



# TOURS AND MONDAY THE 14TH

**Tours will start at 1:30**

**Please meet your tour guide or shuttle bus at City Gallery**

## TOURS

Charleston's Historic Walled City  
*with Katherine Pemberton*

Dealing with Water on College of Charleston's Historic Campus\*  
*with Katie West and Laura Lee Worrell*

Defending the Battery –Design and Reconstruction of Charleston's  
Historic Seawall  
*with Jim O'Connor*

Designing with Water: Water Management and Waterfront Public  
Space Design in the Battery  
*with City of Charleston Planning, Preservation and Sustainability and Stormwater  
Management*

Flood Mitigation in Charleston at the Macro and Micro Levels  
*with the Historic Charleston Foundation*

Historic Fill - The Battery, White Point Garden, and Murray Boulevard  
*with Christina Butler*

The Lowcountry Lowline: A Complex Linear Park\*  
*with Scott Parker*

Sites of Black Resistance in Charleston\*  
*with Mills Pennebaker*

Storm-related Measures at Fort Moultrie\*  
*with Nathan Betcher*

\* shuttle bus transportation from City Gallery



# WORKSHOPS TUESDAY THE 15TH

**Tours will start at 1:30**

**Please meet your tour guide or shuttle bus at City Gallery**

## TOURS

Charleston's Historic Walled City  
*with Katherine Pemberton*

Dealing with Water on College of Charleston's Historic Campus\*  
*with Katie West and Laura Lee Worrell*

Defending the Battery –Design and Reconstruction of Charleston's  
Historic Seawall  
*with Jim O'Connor*

Elevated Buildings Tour  
*with the Historic Charleston Foundation*

Historic Fill - The Battery, White Point Garden, and Murray Boulevard  
*with Christina Butler*

The Lowcountry Lowline: A Complex Linear Park\*  
*with Scott Parker*

Sites of Black Resistance in Charleston\*  
*with Mills Pennebaker*

Storm-related Measures at Fort Moultrie\*  
*with Nathan Betcher*

## WORKSHOP

Flood Risk Assessment Training Workshop  
*with Vidya Samadi*

USACE Coastal Storm Risk Management (CSRM) and Historic Cities  
*with Mark Wilbert and B.D. Wortham-Galvin*  
*Convenes at the South Carolina Society Hall at 2:00*

\* shuttle bus transportation from City Gallery



# TOUR DESCRIPTIONS

## **Charleston’s Historic Walled City**

*with Katherine Pemberton, The National Society of the Colonial Dames of America in the State of South Carolina*

Constructed in 1909, Charleston’s historic Low Battery seawall is succumbing to environmental attack from storms, sea level rise and material deterioration. As much preservation effort as engineering challenge, this landmark is being reconstructed to create a revitalized public realm with underpinned foundations, strengthened seawall, upgraded drainage, and improved accessibility.

## **Dealing with Water on College of Charleston’s Historic Campus**

*with Katie West and Laura Lee Worrell, College of Charleston*

With 144 buildings on its urban downtown campus, the College of Charleston is constantly dealing with water management, flooding, and drainage issues. The most recognizable example of water management on our campus is the cistern at Randolph Hall, but this is just one of many cisterns on campus. There are at least 10, and possibly as many as 50, old cisterns scattered across its grounds. The modern era of stormwater management is being addressed at new construction projects and existing sites, including a large-scale underground cistern planned for the Simons Center Renovation and a small 1,100 gallon above ground example at 26 Coming Street.

## **Defending the Battery –Design and Reconstruction of Charleston’s Historic Seawall**

*with Jim O’Connor, Johnson, Mirmiran & Thompson, Inc.*

Constructed in 1909, Charleston’s historic Low Battery seawall is succumbing to environmental attack from storms, sea level rise and material deterioration. As much preservation effort as engineering challenge, this landmark is being reconstructed to create a revitalized public realm with underpinned foundations, strengthened seawall, upgraded drainage, and improved accessibility.



# TOUR DESCRIPTIONS

## **Designing with Water: Water Management and Waterfront Public Space Design in the Battery**

*with City of Charleston Planning, Preservation and Sustainability and Stormwater Management*

One of the myriad consequences of climate change is the increased amount of flooding that communities are encountering. This includes not only coastal communities flooding due to sea level rise and the resultant impacts of astronomical high tides, but also severe storm flooding happening along estuaries and even further inland along rivers and tributaries. Water is now one of the many contexts with which built environment professionals need to design. This tour will include members from both the Department of Planning, Preservation & Sustainability and the Department of Stormwater Management to discuss how water is managed on the Battery and the design process for rethinking public space alongside the rebuilding of the historic seawall.

## **Elevated Buildings Tour**

*with Preservation Society of Charleston*

Traditionally, the Charleston Board of Architectural Review (BAR) resisted requests to elevate historic buildings, due to adverse effects to historic materials, form, and relationship to streetscapes. However, with climate change considerations and expected sea-level rise, the preservation community decided it was time to reevaluate our approach to historic structures in flood-prone areas. Led by the BAR, two public workshops were held with a panel of local architects, engineers, contractors, and preservationists, to develop a set of design guidelines of preferred approaches to elevation, specific to Charleston’s architecture and urban environment. This tour will give attendees a chance to view real-world elevation projects that have undergone a rigorous design review process within the oldest historic district in the nation. Attendees will also have the opportunity to engage with architects involved with the projects, to delve into the details of the design and elevation process on site.



# TOUR DESCRIPTIONS

## **Flood Mitigation in Charleston at the Macro and Micro Levels**

*with Historic Charleston Foundation Staff*

Historic Charleston Foundation (HCF) is well aware of the impacts of sea level rise and flooding in Charleston’s historic neighborhoods. The city has been shaped by water since its founding. The area within the original walled city was settled because of its location on high ground. As the city expanded, creeks and marshes were filled to provide more buildable area in the city. During heavy storm and tidal events these former wetland areas are the first to experience flooding. As Preservationists, we have had to adjust our perspective on how to best protect historic properties from flooding. For this tour, HCF will host a case study/walking tour to discuss Charleston flood mitigation, both permanent and temporary, at the macro and micro levels to share what we have learned through experience. HCF will discuss the Dutch Dialogues Charleston, the proposed Army Corps sea wall project, and individual flood adaptation methods at homes on the peninsula.

## **Historic Fill - The Battery, White Point Garden, and Murray Boulevard**

*with Christina Rae Butler, American College of Building Arts*

As a coastal city, Charleston’s is no stranger to flooding, and for the past 350 years its residents have reclaimed land and developed complex drainage infrastructure to create nearly fifty percent more buildable land than existed in 1680. Join historian, preservationist, and Lowcountry AT High Tide author Christina R. Butler for a walking tour of one of the city’s historic (and man-made) waterfronts. Beginning in the original walled city and heading south, the route will highlight the engineering and filling efforts that created the Battery and White Point Garden, before turning onto Murray Boulevard, a 20th century reclamation. Along the way, Butler will discuss recent drainage upgrades and seawall repairs, and residents’ responses to rising sea level while preserving the city’s historic architectural character.



# TOUR DESCRIPTIONS

## **The Lowcountry Lowline: A Complex Linear Park Project**

*with Scott Parker*

What is the Lowline? The Lowline is a vision to reclaim 1.7 miles of abandoned railway track and neglected highway corridor along the backbone of the Charleston Peninsula. It is a vision to transform this forgotten stretch of urban space into a centralized regional green infrastructure. The Friends of the Lowcountry Lowline are working alongside the City of Charleston to create a green space that highlights the surrounding neighborhoods, addresses city-wide flooding, and gives pedestrians and bicyclists a safe, dedicated path. The Conceptual Master Plan is completed with the next stages including securing funding, design, community input, and construction. Walk the future Lowline to discuss issues of flooding and community culture.  
<https://lowcountrylowline.org/conceptual-master-plan>

## **Sites of Black Resistance in Charleston**

*with Mills Pennebaker, College of Charleston*

The history of Charleston is a history of racial violence. From the formation of the city in the late 1600s to today, city officials have attempted to impose second-class citizenship upon Black residents using a variety of social, political, educational, and economic tools of oppression. Despite centuries of subjugation, Black Charlestonians have continuously resisted slavery and its legacies by creating and maintaining sites of collectivism, fellowship, education, and advocacy. Join public historian Mills Pennebaker for a walking exploration of Black opposition to local racial regimes.

## **Storm-Related Measures at Fort Moultrie**

*with Nathan Betcher, National Park Service*

Ft. Moultrie highlights over 170 continuous years of American seacoast defense, from the Revolutionary War to WW2. The present iteration of the fort was built as part of the 2nd System of Fortifications in 1808. Despite upgrades and improvements – from brick and mortar, to the concrete of the Endicott Era batteries - water intrusion issues have never been solved. This tour will take you through areas of the fort and the adjacent Battery Jasper to see the past and present challenges in addressing water intrusion. Closed toed shoes are required, and if you have a flashlight, bring one along.



# WORKSHOPS

## **USACE Coastal Storm Risk Management (CSRМ) and Historic Cities**

*with Mark Wilbert and B.D. Wortham-Galvin*

A panel discussion to develop the best possible solutions to protect their cities while preserving their historic and cultural identities. The panel includes the USACE, Waggoner and Ball consultants, and representatives from Miami, Norfolk, and Charleston. Many cities around the country are undertaking CSRМ feasibility studies in order to protect against deadly and costly storm surge. Sea level rise projections are making this task even more urgent. This session will discuss the various steps involved in a CSRМ, specific issues with the National Historic Preservation Act (NHPA), and share important lessons learned from cities currently in the process. USACE representatives will help to un-pack the many policy and regulatory steps involved in the process. Ultimately the best CSRМ projects will result when City's and USACE teams work closely together towards an outcome that meets locally defined goals and federal process requirements.



# WORKSHOPS

## **Flood Risk Assessment Training Workshop**

*with Vidya Samadi, Clemson University*

The aim of this workshop is to educate a wide range of users and professionals and use research-based information and technologies to support flood disaster risk reduction. We will provide training course and materials about Flood Analytics Information System (FAIS). FAIS is a flood analytics and risk assessment application that seamlessly identifies the areas at risk of floodwater in real time. This web-based training will be looking at USGS data gathering, exploring crowdsourced data interface, and discussing application of advanced techniques in flood risk assessment, and the broad spectrum of the software's capabilities. There will be a model demonstration relevant to the background of the attendees. This will be followed by an open session at the end for attendees to ask any additional questions. There is no need for users to install the software on the computer, to participate in the training. Training notes will be posted to users in advance of the training.