

Letting Go in the Face of Climate Change

By Laura L. Knott, March 10, 2020

Traditionally, historic preservation best practices have been based on the belief that historic built resources are irreplaceable and must be preserved at all costs. Recently, however, accelerating climate change, with its super storms, inundations, and temperature extremes, has caused many practitioners and their clients to view some instances of long-term conservation and perpetuation as potentially unsustainable, and loss as more often inevitable. This understanding has inspired an expansion of the range of possible historic preservation solutions to include “non-intervention,” “continued ruination,” and “curated decay,” or otherwise simply “letting go” of any plans for saving the resources. This white paper describes my team’s development of a cultural landscape report that ended in the rare recommendation of non-intervention in the ongoing loss of a historic site in Fairfax County, Virginia.

Non-Intervention Philosophy

The concept of non-intervention is relatively new, but national policy is already starting to reflect its acceptance as an alternative to perpetuation. In 2014, Department of the Interior director Johnathan B. Jarvis issued Policy Memorandum 14-02, writing that

[r]esponsible stewardship requires making choices that promote resilience and taking sustainable management actions. Funding temporary repairs for resources that cannot, because of their location or fragility, be saved for the long term, demands careful thought. Managers should consider choices such as documenting some resources and allowing them to fall into ruin rather than rebuilding after major storms.¹

Since then, the National Park Service has issued its 2016 *Cultural Resources Climate Change Strategy*, which discusses the concept in more detail.²

Other national governments and NGOs are also developing new approaches to include non-intervention alternatives. The United Kingdom’s National Trust is experimenting with what it calls “continued ruination” as an option to preservation of a complex of concrete structures at Orford Ness in Suffolk built by the UK’s Atomic Weapons Research Establishment in 1955. At Orford Ness, scholars are studying the resulting ongoing dialogue between the ongoing ruin of cultural artifacts and natural forces.³ In addition, Historic England has committed to “develop an approach for dealing with inevitable change, including loss.”⁴

¹ Jonathan B. Jarvis, “Policy Memorandum 14-02: Climate Change and Stewardship of Cultural Resources,” <https://www.nps.gov/policy/PolMemos/PM-14-02.htm>, accessed March 5, 2020.

² Rockman, Marcy, Marissa Morgan, Sonya Ziaja, George Hambracht, and Alison Meadow. 2016. *Cultural Resources Climate Change Strategy*. Washington, DC: Cultural Resources, Partnerships, and Science and Climate Change Response Program, National Park Service, <https://www.nps.gov/subjects/climatechange/upload/NPS-2016-Cultural-Resoures-Climate-Change-Strategy.pdf>, accessed March 6, 2020.

³ Caitlin DeSilvey, *Curated Decay: Heritage beyond Saving* (Minneapolis: University of Minnesota Press, 2017), 75-95.

⁴ Hannah Fluck, “Climate Change Adaptation Report,” Research Report Series 28/2016, Historic England, page 28, <https://research.historicengland.org.uk/Report.aspx?i=15500>, page 28, accessed March 5, 2020.

Caitlin DeSilvey's 2017 book, *Curated Decay: Heritage beyond Saving*, describes the preservation philosophy and associated research at Orford Ness as "curated decay." Curated decay proposes adaptation to, rather than resistance to, the processes of deterioration, and acceptance of eventual loss. It suggests managing evidence of past use at the site while at the same time interpreting the natural processes as they run their course. At Orford Ness, for example, visitors with self-guided tour booklets are encouraged to observe the site's "process of colonization and decay of the man-made by nature" along marked footpaths.

Lane's Mill Park

My team was commissioned to develop a cultural landscape report to protect the remains of the historic Lane's Mill. The main feature of Centreville's Lane's Mill Park, managed by the Fairfax County Park Authority. The mill stands within the 100-year floodplain at the confluence of two urban streams and due to increased urban development in Centreville since the mid-twentieth century, the mill structures have been reduced to ruins by increasingly frequent and fast-moving floods caused by run-off. The greatest challenge to our team was to weigh the value of information represented by the site vs. the cost of preservation. This article describes my team's decision to recommend non-intervention in the context of this project.

Lane's Mill was established by entrepreneur James Lane, Jr., in the 1760s amid the flourishing of grain farming close to Washington, D.C. While operated primarily to grind grain into flour for local farmers, by the late eighteenth century, the mill complex had expanded to include a sawmill, millraces, and millponds to provide power, and a house for the miller. In the late nineteenth and early twentieth centuries, under the management of Pendleton Robinson, the mill served an important role in Fairfax County social history as an African American-operated business and a place of interracial social interaction in Centreville (Figure 1).



Figure 1. Photograph of Lane's Mill ca. 1910. Courtesy of Fairfax County Park Authority.

After mill operations ended in 1924, the abandoned structures began to deteriorate. By the 1970s, they were in ruins, and by the end of the 1980s, an adjacent suburban development had destroyed the

miller's house, much of the mill road, and other related structures. To protect what remained of the mill complex, the Park Authority took possession of the site in 1990 and established the park. Workers stabilized the ruins and fenced the remaining mill structures and associated features to protect them from vandalism. In 1993 the site was listed in the National Register of Historic Places as an archaeological resource.

In 2018, the Park Authority commissioned my team, along with Robinson & Associates and Aeon Preservation, to complete the CLR for the park. The goals of the study were to document the history of the development of Lane's Mill, evaluate its existing conditions, assess its significance and integrity, and provide treatment recommendations based on a vision for the park that is sensitive to issues of conservation, access, public safety, interpretation, and protection of cultural and natural resources.

The team began by conducting background research and data collection. The results were summarized in a chronological physical history of the development of the site, supported by plan graphics that showed the site and its context at important dates. While Lane's Mill was determined eligible for the Virginia Landmarks Register in 1993 as an archaeological site, Tim Kerr and Michael Mitchell of Robinson Associates recommended that the site was also locally significant in industrial and social history, as well as African American heritage. This determination will support future applications for archaeological investigations at the site. Despite intensive research, however, only one image of the mill itself was located and no others were discovered that would provide an idea of how the mill and associated structures might have appeared during the period of significance.

Next, the team documented existing conditions at the site, including written descriptions and photographs of the mill ruins from a variety of viewpoints. Alfonso Narvaez of Aeon Preservation, who specializes in materials and structural conservation, took an active role in this phase of the project, assessing issues around condition, deterioration, and public safety. Aeon determined that overall, the ruins were in poor condition with portions highly unstable with degrading materials that will lead to continued progressive collapse (Figure 2).



Figure 2. Photograph of Lane's Mill in 2018 by Alfonso Narvaez.

The team found that the primary cause of the deterioration of the mill structures was Lane's Mill Park's location at the confluence of the two suburban streams, which makes it vulnerable to repeated, serious flooding. The site is now subject to frequent and heavy flooding caused by increased development in the watersheds of Cub Run and Big Rocky Run, exacerbated by climate change. Between 1980 and 2000, the population within the Cub Run Watershed grew almost 500% with an associated impervious cover increase of around 265%. Centreville, in which Lane's Mill Park is located, was identified as one of the areas of significant development within the watershed.

The team then compared the mill site's existing conditions to its historic conditions. Due to the deterioration of the remaining mill features, the team determined that the site possesses overall diminished integrity for the prior of significance identified by the project historians. This means that the landscape characteristics, associated features, and spatial qualities that shaped the mill site during the historic period were generally not present as they were historically. In addition to poor integrity, continued flooding meant that any above-ground remains of the mill structures would very soon completely disappear.

Due to the mill's low integrity and ongoing threats, the team recommended that the Park Authority should adopt the philosophy of non-intervention in dealing with the site, proposing adaptation to, rather than resistance to, the processes of deterioration, and acceptance of the eventual loss of the Lane's Mill structures. The recommendations were presented in four categories: documentation, vegetation management, public safety, and interpretation.

- **Documentation:** Of primary importance is documentation of this historic resource before it is completely lost. This can be accomplished by first, completing a LiDAR survey of all the mill structures, and second, continuing archaeological investigations at the site to recover as much information as possible about the mill before remaining resources are lost.
- **Vegetation Management:** Despite periodic efforts to clear the site, the Lane's Mill ruins very quickly become overgrown with opportunistic trees, vines, shrubs, and grasses, some identified as regionally invasive. Overgrown vegetation not only blocks views to the remnant mill structures, it also contributes to their deterioration. Vegetation management is a crucial part of maximizing interpretation at the site so that the public can see the major structures of the site from adjacent trails, not only to observe the ruins themselves, but to witness their changing conditions over time. In addition, vegetation management is also important for maximizing protection of the site without other intervention. Vegetation management at Lane's Mill Park should focus on the control of invasive species, particularly those that inhibit views of the structures or that contribute to destabilization.
- **Public Safety:** The ruins of Lane's Mill present a certain amount of danger to persons who may attempt to climb them or explore the site. Walking surfaces are unstable, there are a number of high ledges with no protective barrier, and some lengths of the mill walls are unstable and could topple. In order to protect public safety at the site, the Park Authority agreed that the placement of a caution sign at the site is the best way to manage public safety. To minimize clutter at the site, the warning will be incorporated into the two proposed interpretive signs at the site.
- **Interpretation:** Recommendations for interpretation at Lane's Mill Park include expanding the boundary of the park to include all remaining mill-related features, enhancing the existing trail

system with an interpretive loop at the mill ruins, adding interpretive wayside signs, and providing multi-faceted interpretive themes.

- **Boundary:** Expand the boundaries of Lane's Mill Park to include what remains of the mill's original tract. The 29-acre parcel is already part of the Cub Run Stream Valley Park, which includes the smaller Lane's Mill Park. Bringing all former land associated with the mill site under one administrative boundary will support a cohesive interpretation narrative.
- **Interpretive Trail:** Expand the existing trail system to improve interpretation of Lane's Mill. This would provide access and interpretation of other features of the historic mill operation, including its mill pond sites and head races, as well as the old mill road.
- **Interpretive Wayside Signs:** Add new interpretive wayside signs in the area of Lane's Mill to provide general information about the mill and the history of its development, but also include maps, plans, and information about existing remaining features.
- **Content:** Ensure that content presented in interpretive signs is multi-faceted, presenting not only the cultural history of the mill, but also its natural history and a discussion of the non-intervention approach. This could also be tied to information about why the mill was sited in this location, including the hydrology of the site, the sources of the stone used to build the mill, and the structure's ruination by heavy flooding from increased impervious cover, explaining the urban ecological process and the effects of climate change.

By following these recommendations, the Park Authority can manage evidence of past use at the site while at the same time curating natural processes as they run their course in a way that contributes to the education of the public about the county's historic resources.