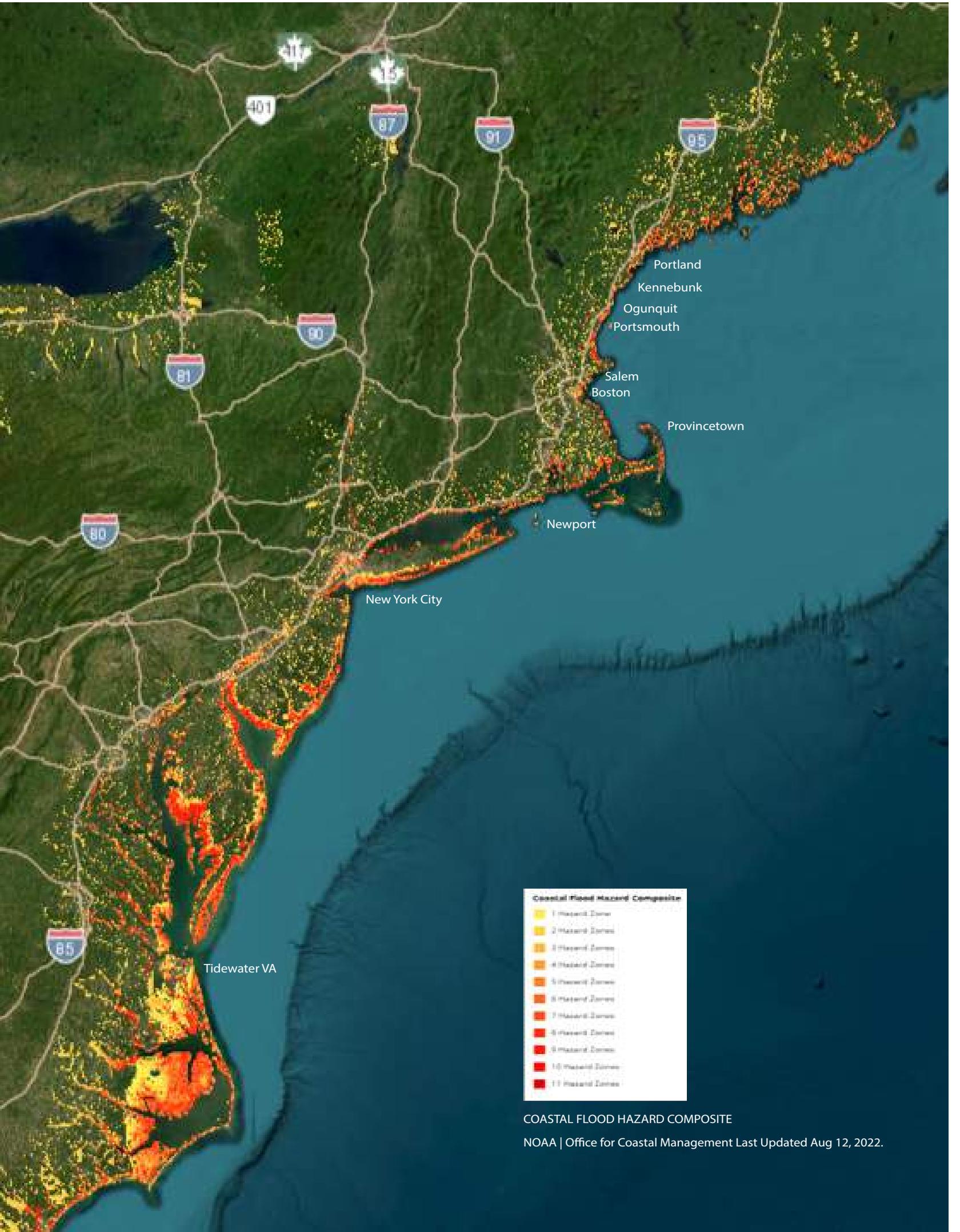


PORTSMOUTH, NH

HISTORYABOVEWATER.ORG/2023-PORTSMOUTH
AC HOTEL | 299 VAUGHAN STREET

FOUNDED BY THE NEWPORT RESTORATION FOUNDATION | HISTORYABOVEWATER.ORG





COASTAL FLOOD HAZARD COMPOSITE

NOAA | Office for Coastal Management Last Updated Aug 12, 2022.

KEEPING HISTORY ABOVE WATER PROGRAM, MAY 7TH - 9TH

	SUN May 7 or MON May 8: WELCOME
	Senator Jeanne Shaheen, welcome
	City of Portsmouth: Mayor McEachern
	SUN May 7
5:00 pm	Reception
5:30-7:00 pm	Conference Hosts & Newport Restoration Foundation
	Keynote: Howard Mansfield
	MON May 8
8:15 am	Opening Remarks
	Newport Restoration Foundation Update
9:00	Water Has a Memory/Strawbery Banke/City/UNH partnership
9:30	Think Blue: A History of Water Infrastructures in the City of Portsmouth
9:45	UNH Geospatial Lab Data Logging
10:00	Implementing Resiliency Measures: Portsmouth's 1860 Shaw Warehouse
10:30	BREAK
11:00	Charting Solutions in a Resilient City 2.0: Tidewater VA
11:30	Climate Action Planning at Historic New England
12:00 pm	The House of the Seven Gables/MA Coastal Zone Management
12:30	Provincetown MA Flood Plain: Preservation Case Studies
1:00	Increasing Climate Resiliency through Selective Dam Removal
1:30	LUNCH
3:00 - 5:00	Tours -- Shaw Warehouse, Cassie Bethoney, Weston & Sampson and Joseph Almeida, City of Portsmouth Facilities Manager AND Strawbery Banke Museum with Horsley-Witten
	TUES May 9
8:30 am	NOAA Flood Risk Assessment & Application Guide
9:30	UNH Coastal Flood Risk Assessment & Guidance
10:30	BREAK
11:15	Role of the Federal Government and Climate Change Policy Development
12:00 pm	National Park Service: Tale of Three Storms
12:30	Living Above the Street: Flood Retrofitting & Adaptive Streetscape NYC
1:00	Adapting to Sea Level Rise in Southern Maine's Historic Waterfront Communities (Portland, Ogunquit, Kennebunk)
2:00	LUNCH
3:00 - 5:00	Tours -- Gundalow river cruise OR City of Portsmouth Historic Cemeteries Committee chair Susan Sterry: walking tour of 1671 Point of Graves Burying Ground

United States Senate

WASHINGTON, DC 20510

April 15, 2023

Dear Friends,

Welcome to this year's Keeping History Above Water Conference in Portsmouth, New Hampshire! Please know that I join in spirit as we continue to share best practices and useful information that will sustain the rich history of our coastal communities. Thank you to the City of Portsmouth, Strawberry Banke Museum and the University of New Hampshire Earth Sciences Center for hosting this event. And – of course – thank you to conference participants for venturing to New Hampshire and lending your thoughts to these important conversations.

For those traveling to New Hampshire for the first time, you will find a small but beautiful coastline that is a source of pride for all Granite Staters. You will also discover a centuries-long history and fascinating culture in coastal towns and cities as well as a community that recognizes the value of conserving these stories and historic resources. They understand that Portsmouth and Seacoast residents can be brought closer together – and a passion and appreciation for our past can be ignited in more people – when our distinct local character is promoted and preserved.

So much of the conversation about sea level rise is centered on what we will lose in the *future* if we fail to act *now*. That's why it's so important to include your viewpoints in these discussions. We may be deprived of crucial connections to our shared *past* if measures are not taken to manage flooding and storm surges in the years to come. This conference is an opportunity for all of us to share perspectives from our particular fields, and ultimately implement thoughtful solutions to manage the effects of climate change and protect against sea level rise. It is the skills displayed here—dialogue, education, and cooperation—that will sustain thriving coastal communities for future generations to know and cherish.

I hope that the 2023 Keeping History Above Water will encourage further discussions on these important topics. I wish you all the best as you continue your good work.

Sincerely,



Jeanne Shaheen
United States Senator



Deaglan McEachern
Mayor

CITY OF PORTSMOUTH

Municipal Complex
1 Junkins Avenue
Portsmouth, New Hampshire 03801
mayor@cityofportsmouth.com
(603) 610-7200

May 7, 2023

Greetings “Keeping History Above Water Portsmouth 2023” Attendees,

On behalf of the Portsmouth City Council, I welcome you to our city and to this legacy event that is part of our commemoration of Portsmouth, New Hampshire’s 400th anniversary.

Home to New Hampshire’s only Atlantic port and to the gateway of our state’s 18 miles of coast, I join you in celebrating New Hampshire’s history, the marine and riverine environment that has sustained our people since time immemorial and to the historic port that served one of the nation’s original thirteen colonies.

You are on the native lands of N’dalosabna Piscataquak and in the city of William Whipple signer of the Declaration of Independence, temporary home of John Paul Jones and Daniel Webster, the Portsmouth Naval Shipyard (oldest active US Navy yard in the country) and the place where the Portsmouth Peace Treaty ended the Russo-Japanese War and earned President Theodore Roosevelt the first Nobel Peace Prize awarded an American.

Clearly there is much history we are anxious and committed to keeping “above water.”

One hundred years ago, on the City’s 300th anniversary, the Chamber of Commerce gave us our motto: “The City of the Open Door.” Today, water laps at our doorsteps – during King Tides (as the evidence at Strawberry Banke Museum in our most historic waterfront neighborhood shows) and during the Nor’easters that bring our tidal Piscataqua River over its banks.

To be sure Portsmouth’s doors remain open, we recognize that all of us – preservationists, engineers, the stewards of our DPW infrastructure and City government – must work together to envision a future that keeps our history above water.

I am proud to lead a City that declared itself an Eco-Municipality in 2017 and one that is currently pursuing the creation of a Climate Action Plan whose vision relies on community engagement and is enriched by how robust the citizen activism on behalf of our planet can be.

Thank you for bringing the focus of Keeping History Above Water® to bear on Portsmouth. I hope you enjoy your stay, our historical waterfront treasures and your discussions. I look forward to hearing your insights that will help keep our doors open.

Sincerely yours,

Deaglan McEachern
Mayor

Wonder Women of UConn | Flower Power in Rhode Island | *Weekends with Yankee Returns!*

YANKEE

NEW ENGLAND'S MAGAZINE

SPECIAL REPORT
The Future of Our Environment

Rising Seas

THE COAST IS CHANGING.

CAN NEW ENGLAND ADAPT?

SUNDAY, MAY 7TH

12 NOON - 5:00 PM

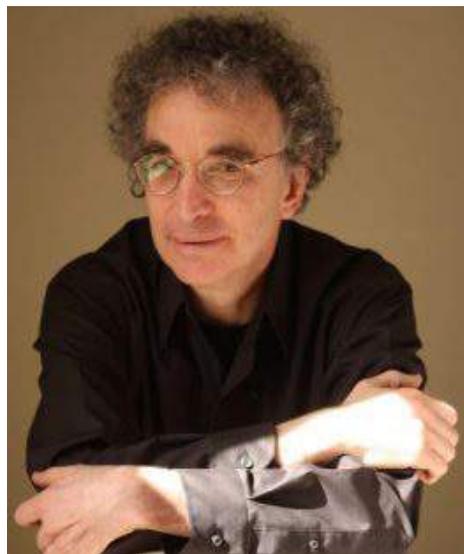
Conference check-in, main lobby of the AC Hotel

5:00 PM - 7:00 PM

Opening Reception & Welcome

Conference Director Stephanie Seacord

Conference Founders, Newport Restoration Foundation



Howard Mansfield sifts through the commonplace and the forgotten to discover stories that tell us about ourselves and our place in the world. He writes about history, architecture, and preservation. He is the author of a dozen books, including *In the Memory House*, *The Bones of the Earth*, *The Same Ax, Twice*, *Chasing Eden*, and *Dwelling in Possibility: Searching for the Soul of Shelter* which *The Boston Globe* called “a wholly original meditation that’s part observation of the contemporary built environment, part cultural history, part philosophical account, and at times something like a Whitmanian poetic survey.”

KEYNOTE: Howard Mansfield, author of the *Yankee Magazine* cover story, “Rising Seas” and more than a dozen books, including *The Habit of Turning the World Upside Down*, in his quest to understand the soul of American places. [HowardMansfield.com]

“Howard Mansfield has never written an uninteresting or dull sentence. All of his books are emotionally and intellectually nourishing,” said the writer and critic Guy Davenport. “He is something like a cultural psychologist along with being a first-class cultural historian. He is humane, witty, bright-minded, and rigorously intelligent. His deep subject is Time: how we deal with it and how it deals with us.”

In one of his first books, *In the Memory House*, Mansfield examined the way we create our history, how we choose our ancestors. In *The Same Ax, Twice* he looked at how good restorations restore us. In *The Bones of the Earth* Mansfield showed how people still carry allegiances to the oldest landmarks—sticks and stones. In *Turn and Jump*, he looked at how we experience the passage of time. In *Dwelling in Possibility*, he searched for what makes some houses a home, and some public places welcoming. In *Summer Over Autumn*, he turned his attention to the small town where he has lived for the last thirty years. In *The Habit of Turning the World Upside Down* he explored our belief in property and the cost of that belief. And in *Chasing Eden: A Book of Seekers* he looked at Americans seeking their Promised Land, seeking God, seeking freedom and seeking peace. In short, Howard Mansfield is trying to understand the soul of American places.

In 2014, the New Hampshire Humanities Council celebrated their 40th anniversary by honoring 40 New Hampshire-based people who have “demonstrated what it means to create, teach, lead, assist, and encourage human understanding.” Mansfield’s work was honored along with filmmaker Ken Burns and US Poet Laureates Donald Hall and Charlie Simic.

He served as a writer and consultant for the “Claiming the Land” exhibit at the New Hampshire Historical Society and for the Library of Congress Bicentennial was the writer and project manager for one of the two projects representing New Hampshire in “Local Legacies: A National Project to Document American Community Traditions.” Mansfield was honored with a Gold Medal for Commentary for City and Regional Magazines, a Silver medal from the Independent Publisher Book Awards, and as a Feature Story Finalist in the National City and Regional Magazine Awards. He received an honorary Doctor of Humane Letters from Franklin Pierce University.

“I’VE BEEN ROWING AGAINST MY OWN BELIEF IN ROCK-STEADY TRADITIONS, IN WANTING TO BELIEVE THAT IT WILL ALL BE THE SAME AS IT EVER WAS, THE SAME WHEN THE NEXT GENERATIONS DISCOVER THIS PLACE.” HOWARD MANSFIELD

Howard Mansfield’s cover story appeared in the March 2018 issue of *Yankee* (image courtesy of *Yankee Magazine*).



KHAW LINK



PORTSMOUTH HISTORIC VULNERABILITY STORY MAP LINK

Alyssa Lozupone is the Director of Preservation at the Newport Restoration Foundation (NRF) in Rhode Island. Prior to joining NRF, Lozupone was a Tax Credit and Grants Manager at the Connecticut State Historic Preservation Office. She has also worked at The Preservation Society of Newport County and as an adjunct professor at Roger Williams University. She holds an M.S. in Historic Preservation from the University of Pennsylvania and a B.A. in Cultural and Historic Preservation from Salve Regina University. She currently serves on the boards of Landmark Trust USA and Preservation Action.

Margaret Back is Preservation Associate at the Newport Restoration Foundation where she leads projects connecting climate change and built heritage resiliency. She previously worked as a Preservation Manager for the South Region of Historic New England, where she oversaw preservation projects and facility maintenance for properties in Connecticut, Massachusetts and Rhode Island. She holds an M.S. in Historic Preservation from the University of Pennsylvania.

Peter L. Britz, City of Portsmouth Director of Planning and Sustainability, joined the City of Portsmouth Planning Department in 2000 as Environmental Planner, having served as an environmental consultant working in NH, Massachusetts and the Pacific Northwest. In 2008, with sustainability efforts becoming a priority for the City, he was named Sustainability Coordinator. In that role, his responsibilities have included serving as Planning Department liaison to the Blue Ribbon Committee on Sustainable Practices which is dedicated to improving residents' awareness of initiatives the City pursues as an Eco-Municipality. He is recognized by his colleagues regionally and nationally as the voice of sustainability for the Seacoast of New Hampshire. From 1996 to 1999, he worked for Fishman Environmental Services in Portland, Oregon as a coastal and natural resource planner. He holds a Master's degree in marine affairs from the University of Washington and a BA from Middlebury College in Vermont.

Rodney Rowland is Director of Facilities and Environmental Sustainability for Strawberry Banke Museum in Portsmouth, New Hampshire. He has worked for over 30 years at this National Register Historic District site to strengthen its mission and ensure a sustainable future. Since 2012, he has led the extensive Sea Level Rise Initiative resiliency project at the museum. That effort seeks to protect the very fabric the museum uses to teach 500 years of history and ensure that the lessons learned and the work done is broadly understood. This public outreach is focused on changing minds and engaging the public to take action in their communities. Toward this goal, Rowland has lectured extensively at numerous conferences, including three of the Keeping History Above Water conferences, a TedX Talk in 2019 and several regional lecture programs and panels.

Michael Routhier is the program coordinator and creator of the Geospatial Science Graduate Certificate program at the University of New Hampshire (UNH) and manager of the Geospatial Science Center (GSSC) at the UNH Institute for the Study of Earth, Oceans, and Space (EOS). He has managed the GSSC for over twenty years and his most recent work includes the deployment of water sensors in Hampton and Portsmouth, New Hampshire to help monitor the effects of sea level on the coastal environment. He is also using UAV and satellite remote-sensing technologies to map New Hampshire salt marsh grasses and submerged eelgrass species to monitor their distribution relative to factors such as sea level rise and anthropogenic influences. His previous work includes helping to build and manage the cyberinfrastructure for the NSF New Hampshire EPSCoR Ecosystems & Society, Safe Beaches & Shellfish, and the Future of Dams projects, providing digital data archive support to the NASA Earth Science Federation Partners (ESiPS) EOS-WEBSTER project for terrestrial system research, providing geospatial analysis support to the UNH Water Systems Analysis Group for the study of macro-scale hydrology, and the mapping of Amazonian and southeast Asian rainforests as part of the NASA Landsat Pathfinder Tropical Deforestation Monitoring project.

Brian Goetz, Deputy Director City of Portsmouth Department of Public Works, leads the Water|Wastewater|Stormwater Division with 35 years of waterworks management and consulting experience. He is widely recognized as one of the foremost authorities on water demand and efficiency. His efforts helped Portsmouth receive the State of New Hampshire 2015 Water Sustainability Award. A member and Past President of New England Water Works Association (NEWWA) and American Water Works Association (AWWA) he is former chair of the NEWWA Water Resources Committee and is a frequent speaker and contributor to NEWWA's publications. A past member of the State of New Hampshire Groundwater Commission, Goetz is a current member of the State of New Hampshire's Seacoast Drinking Water Commission and co-chairs the City of Portsmouth Safe Water Advisory Group. Goetz earned a Bachelor's degree in technology from Bowling Green State University and a Master's degree in environmental policy from Indiana University. He is a Grade 4 certified water treatment operator and a Grade 3 certified water distribution operator.



Images of Portsmouth waterfront from Dec 2022 storm (top to bottom): historic Sheafe Warehouse and Water Street, Marcy Street and historic Player's Ring theater building; Mechanic Street wastewater pump station.

MONDAY, MAY 8TH

8:00 AM - 3:00 PM

Check-in, AC Hotel Conference Center, 2nd floor

7:30 AM - 8:15 AM

Continental breakfast in AC Hotel Conference Center, 2nd floor

8:15 AM - 9:00 AM

Opening Remarks & Welcome, Conference Director Stephanie Seacord and KHAW founders, Newport Restoration Foundation

9:00 AM - 9:30 AM

"Water Has a Memory" KHAW Update: Peter Britz, City of Portsmouth Planning & Sustainability Director; Rodney Rowland, Strawberry Banke Facilities and Environmental Sustainability Director; Michael Routhier, Manager of the Geospatial Science Center (GSSC) at the UNH Institute for the Study of Earth, Oceans, and Space (EOS).

9:30 - 9:45 AM

"Think Blue" Initiatives and A History of the Portsmouth Water System, Brian F. Goetz, City of Portsmouth DPW Deputy Director, Water | Wastewater | Stormwater Division

9:45 - 10:00 AM

UNH Geospatial Lab Data Logging, Michael Routhier, Manager of the Geospatial Science Center (GSSC) at the UNH Institute for the Study of Earth, Oceans, and Space (EOS).

10:00 AM - 10:30 AM

Implementing Resiliency Measures: A Case History of the Portsmouth's 1860 Historic Shaw Warehouse, Cassie Bethoney, Weston & Sampson, Project Manager, Landscape Architecture

10:30 AM - 11:00 AM

BREAK

11:00 AM - 11:30 AM

Charting Solutions in a Resilient City 2.0, Tidewater, Virginia, Kerry Shackelford and Paige Pollard, Building Resilient Solutions, Suffolk, VA. Building Resilient Solutions has recently concluded two discrete tests in their flood testing chamber and shares the process, information and outcomes with KHAW attendees to facilitate a discussion about testing, priorities for materials and assemblies to be tested, and how this information can be used and disseminated to encourage preservation of historic materials.

11:30 AM - 12 NOON

Climate Action Planning at Historic New England: Preparing Historic Sites Now for Carbon Neutrality and Resilience, Ben Haavik, Historic New England Team Leader, Property Care

12 NOON - 12:30 PM

Salem's House of the Seven Gables and MA Coastal Zone Management, Susan Baker, House of Seven Gables "Historic Preservation in a Changing Climate: The House of the Seven Gables." A review of the historic 1668 site and addressing the issues related to climate change. MA Coastal Zone Management has funded a two-year grant to develop recommendations. This session shares preliminary data and findings.

12:30 PM - 1:00 PM

The Provincetown MA Flood Plain: Preservation Case Studies, Regina Binder, Binder Group with Tim Famulare, Director of Community Development and Liaison to Coastal Resilience Advisory Committee; Michelle Stefani, Chair of Harbor Committee and Chair of Coastal Resilience Advisory Committee; and Michela Murphy, Historic District Commission and Coastal Resilience Advisory Committee member. Provincetown Massachusetts sits at the end of Cape Cod surrounded by water with over half the land along the Atlantic Ocean owned by the National Seashore. The historic district includes 1184 structures, over 700 of which are in a flood zone, more than half of those in a velocity zone. Given that the historic district is a primary economic engine, improving coastal resiliency is critical. Provincetown is adapting but the fragmented board review process often leads property owners to try to avoid FEMA compliance by limiting scope or by claiming historic exemption status. This session explains how a newly created coastal resiliency advisory committee, a proposed 2023 Local Comprehensive Plan, a proposed flow chart for working with the county and the state and revisions to the Municipal Plan seek to establish Provincetown as a model for raising awareness, removing regulatory obstacles and seeking financial assistance.

1:00 PM - 1:30 PM

Increasing Climate Resiliency through Selective Dam Removal While Preserving Our Past, Quinn Stuart and Peter Walker, VHB Cultural and Environmental Services. Since the passage of the National Historic Preservation Act in 1966, more than 100 dams have been individually listed in the National Register while hundreds more are listed as contributing to the historic districts they helped create. As more historic dams are rendered unsafe by climate change, the question of how to protect the communities they serve from rising floodwaters while recognizing their historic role necessitates a careful balancing act between natural and historic resources. The talk will draw from several example projects within New England, and in New Hampshire especially, including the removal of the Homestead Woolen Mills Dam from the Ashuelot River, the Great Dam from the Exeter River, the Sawyer Mill Dam from the Bellamy River, and the on-going planning for removal of the Mill Pond Dam on the Oyster River.

1:30 - 2:30 PM

LUNCH

3:00 - 5:00 PM

TOURS OF STRAWBERRY BANKE AND PRESCOTT PARK RESILIENCY INITIATIVES

SPEAKER BIOS

Cassie Bethoney, Project Manager and Registered Landscape Architect for Weston & Sampson leads the design of park and open space improvements in the public realm and manages complex multidisciplinary teams to bring abstract ideas to reality. Much of her work spans across scales, from city-wide, neighborhood and park master planning to site-specific improvements. Working between scales has allowed Cassie to weave visionary thinking and pragmatism together to achieve successful project outcomes. She believes that climate engineering and design are most successful when they work in tandem, and that parks and open spaces can be adapted to changing climatic conditions while also preserving the cultural memory of their place in the community. With parks becoming increasingly programmed to mitigate climate change, ostensibly serving more civic functions than ever before, they must be understood as a part of public infrastructure and recognized as fundamental components of a functioning city. With over a decade working in the public realm, Cassie continues to advocate for an engaged public process to make vibrant spaces. She holds a Bachelor of Science in Landscape Architecture from Cornell University and a Masters of Landscape Architecture from Harvard's Graduate School of Design.

Kerry Shackelford is a Licensed Class A Contractor, the owner of Museum Resources Construction & Millwork (MRCM) and co-owner of Building Resilient Solutions (BRS)– a joint venture with Commonwealth Preservation Group (CPG). MRCM has performed restorations, reproductions, additions, and remodeling on a wide variety of historic properties, including private homes, commercial buildings, and museums. At BRS, Kerry is responsible for client consultation, pre- and post-retrofit monitoring design, retrofit design, and lab operations for retrofit effectiveness testing. Kerry has gained a reputation for authentic, accurate historic reproduction. He has extensive experience in– and special interest and appreciation for– the traditional Historic Trades and has worked “hands on” in traditional historic woodworking and forest product manufacture for 30+ years. His experience was developed initially through a degree in Natural Resources Management from the University of Tennessee and then through a traditional apprenticeship of 6 years in Coopering at the Colonial Williamsburg Foundation. He is one of only two tradesmen to complete this long and challenging program.

Paige Pollard, co-owner of Building Resilient Solutions in Suffolk VA, opened Commonwealth Preservation Group (CPG) in 2004 with her husband, Marcus Pollard, after working as a local preservation planner and at the Virginia Department of Historic Resources. In response to increasing inundation and nuisance flooding, CPG and Museum Resources Construction & Millwork initiated a joint venture, establishing Building Resilient Solutions (BRS) in 2019. BRS focuses on site specific analysis and data-driven retrofit recommendations for at risk properties. The two QR codes at right link to their most recent test results. Pollard received her undergraduate degree from the University of Virginia School of Architecture, and Master's in Historic Preservation from the University of Georgia.

Benjamin Haavik, Historic New England (HNE) Team Leader of Property Care, is responsible for the maintenance and preservation of 39 historic house museums and landscapes open to the public. In this role, Ben has overseen many initiatives including recent work to develop a Climate Action Plan to make HNE sites more resilient and carbon neutral. Prior to joining HNE in 2004, Ben was Deputy Director of the Historic House Trust of New York City where he cared for 24 historic sites throughout the five boroughs of New York City. He began his career at the Fairmount Park Historic Preservation Trust in Philadelphia PA, after receiving his MS in Historic Preservation from the University of Pennsylvania. He was a participant in the Attingham Summer School Program in England in 2004 and is recognized as a Professional Associate of the American Institute for Conservation.

Susan Baker is Collections Manager for the 354-year old House of the Seven Gables in Salem MA. She has led The Gables' efforts to get involved in climate change actions, is responsible for the institution's collections and, in part, for the structures themselves. Baker joined Preservation Partners in Salem, a city-led forum for historic preservation groups to meet and share news and concerns. From there she participated in a sub-group led by the city's preservation planner and including Salem Sound Coastwatch, Historic New England, the Peabody Essex Museum, Essex National Heritage Area, Destination Salem, Historic Salem and the National Park Service. This group has organized two conferences devoted to the topic of climate adaptations and is planning a third for September 2023. Over the course of the sub-group's work, she and Barbara Warren of Salem Sound Coastwatch collaborated to develop a successful Massachusetts Office of Coastal Zone Management grant request for \$509,919 to address the impact of climate change on the historic property. The grant, jointly administered by The Gables and its project partner Salem Sound Coastwatch, is the first in the state to a nonprofit museum for focusing on adaptations that are needed to the built environment.



BUILDING RESILIENT
SOLUTIONS TEST RESULTS
1 & 2



MONDAY SPEAKER BIOS

Regina Binder, founder of The Binder Group, is Chairman of the Local Comprehensive Plan Committee and the Provincetown Public Pier Corporation. She has spent more than 25 years in permitting and project management and development, working with community, tourism and cultural ministries, NGOs, regional and federal authorities, and private entities to achieve their sustainable preservation, planning and development goals. As research director for Mandala Research, Binder served on the US Department of Commerce Travel and Tourism Advisory Board during the Obama Administration. She is a member of The National Alliance of Preservation Commissions, ICOMOS and BEST (Business Enterprises for Sustainable Tourism). Binder is an advisor to the United Nations and is a senior research fellow and advisor on sustainable tourism to The Kenan Institute's Center for Competitive Economies at the University North Carolina-Chapel Hill. There, her work is specifically focused on World Heritage Sites. In 1998, she received the 'Save America's Treasures Award' from Hillary Clinton for her preservation of The Nantucket United Methodist Church (1822). Binder created the local historic district in Provincetown and then chaired the district commission for seven years, also serving on the Zoning Board, Planning Board, Licensing Board and the ad-hoc Zoning Bylaw Rewrite Commission. She has served as chairman of the Provincetown Community Compact for the last fifteen years. She holds a Master's of Science in Historic Preservation from the Graduate School of Architecture, Planning and Preservation (GSAPP), Columbia University, and a BA in Art History from Vassar College. She is joined on the panel by Tim Famulare, Director of Community Development and Liaison to Coastal Resilience Advisory Committee; Michelle Stefani, Chair of Harbor Committee and Chair of Coastal Resilience Advisory Committee; and Michela Murphy, Historic District Commission and Coastal Resilience Advisory Committee member.

Peter J. Walker is a Principal in the environmental practice at Vanasse Hangen Brustlin (VHB), many of whose projects have involved environmental restoration, community-based projects and historic preservation. In a former position with the NH Department of Environmental Services, he was responsible for the Wetlands Bureau's permitting and public outreach efforts and he has been involved in environmental issues in northern New England for nearly 30 years. He received a Bachelor's degree in biology and environmental studies from Williams College and a Master's degree from the University of Vermont.

Quinn Stuart is the Director of Cultural Resources for Vanasse Hangen Brustlin (VHB) in Watertown, MA. She has worked in historic preservation throughout the country for the last 16 years. Quinn's diverse professional and educational background includes architectural history, cultural resource management, preservation carpentry and masonry conservation. She has specialized knowledge of architectural history, local, state and federal historic compliance regulations and working with municipalities and consulting parties to minimize or mitigate impacts to historic resources. She received her M.A. in Historic Preservation from Savannah College of Art and Design and graduated from Roger Williams University with a B.S. in Historic Preservation.

MONDAY, MAY 8TH TOURS

Prescott Park & Shaw Warehouse Resiliency Case Study Tour

This site visit with Cassie Bethoney from Weston & Sampson and City of Portsmouth Facilities Manager Joe Almeida takes an on-site look at the City's plan to raise the 1806 Shaw Warehouse (partial view, below, of building during December 2022 storm seen at left, foreground) and move it away from the waterfront to higher ground.



Strawbery Banke Museum Master Plan Case Study Tour

This site visit to the 10-acre Strawbery Banke living history museum with the Director of Properties and Environmental Sustainability and engineers Horsley-Witten and Placework examines how the Strawbery Banke Master Plan intends to deflect surface water flooding from the museum's historic 1695-1870 buildings along "Puddle Dock" (as seen below after a heavy rain).



TUESDAY, MAY 9TH

8:00 AM - 3:00 PM

7:30 AM - 8:30 AM

8:30 AM - 9:30 AM

Check-in, AC Hotel Conference Center, 2nd floor

Continental breakfast in AC Hotel Conference Center, 2nd floor

NOAA's Flood Risk Assessment & Application Guide, Mark Osler, NOAA Senior Advisor for Coastal Inundation and Claudia Mazur, Sea Grant Knauss Marine Science Policy Fellow

In 2023, NOAA plans to unveil a new model to more accurately predict when and where high tide flooding will likely occur, up to a year ahead of time, and to implement the model by the end of 2023. This new information will help coastal communities better prepare and respond to potential flooding days to help lessen possible impacts from climate change. When ready, NOAA will incorporate the model into a new seasonal-to-annual coastal flood outlook, building on the agency's Seasonal High Tide Bulletin and High Tide Flooding Annual Outlook. These online resources show users when and where high tide flooding is most likely in coming months.

NOAA currently provides a range of dates each season when the tides will be highest. With this update, each day in the calendar year will be assigned a likelihood of actual flooding to occur to better enable communities to make risk-informed management decisions, such as whether to close roads, perform maintenance on stormdrain systems, or prepare flood mitigation actions for vulnerable infrastructure. This new approach represents an important step forward in the ability to predict coastal flooding for months and years into the future. This advancement highlights NOAA's commitment to serving coastal communities with the data and information they need to plan for the future.

9:30 AM - 10:30 AM

UNH Coastal Flood Risk Assessment & Guidance (2020), Cameron Wake, Research Professor, UNH Earth Systems Research Center and Josephine A. Lamprey Professor in Climate and Sustainability at the UNH Sustainability Institute

In this session, Dr. Wake explores his 2019 New Hampshire Coastal Flood Risk Summary – Part I (top QR code at left) and his 2020 New Hampshire Coastal Flood Risk Summary, Part II: Guidance for Using Scientific Projections (bottom QR code), both published by the University of New Hampshire, Durham, NH.

The Guidance document provides science-based and user-informed guiding principles and a multi-step approach for incorporating updated coastal flood risk projections into private, local, state and federal projects, including planning, regulatory and site-specific decisions-making to:

- Select and plan for relative sea-level rise (RSLR) estimates that range from 1.3-2.3 feet by 2050, 2.9-6.2 feet by 2100, and 4.6-11.7 feet by 2150, under the assumption that global greenhouse gas concentrations will stabilize by the end of the century. Higher RSLR estimates are advised should decision makers prefer to assume that global greenhouse gas concentrations will continue to grow through 2100 and that the rate of ice mass loss from Antarctica will accelerate even more rapidly;
- Adjust current coastal storm surge depths and extents and augment existing floodplain management and protection standards to account for RSLR;
- Assess risks associated from increasing groundwater levels which are projected to rise as a percentage of RSLR up to 3 miles inland from the coast;
- Account for projected increases in extreme precipitation by multiplying present-day extreme precipitation rainfall estimates by at least 15%; and
- Identify and evaluate adaptation options to minimize coastal flood risks.

It is imperative that decision makers recognize that RSLR, coastal storms, RSLR-induced groundwater rise, extreme precipitation and freshwater flooding pose an increasing threat to New Hampshire's public health and safety, public and private structures and facilities, livelihoods and economies and natural, historic and cultural resources. Proactive planning for these coastal flood risks is essential to save lives and money, sustain quality of life, mitigate crises and conflict and avoid the degradation of New Hampshire's most vulnerable coastal areas. The Guidance directs decision makers to "create a bold vision, start immediately, and act incrementally and opportunistically" and lays out eight additional guiding principles, including prioritizing equity and justice for socially vulnerable populations, protecting natural, cultural and historic resources and public access and supporting greenhouse gas reduction policies to help avoid the worst coastal flood risks.

BREAK

10:30 AM - 11:00 AM



UNH COASTAL
FLOOD RISK
ASSESSMENT



UNH COASTAL
FLOOD RISK
ASSESSMENT
GUIDANCE

11:15 AM - 12 NOON

Role of the Federal Government and Climate Change Policy Development by the Senate Advisory Council on Historic Preservation (ACHP), Sara Bronin, chair and Cornell University Fellow, Atkinson Center on Sustainability

The Council is an independent federal agency comprised of 24 Presidentially-appointed members from federal agencies, preservation organizations, tribes and expert private citizens. Its staff members, based in Washington DC, carry out historic preservation case reviews, provide training in historic preservation law and policy and conduct outreach to the American public on the importance of historic sites and community preservation. This session considers the role of federal policy in tackling the issue of sea level rise and the steps currently being undertaken by ACHP to move the needle. Areas for discussion include: climate adaptation and mitigation, equity, flexibility, education and collaboration. the impacts of sea level rise on historic properties as an integral part of community planning, disaster planning and response and hazard mitigation, environmental review consultation regarding historic properties with disadvantaged and underserved residents, and capacity building options for supporting their participation. ACHP believes that creative solutions should be encouraged to help communities accept and contend with the reality that many historic properties will have to be altered if they are to survive sea level rise and others inevitably will be lost. Cooperative efforts across agencies and between levels of government are critically important and should be encouraged.

12 NOON - 12:30 PM

A Tale of Three Storms: A Practical Guide to Preparing for Nature's Unexpected Fury, David Luchsinger former National Park Service Superintendent.

In his 37 years with the National Park Service, Luchsinger confronted the reality of the collision between climate and its ever-stronger ocean storms and the challenges of protecting and restoring national historic treasures in the care of the National Park Service. This program will examine:

- Halloween Storm of 1991 ("The Perfect Storm") -- The effects of three systems coming together, the damage to natural and cultural resources of the park and learning from a previously unfathomable event.
- The "Katrina" and "Rita" Experience -- The devastation and aftermath a year later, the destruction and loss of history to Mother Nature, reconstructing the history remaining and preparing for the next event.
- Preparing a park for a potential natural disaster that had never before happened -- Decision-making on projects based on experienced statistical data and planning for the unthinkable.
- "Superstorm Sandy" -- The destruction of all infrastructure and the plan in place to rebuild, the human factor, the successful return.
- Planning for the future with sea level rise -- Protecting historical resources, smart building practices learned from experience, "expecting the unexpected" and accepting the inevitable changes to come.

TUESDAY, MAY 9TH

12:30 PM - 1:00 PM

Living Above the Street: Flood Retrofitting and Adaptive Streetscape of New York City's Historic Districts, Ziming Wang, M.S. Columbia University

In view of the extensive streetscape changes happening in New York City's waterfront communities due to flood adaptation interventions, such as building elevations mandated by the city's stringent Post-Sandy policy framework, this program examines possible design and policy solutions for the adaptive transformation of New York City's historic streetscapes towards flood resilience. The research incorporates building, street and neighborhood-scaled thinking, taking into account a diverse body of heritage, economic and resilience values embedded within the historic built environment. Specifically, this research project features:

- Mapping flood risk faced by New York City's historic built environment, and an analysis of negative streetscape impacts associated with retrofitting interventions under the city's flood regulation;
- A theoretical framework and a set of evaluation metrics to understand and measure the various values and goals involved in the flood adaptation of historic streetscapes;
- Design guidelines for streetscape-sensitive flood retrofitting of New York City's flood-threatened historic buildings and districts;
- Policy reflections and recommendations in New York City's context based on observations from design studies;
- An online platform (QR code at left) for sharing research findings and for building dialogues among professional practitioners and community stakeholders on flood resilience and historic preservation.



LIVING ABOVE THE
STREET INITIATIVE
LINK

1:00 PM - 2:00 PM

Adapting to Sea Level Rise in Southern Maine's Historic Waterfront Communities, David Reidmiller, Gulf of Maine Research Institute; Ian Stevenson and Sarah Hansen, Greater Portland Landmarks; and Abbie Sherwin, Southern Maine Planning & Development Commission

This session will start with a technical overview, by Dave Reidmiller of the Gulf of Maine Research Institute, of sea level rise science and coastal flood projections for Maine over the coming decades, with a focus on Portland's historic working waterfront. Sarah Hansen and Ian Stevenson of Greater Portland Landmarks (GPL) will follow with a talk describing how to assess flood vulnerability for historic properties in two distinct neighborhoods of Portland and South Portland. They will draw from GPL's 2020 publication, *Staying Above Water: A Property Owner's Guide*, which illustrates transferable resilience solutions for homeowners whose properties face increasing flood risks. The session will conclude with a presentation by Abbie Sherwin of the Southern Maine Planning & Development Commission who will describe two case studies—Marginal Way in Ogunquit and the Dock Square/Lower Village hamlet in Kennebunkport/Kennebunk—illustrating the considerations, challenges and differences in approaches for dealing with the consequences of increased flood risk as a result of sea level rise.

2:00 PM - 3:00 PM

LUNCH

3:00 PM - 5:00 PM

TOURS

RIVER TOUR ON THE GUNDALOW "PISCATAQUA" (limited to 44 passengers)

WALKING TOUR & SEA LEVEL RISE CHALLENGES AT THE WATERFRONT 1671 POINT OF GRAVES BURYING GROUND with Susan Sterry, co-chair of the City of Portsmouth Historic Cemeteries Committee

TUESDAY SPEAKER BIOS

Mark Osler, NOAA Senior Advisor for Coastal Inundation and Resilience, works across all of NOAA (its four "Services," two "Departments" and all sub-units) -- including as US Government representative to the G7's Ocean Risk and Resilience Action Alliance and as NOAA representative within the White House National Security Council, Office of Science and Technology Policy, and the Council on Environmental Quality -- to advance coastal inundation science and the ability of decisionmakers to prepare for and respond to changes affecting the nation's coastlines. He serves as senior advisor to NOAA leadership on defining research, applied science and policy priorities related to understanding and reducing the impacts of coastal risk to the public, national security and the US economy. Prior to joining NOAA, Mark worked for 17 years in the private sector. He holds a Bachelor's degree in civil engineering from Lehigh University and a Master's degree in coastal engineering from the University of Delaware's Center for Applied Coastal Research.

Cameron Wake is a Research Professor at the Institute for the Study of Earth, Oceans and Space, and the Dept. of Earth Sciences at the University of New Hampshire. He is also the Josephine A. Lamprey Professor in Climate and Sustainability at the UNH Sustainability Institute. He leads a research program investigating regional climate change through the analysis of ice core records and historical and instrumental data. In addition to teaching classes and lecturing widely on global environmental change, he serves as the program chair for UNH's Sustainability Dual Major. Cameron also helps lead Climate Solutions New England, a collaborative effort to secure healthy, prosperous and sustainable communities through the pursuit of integrated solutions that include building energy self-reliance and weather resilience. He is an author on over 85 papers in the peer-reviewed scientific literature and dozens of reports. His collaborative research on several regional climate assessments in the northeast United States has been shared with municipal, state and federal agencies and representatives, covered widely in the media and is frequently cited as motivation for policy action. In recognition of his engaged scholarship around the issue of climate change, Cameron was awarded the UNH Faculty Award of Excellence in Public Service in 2010. He holds a Ph.D. in Earth Sciences from the University of New Hampshire, an M.A. in Geography from Wilfrid Laurier University and a Bachelor of Science in Geology from the University of Ottawa.

Sara C. Bronin serves as the 12th Chair of the Advisory Council on Historic Preservation after confirmation by unanimous consent of the U.S. Senate. She is currently on leave from her position as a Professor of the Cornell University College of Architecture, Art, and Planning, and is an Associated Faculty Member of the Cornell Law School, is the Director of the Legal Constructs Lab, and is a Faculty Fellow of the Cornell Atkinson Center for Sustainability. Bronin has served on the board of Latinos in Heritage Conservation and as an advisor for the National Trust for Historic Preservation and the Sustainable Development Code. Previously, she chaired Preservation Connecticut, served on the city of Hartford historic preservation commission, and led Hartford's nationally-recognized efforts to overhaul the zoning code. She founded and directs the National Zoning Atlas, which aims to translate and standardize information about how zoning regulates housing in around 30,000 jurisdictions nationally. She holds a J.D. from Yale Law School (Harry S Truman Scholarship), M.Sc. from the University of Oxford (Rhodes Scholarship) and a B.Architecture/B.A. from the University of Texas.

Dave Luchsinger worked for the National Park Service for 37 years. He began his NPS career at Fire Island National Seashore in New York as a seasonal laborer then advanced to Acting Superintendent. After transferring to Administration, he worked as administrative chief and was involved in a number of significant projects including overseeing the multimillion dollar rehabilitation of the site after the 1991 "Perfect Storm" and assisting with the recovery efforts of the Flight 800 disaster. During his tenure at Manhattan Sites, Luchsinger oversaw the \$16.5 million dollar rehabilitation of Federal Hall National Memorial and coordinated the Joint Session of Congress there on September 6, 2002 for the first anniversary of 9/11. In 2003 and 2004, Luchsinger served as Acting Deputy Superintendent of the Statue of Liberty National Monument and Ellis Island to assist in the re-opening of the Statue following 9/11 as well as overseeing rehabilitation and stabilization projects on the south side of Ellis Island. Luchsinger later worked as business manager at Gateway National Recreation Area in New York and New Jersey and negotiated the historic \$70 million lease for the rehabilitation of Fort Hancock. His experience in leading recovery efforts after the Perfect Storm, in Louisiana after Hurricanes Katrina, Gustav and Ike, and on Liberty Island after Superstorm Sandy are the focus of his presentation. He is the recipient of many National Park Service awards and honors, including the Ellis Island Medal of Honor. He lectures for many conservation organizations, including State Parks, Green Alliance and the Union of Concerned Scientists and is currently working with conservation and preservation students at the College of William and Mary in VA.

TUESDAY SPEAKER BIOS



LIVING ABOVE THE
STREET THESIS LINK

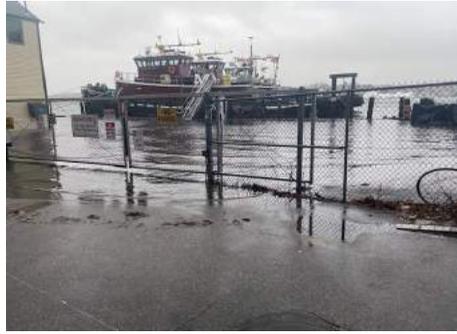
Ziming Wang completed his M.S. in Historic Preservation at Columbia University in 2022 with the thesis, "Living Above the Street: Flood Retrofitting and Adaptive Streetscape of New York City's Historic Districts" (QR code at left). Under a six-month fellowship sponsored by Columbia's Onera Prize for Historic Preservation, he is currently expanding and furthering his research on flood adaptation and historic urban form change in the context of New York City. Ziming holds a Bachelor's degree in Architecture from Tsinghua University; during his graduate studies, he served as a teaching assistant, participated in the 2021 APT-PETC Student Design-Build Competition as a member of the Columbia team, and interned at New York City Department of City Planning and Jay Heritage Center. An aspiring urban researcher, he seeks to develop a research and teaching-oriented career at the intersection of urban planning and historic preservation.

Sarah Hansen joined Greater Portland Landmarks as Executive Director in June 2019 having previously served as Director of Preservation Services at Maine Preservation for two years. She serves on the board of the National Preservation Partners Network, Maine's Main Street Advisory Council, the Maine Alliance for Smart Growth, and as a founding member of the Cultural Alliance of Maine. Sarah discovered her love of community revitalization as a history major at Connecticut College and received a M.A. in Preservation Studies from Boston University. After working with Boston Main Streets, she worked for the National Trust for Historic Preservation's regional office in Denver covering South Dakota, Wyoming and Montana. She also worked for Colorado Preservation, Inc. and with Architectural Heritage Foundation in Boston, a nonprofit historic tax credit developer. After five years as Coordinator of the Washington State Main Street Program, she worked for the Arkansas Community Foundation as Statewide Outreach Director. Locally, Sarah was appointed to the Village Review Overlay Committee for the City of Westbrook and serves on the Economic Vitality Committee for Discover Downtown Westbrook.

Ian Stevenson, Director of Advocacy for Greater Portland Landmarks, works to preserve the region's sense of place while helping shape its future. He engages in community review and legislative processes, develops policy statements and convenes diverse interested parties to discuss initiatives relating to historic preservation and architecture. He researches and documents neighborhoods and delivers lectures aimed at building grassroots advocacy. He meets with developers, architects and realtors to ensure that preservation plays a role in new projects. His work bridges the gap between history and growth and aims to make preservation contribute to the solutions of some of our most pressing problems like climate change, DEI, and the need for affordable housing. Ian holds a BA in American history from Bates College, and both an MA in Preservation Studies and PhD in American & New England Studies from Boston University. His research and publications include such topics as historic dams, railroad station architecture, Civil War veterans' vacation homes, historic preservation photography, the creation of national parks, and river rewilding. Ian has served as a board member for the Vernacular Architecture Forum and the New England Chapter of the Society of Architectural Historians and is a current board member of the Fifth Maine Museum on Peaks Island.

Dr. David Reidmiller is the Director of the Climate Center at the Gulf of Maine Research Institute (GMRI). Prior to joining GMRI, Dave served in a variety of climate science policy roles for the federal government, including as Director of the Fourth National Climate Assessment with the White House and, while at the State Department, as the lead U.S. science and technology negotiator for the Paris Agreement. Dave holds a Ph.D. in atmospheric sciences from the University of Washington and a BA in chemistry from Colgate University.

Abbie Sherwin is a Senior Planner and Coastal Resilience Coordinator with Southern Maine Planning and Development Commission. She provides technical and planning assistance to Maine communities, specializing in coastal resilience, climate adaptation planning and hazard mitigation. Abbie works with municipal planners, local officials, and regional organizations to assess climate-related vulnerabilities and implement strategies to help communities prepare for changing environmental conditions. She holds an M.S. in coastal science and policy from the University of New Hampshire and is a Certified Floodplain Manager®.



Images of Portsmouth waterfront from Dec 2022 storm (top left to right): Rte. 1 restaurant adjacent to tidal marsh, tugboat dock downtown, tidal South Mill Pond. Bottom, left to right: Mechanic Street, back channel of Piscataqua River, river flooding.



TUESDAY, MAY 9TH TOURS 3-5 PM

Tour of Portsmouth Harbor & Piscataqua River Aboard the Gundalow "Piscataqua"

The nonprofit Gundalow Company's mission "to protect the Piscataqua Region's maritime heritage and environment through education and action" is more important than ever. Get a glimpse of the past 300 years on the working waterfront and explore issues such as water quality, habitat protection, stewardship and navigation. The Gundalow Company collaborates with partners to generate publicity, awareness, and action relating to the health of the Piscataqua Maritime Region and the Great Bay Estuary and aims to be a leader in efforts to inspire stewardship of the Piscataqua Region's environmental and maritime legacies. This two-hour cruise of the Piscataqua River affords a waterside view of the history Portsmouth is striving to keep above water and insight into the riverine environment that is just as vital -- and threatened.

Tour of the 1671 waterfront Point of Graves Burying Ground with City Historic Cemeteries Committee co-chair Susan Sterry.

The City's Cemetery Committee was created in 2021 to encourage the restoration, preservation and safeguarding of Portsmouth's historic cemeteries and their history for future generations. The Committee determined that rebuilding the retaining walls at the 1671 Point of Graves Burial Ground was a top priority and worked to provide the documentation and rationale required by the NH State Library to receive grant funding for the project. The grant was awarded by Governor and Executive Council in 2022. The Cemetery Committee's work continues. Established in 1671 on land deeded to the town by Capt. John Pickering, Point of Graves is located on Mechanic Street next to Prescott Park and close to the Shaw Warehouse site overlooking the Piscataqua River. The historic site contains the gravesites of some of Portsmouth's earliest settlers as well as some of the finest examples of early gravestone artistry in the colonies.

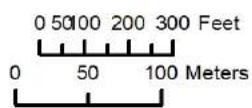
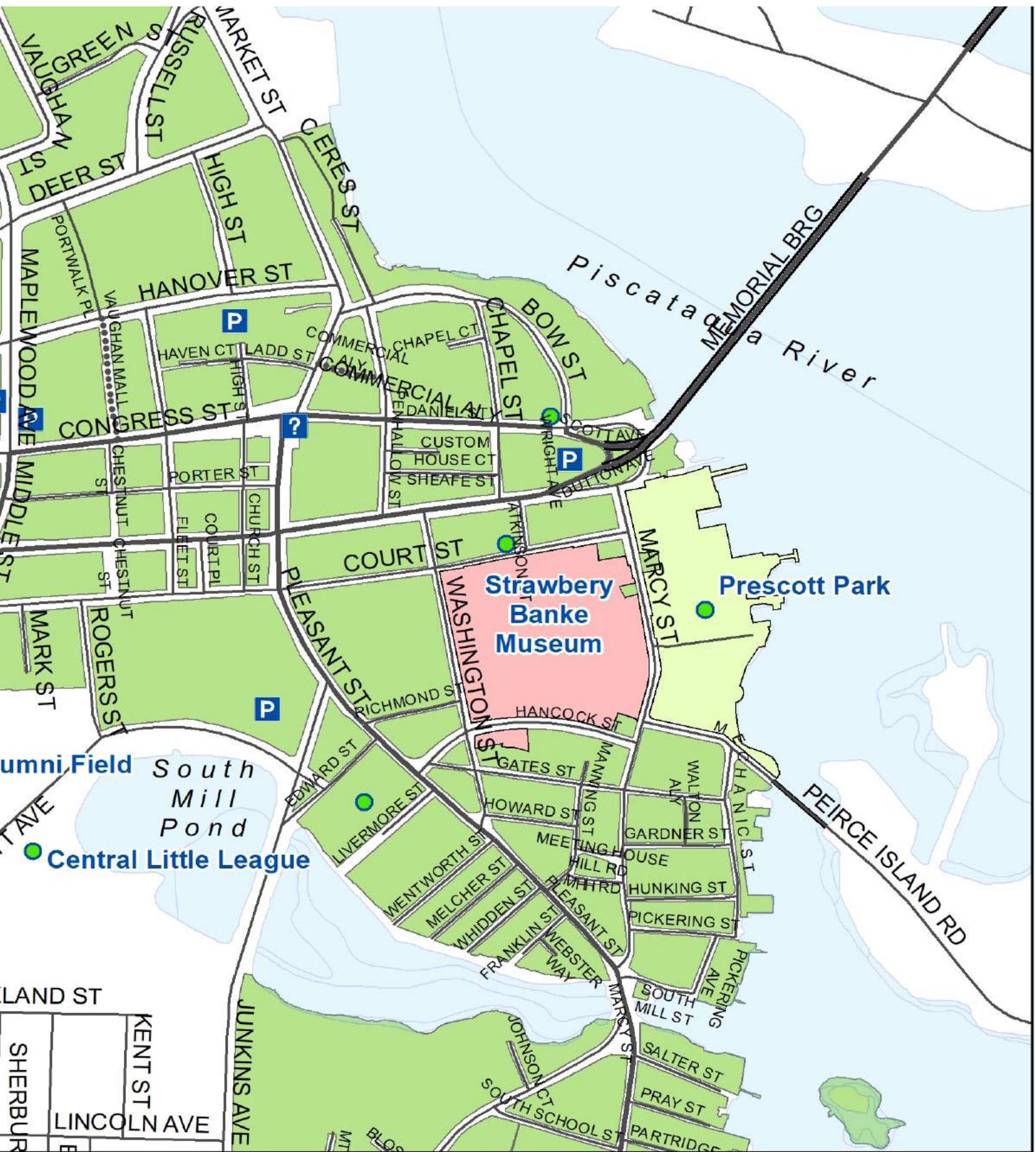




Downtown Portsmouth, New Hampshire

Map prepared by Portsmouth Department of Public Works, 11 April 2023
Comments and corrections: www.cityofportsmouth.com

cityofportsm





Think Blue! What can YOU do?

See how many of these suggestions from the City of Portsmouth DPW Water-Stormwater Division you can adopt!

Use mulch around plants to retain water, suppress weeds, moderate temperature and avoid erosion.

AM a rain barrel to your gutter downspout and use rainwater for watering. Save 55 gals a day!

Create a rain garden! Rain gardens are great ways to improve both your landscape and water quality.

Replace your toilet with a new, water-efficient one. Many places like Portsmouth offer rebates. Save 10 gals per day.

Install low-flow showerheads. Take showers instead of baths and keep them under 5 minutes. Save 50 gals per day.

Turn off the water while brushing your teeth, shaving and while bathing your hands. Save 7 gals a day.

Avoid over-fertilization that increases plants' need for water and adds nitrogen to stormwater runoff.

Use only full loads of laundry. Invest in a high-efficiency washing machine. Many places like Portsmouth offer rebates. Save 10 gals per load. Save 27 gals per day.

Compost. Add organic waste from your kitchen to a compost pile that forms a nutrient-rich soil to add to your garden.

Use an irrigation system. If you don't have one, you can't really save water. Water your yard in the morning or evening to avoid being sun or wind-dried. Save 16 gals.

Wash car or car wash that recycles their water. Save 100 gals.

Take the pledge to "Soapy the Dog!" at StateofNewHampshire.org/soapythedog.

Recycle your waste. Save 2,000 gals per year.

When washing dishes by hand, fill the sink with soapy water instead of running the water. Wipe a load of clothes.

Fix it if it leaks it. Do not dump leaves or clippings or other yard or home debris into water bodies or ponds. Use leaves as mulch and compost or collect in a paper bag for green waste.

Don't dump waste in storm drains. Dispose of household hazardous waste properly at your town's collection day events.



PLAN
OF THE CITY OF
PORTSMOUTH N.H.
WATER WORKS
SCALE 200 FEET TO THE INCH
1892-3

ENGINEERED BY
J.A. HARRINGTON & COMPANY
100 STATE ST.
PORTSMOUTH, N.H. 03801

The plan below shows the City of Portsmouth water works network in the 1890s. The latest initiatives of the DPW Water | Wastewater | Stormwater Division focus on how community members can save water and protect the stormwater outflow from excessive contaminants that would otherwise flow into the Piscataqua River. All of these networks and efforts are threatened by sea level rise..





Image: Strawbery Banke Museum "under water" in December 2019 from stormwater flooding.



About Keeping History Above Water & Newport Restoration Foundation

Keeping History Above Water® (KHAW) was founded in 2016 by the Newport Restoration Foundation to foster a national conversation focused on the increasing and varied risks posed by sea-level rise to historic coastal communities. KHAW® programs, conferences, and workshops focus on protecting historic buildings, landscapes, and neighborhoods from the increasing threat of inundation. Since the inaugural conference in Newport, KHAW® events have been hosted in Annapolis, Palo Alto, Des Moines, St. Augustine, Nantucket, Charleston, Salem, and Norfolk.

Founded as a not-for-profit institution in 1968 by Doris Duke, the Newport Restoration Foundation (NRF) promotes and invests in the architectural heritage of the Newport community, the traditional building trades, and the fine and decorative arts collections of Doris Duke. Since its founding, NRF has restored and preserved more than 80 eighteenth- and early nineteenth-century buildings, 74 of which are currently rented as private residences to tenant stewards and maintained by a full-time crew of carpenters and painters. This is one of the largest collections of period architecture owned by a single organization anywhere in the United States. More importantly, the majority of these structures are being lived in and used as they have for more than three centuries, making them an enduring and defining feature of the historic architectural fabric of Newport and a source of great pride for the community. As a leader in the preservation of early American architecture, the NRF is well positioned to provide a forum for the exchange of information across disciplinary boundaries for collaborative problem-solving in the areas of most critical concern to the field of historic preservation today.



About Portsmouth NH & PNH400

In 2023, Portsmouth, New Hampshire celebrates the 400th anniversary of settlement; yet those who “came to fish” started arriving at the offshore Isles of Shoals long before Captain John Smith in 1614 and began trading with those who had lived here for time immemorial. Today the city maintains New Hampshire’s only ocean shipping port, a working commercial fishing fleet, America’s first and oldest continuously operating Navy yard (founded in 1800) – and some of the oldest historic houses in the country, including many at the 10-acre Strawberry Banke Museum. All of these business and residential components are threatened by sea-level rise. The City’s 2013 Vulnerability Assessment detailed the threat to these resources by 2050. The “worst case scenario” for 2100 -- a 100-year storm surge at high tide producing 18 feet of flooding. The December 2022 storm brought 75 mph winds and a 13 foot tide to the anticipated long-range flood impact of combined King Tides and storm surge, plus groundwater infiltration.

In 2011, Strawberry Banke was chosen to be a test site for a City of Portsmouth, University of New Hampshire and Rockingham Planning Commission study to assess the sea-level rise vulnerability of coastal resources. Because the museum campus lies at one of the lowest points in the city, the flood elevation maps, vulnerability assessments, suggestions for potential adaptation strategies and City recommendations for future planning, regulation and policies all revolve around Strawberry Banke. In 2013, the museum joined the City’s Local Advisory Committee (LAC) for the Climate Change Vulnerability Assessment on Historic Portsmouth to evaluate the areas most vulnerable to sea level rise and storm surge, based on historic, cultural and property values. The museum has also partnered with the City on a public outreach effort that includes an interactive museum exhibit, “Water Has a Memory: Keeping Strawberry Banke and Portsmouth Above Water,” and a mutual data collection partnership with the Geospatial Science Center (GSSC) at the UNH, Institute for the Study of Earth, Oceans, and Space (EOS).

THANK YOU TO THE FOLLOWING SPONSORS FOR MAKING KEEPING HISTORY ABOVE WATER PORTSMOUTH 2023 POSSIBLE:
CITY OF PORTSMOUTH NH, STRAWBERRY BANKE MUSEUM & UNIVERSITY OF NH EARTH, SEA, SCIENCES CENTER
AND TO THESE BENEFACTORS WHO MADE SCHOLARSHIPS POSSIBLE FOR HIGH SCHOOL, COLLEGE AND GRADUATE STUDENTS:
BARBARA AND BENJAMIN ALLEN ROWLAND FUND FOR HISTORIC AND WILDLIFE PRESERVATION (A DONOR ADVISED FUND OF THE NEW HAMPSHIRE CHARITABLE FOUNDATION,
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THANK YOU TO ALL OF THE SPEAKERS WHO DONATED THEIR TIME AND EXPERTISE,
TO NEWPORT RESTORATION FOUNDATION, KHAW FOUNDERS
AND TO PORTSMOUTH NH 400TH, INC. FOR RECOGNIZING KHAW AS AN OFFICIAL PNH400 PARTNER

NRF Newport
Restoration
Foundation



University of New Hampshire



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**KEEPING HISTORY
ABOVE WATER**

MAY 7-9, 2023 | PORTSMOUTH, NH