Interpreting Energy at Historic Sites and Museums to Inspire Climate Action

Leah S. Glaser

Energy is ubiquitous and essential to our modern life, but most of us do not create it, see it, or even understand it. We use a lot of it though, every single day, and we are highly resistant to using less. Energy use, in the form of burning fossil fuels, is the primary cause of climate change. Yet climate change is increasingly not just causing more dangerous natural events. It also is affecting energy production and distribution. In the fall of 2024, Hurricane Helene devastated communities across the southeastern United States and Appalachia and caused widespread power outages, some of which lasted for days. The clean-up will take years. One of the worst weather-related disasters in modern history, Helene serves as a stark reminder of the future we face responding to severe storms caused by warming ocean temperatures. Climate change pressures are pushing the world into a transition to new energy systems, such as solar and wind. Energy diversity will help us move away, or at least depend less upon, the burning of fossil fuels, which is the primary cause of climatic changes. Energy and energy stories are everywhere. We have historically just done a really good job of hiding them. Too few sites, especially those not directly associated with an energy story, think about how to make those resources visible and include energy as an interpretative theme.

We can no longer stop climate change. However, we cannot depend upon government regulation to slow it down. Too many people continue to deny climate change, or at least do not seriously consider it as a major issue. The use of fossil fuels as a primary source of energy is not only embedded in our economy, but also in our culture. We will need to approach this critical problem from every other entry point, enlisting both science and the humanities. Historic sites can serve as warnings or inspiration. As Liz Ševčenko of the International Coalition of Sites of Conscience points out, historic sites are often our best physical evidence about how we approached and solved problems in the past.[1] They can also provide opportunities for reconciliation: clean-up, reparations, apologies, shifts in policies. The public can and must understand our historic energy use better, and, as stewards of the past, we must do our part to raise awareness of both historic and future choices. Environmental history emphasizes the human impact on the environment. Changing human behavior—how we use energy for heat, light, and movement—is the primary contribution that we can make to help mitigate climate change. Change over time is something history, and historic sites, can and must emphasize in interpretation.

The following set of theme papers in this issue of *Parks Stewardship Forum,* "Interpreting Energy at Historic Sites and Museums to Inspire Climate Action," provides examples of how to connect past energy use patterns and attitudes to new ones that are more responsive to the challenges of climate change.

For far too long, many at historic sites, especially those owned by governments, considered discussions about energy or climate change to be too politically divisive and "activist." In the meantime, corporations and government have addressed the problem too tentatively, if at all. This suite of articles, however, adopts the idea that as stewards of cultural sites, it is our responsibility to address climate change because it impacts the preservation and survival of our historic places—the keepers of our cultural heritage. The authors provide examples of ways that museums and historic sites can do our part

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to shift grassroots understanding of energy production and use specifically, as we search for popular acceptance of the need to move beyond fossil fuels and diversify our energy sources.

Parks have already adopted policies, and rangers have built interpretative programs that communicate the impact of climate change on our parks, especially those considered "natural parks." However, energy interpretation at parks designated for historical significance also can support informed decisions about this transition away from fossil fuels and interpret historic energy use within cultural contexts. How do we preserve historic energy processes with historical accuracy when we know the burning of fossil fuels causes climate change? How might historic sites interpret stories of adaptability and resilience?

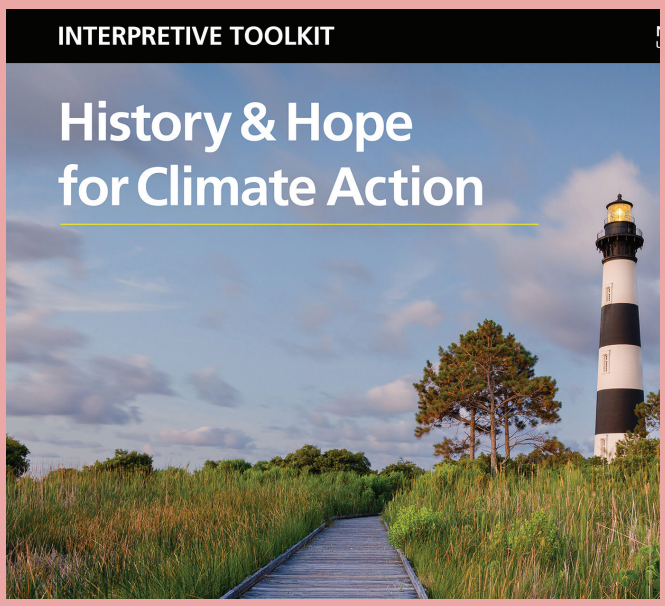
Sites that include energy history, including mills, iron furnaces, factories, steamboats, trains, dams, power plants, and historic homes, can be particularly problematic historical resources to interpret and preserve. They utilized natural resources in exploitative ways, yet they are critically significant resources that have transformed how we have lived throughout history. These resources tell stories about energy, energy systems, and, most importantly, the use of energy. Energy systems "mark the passage of time."[2]

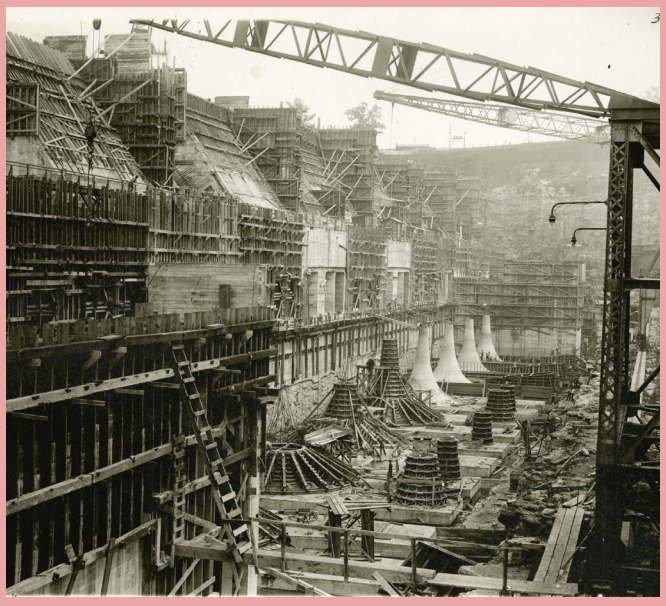
Such sites can tell stories of energy diversity and transition. The Mystic Seaport Museum in Connecticut, for example, has embraced its "Climate Action Initiative," but does not acknowledge energy in its interpretative signage. Mystic Seaport's decision to transition the energy source of its historic steamship from coal to far-lower-emission diesel motors, while maintaining the ability to use the older technology, could offer an opportunity for a new interpretative theme at the shipyard. The new motor maintains the quiet auditory experience, and the elimination of smoke could become an opening for considering and comparing historic vessel technologies. The museum could highlight the accommodation into a larger site-wide narrative stressing the role of energy in maritime history, beginning with the hunt for whale oil on the wind-powered *Joseph Conrad*, to the installation of solar panels on the archives and collections center and the geothermal heating and cooling of the exhibition building, enforcing the site's developing sustainability emphasis.[3]

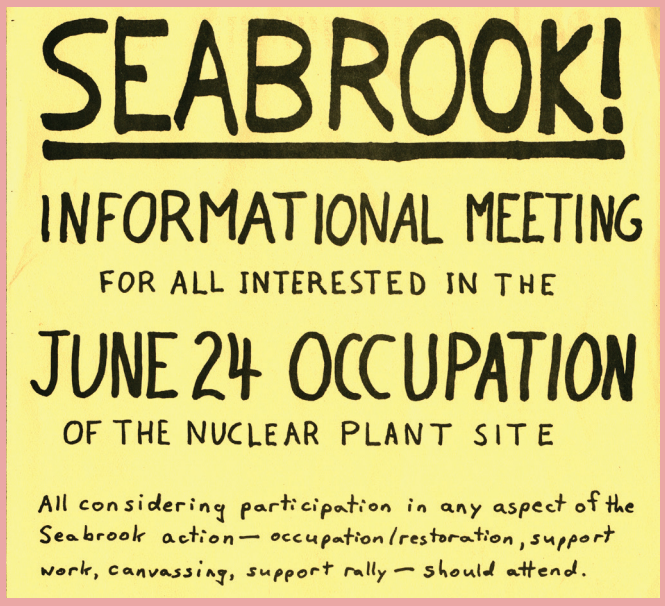
While I discussed examples such as this one in my 2023 book, *Interpreting Energy at Museums and Historic Sites*, in this volume of *Parks Stewardship Forum* we provide evidence that one book is not enough to describe the possibilities for interpreting energy at many different types of historic sites. We just need more to do so. The following articles present ideas and places to start. First and foremost, we are thrilled to share the work of Claire Baker, Donna Graves, and Elizabeth Villano who introduce their innovative interpretive toolkit, "History & Hope for Climate Action," designed with the National Park Service, an ideal starting place to highlight energy history in the national park system. Baker, Graves, and Villano provide ideas that empower visitors with an understanding of historic energy use to help make the critical decisions required of all of us in the present and in the future.

Two sites featured in this issue already recognized the energy stories inherent in their resources, but they can highlight them even more. Chief Vann House State Historic Site in Chatsworth, Georgia, provides an example of a site that is not at all obvious as an energy site. Yet, park rangers such as Irina Garner integrate discussions about the historic energy efficient features embedded in the architecture of this, and other, "big house" plantation homes in the American South. Its design enlists energy from the wind and sun to heat and cool in a warm climate. This case study serves as an extraordinary example of the ordinary. The house, while similar to those on many plantations, achieves a unique status when placed into the historic context of Native American ownership. The Chief Vann House provides physical evidence of Cherokee assimilation and their choice to embrace cultural, economic, and architectural norms of the antebellum South while maintaining their own identity and homelands. Designs and materials inherent in many historic homes built prior to the availability of HVAC (heating, ventilation, and air conditioning) systems—including asymmetrical saltboxes with one roof slope longer than the other to prevent snow from settling on the roof, center hall Colonials designed for central airflow, narrow shotgun houses with doors at both ends for maximum airflow, and Victorian-era as well as Craftsmen houses with commodious porches meant to be outdoor living spaces—are likewise readily available for interpreting energy history.[4]

For this issue, I also asked site manager Andrew Rowand to describe the current and the still very nascent efforts of the staff at Kent Iron Furnace, part of the Eric Sloane Museum, a Connecticut state park and archaeological preserve, to raise interest in a long neglected and little-noticed resource in this part of the state. In 2015, the







1. Cover of the *History & Hope* interpretive toolkit (2024) NATIONAL PARK SERVICE
2. Chief Vann House State Historic Site, Georgia GEORGIA DEPARTMENT OF NATURAL RESOURCES
3. Kent Iron Furnace, Connecticut ANDREW ROWAND
4. Construction of Wilson Dam on the Tennessee River UNIVERSITY OF NORTH ALABAMA ARCHIVES AND SPECIAL COLLECTIONS
5. Poster for protest during the construction of Seabrook Nuclear Station, New Hampshire JMNBQB, CC BY-SA 4.0 / WIKIMEDIA COMMONS
6. Home for enslaved people at Whitney Plantation, with statues by sculptor Woodrow Nash ELSA HAHNE COURTESY OF WHITNEY PLANTATION MUSEUM

editors of an energy-themed issue of Pennsylvania's state history journal observed, "Historians have yet to create literature that properly places timber harvest and iron … as an important crossroads—or site of intensification—in our use of energy."[5] Iron furnaces served as one of the earliest examples of Americans enlisting natural resources for energy, beyond home heating and cooking, for industrial purposes. This included the production of ordnance and nails, as well as pots, kettles, pans, and other tools. When siting these enterprises, ironmasters looked in rural areas for renewable energy sources. This meant wood to heat the furnace as well as running water. Until the mid-19th century, skilled colliers converted wood into charcoal, with waterwheel power operating the furnace's blowers, sustaining air flow and keeping temperatures high and consistent. Hydraulic turbines eventually replaced traditional waterwheels. The ideal topography included a hillside to aid workers in "charging," or pouring the raw materials (limestone flux and iron ore) used to make iron, into the top of the furnace.

Today the natural beauty of these regions hides the short- and long-term impacts of early industry on forests and their ecology. Forests have grown back, and dammed rivers in northwestern Connecticut, as well as northern New Jersey, across Pennsylvania, and New York's Adirondacks, have further hidden evidence of these once denuded places. Historian Robert Gordon argues that several factors contributed to a reluctance to switch to non-renewable fuels like anthracite coal in the Salisbury Iron District of northwestern Connecticut: recycling of slag, dispersed small iron works, respect for artisan tradition in both coal and ironmaking, and an unwillingness to make an economic investment in the changing processes to produce steel and meet the demand of the growing industrial cities. As Salisbury's forges closed, remaining residents began to re-purpose the area, emphasizing the scenery to visitors who not only saw but appreciated the aesthetic beauty of the abandoned furnace ruins amidst regrowth of the formerly denuded forest landscape.[6]

Preserving old technology, historic trades, and traditional skills while remaining conscious of environmental sustainability is a tricky interpretative balance. In the Kent Iron Furnace article, Site Manager Rowand describes the inauguration of a highly successful demonstration program that raised awareness about the historic use of the forest for industrial energy. Similar sites, such as the National Park Service's Hopewell Furnace National Historic Site in southeastern Pennsylvania, have featured annual charcoal-making demonstrations. The spring 2024 blacksmith iron smelting event at the Kent Furnace reflected the trade preservation programming of the Eric Sloane Museum. Its great success demonstrated how sites might attract large and diverse audiences to engage discussions about energy through site-based stories. Reminding the public of what energy conversion and use looked like "in place" can convey a narrative of consumption but also environmental resilience. As long as such special programming remains regular, even if infrequent, sites can capture public attention about the intimate relationship between natural resources and industrial production. The state of Connecticut is also considering collaboration with a nearby mining museum, as well as enlisting virtual reality, to more fully interpret these industrial processes in environmentally sustainable ways.

Muscle Shoals National Heritage Area in northwestern Alabama has initiated efforts to provide more critical analysis of the Tennessee River's history and the environmental impact of its development with "in place" interpretative signage, as well as through educator resources. This is a complex and nuanced story of two river systems—the natural system with which Native Americans interacted and the engineered system that generates hydroelectric power and drives economic growth throughout the Tennessee River region. Here, energy is not just about the past, but also the present and future. Carolyn Barske Crawford notes that, for years now, interpretation of the river's transformation has been fragmented among historic sites sprawled across several states. Today, Muscle Shoals National Heritage Area is collaborating with multiple state agencies, non-profit organizations, and the Tennessee Valley Authority to create an interdisciplinary interpretation of power generation in the Tennessee River Basin that integrates human history, environmental history, and the ecosciences.

The public has a short memory, and places can remind people about our past energy choices. With her counter-narrative discussion about anti-nuclear activism, Amrys Williams asserts that historic places can be interpreted to remind us that people have challenged and struggled over energy use and choices in the past. Lastly, Aislinn Pentecost-Farren's interviews Ashley Rogers, the director of the Whitney Plantation, about how this historic place interprets energy history over time. The site served as a sugar plantation and place of enslavement before eventually becoming a site of oil production. This discussion illuminates how one site addresses energy transition, explores environmental justice work, and

considers the impact on climate around this history in the past and in the present.

We can find stories about energy almost everywhere, and we therefore can interpret energy histories almost anywhere. As public historians, committed to preserving history and resources for future generations, we can do our best to reveal histories that might prod and encourage more widespread mindfulness about our energy use over time and the energy decisions we made in the past. Understanding those choices better can help us make more informed choices in the future to save not only our significant cultural sites, but the earth as well.

ENDNOTES

1. Liz Ševčenko, *Public History for a Post-Truth Era: Fighting Denial through Memory Movements* (New York: Routledge, 2022).
2. David E. Nye, *Consuming Power: A Social History of American Energies* (Cambridge, MA: MIT Press, 1998); Michael E. Webber, *Power Trip: The Story of Energy* (New York: Basic Books, 2019), 6–8.
3. For more on his case study, see Leah S. Glaser, *Interpreting Energy at Historic Sites and Museums* (Lanham, MD: Rowman and Littlefield, 2023), 53–60; and Sophia Matsas, "Mystic Seaport Museum Announces Low Carbon Transformation and Climate Action Initiative," press release, July 28, 2023, Mystic Seaport Museum, https://mysticseaport.org/press-release/mystic-seaport-museum-announces-low-carbon-transformation-and-climate-action-initiative/, accessed November 22, 2024.
4. For more on the energy features of historic houses, see Glaser, *Interpreting Energy at Historic Sites and Museums*, 142–145.
5. Brian Black, Anne Norton Green, and Marcy Ladson, "Energy in Pennsylvania History," *The Pennsylvania Magazine of History and Biography* vol. 89, no. 3 (October 2015), 252.
6. Robert Gordon, *A Landscape Transformed: The Ironmaking District of Salisbury, Connecticut* (New York: Oxford University Press, 2001), 115.