Project Need

Climate change impacts cultural resources by exacerbating the typical deterioration of physical resources, such as historic buildings, and altering cultural landscapes. Climate change impacts to coastal cultural resources include inundation, erosion, destruction, or submersion from sea level rise and storm-related flooding.

As indicated by a report of National Park Service (NPS) coastal assets*, most historic buildings at Cape Lookout National Seashore are listed as being highly vulnerable to sea level rise (and subsequent impacts). This high vulnerability rating is due to the low elevation of the seashore and the previous flooding impacts from storms.

The NPS is proactively thinking about strategies to adapt vulnerable cultural resources & landscapes to ensure their preservation for the enjoyment of present and future generations. Besides considering the opportunities and limitations of materials and technology, the NPS recognizes the need to consider the values and preferences of stakeholders.

In 2016, visitors were invited to voluntarily respond to a survey that measured their connections to the seashore and its historic buildings, as well as their perceptions of resources, climate-related threats, and adaptation strategies.

Respondent Profile

On-site visitor intercept surveys* were conducted at the Light Station Complex (Cape Lookout Village) in the fall of 2015 and at the Light Station Complex and the Theodore and Annie Salter House (Visitor Center in Portsmouth Village) during summer 2016. Of the 253 visitors requested to voluntary participate in the study, a total of 216 individuals agreed (85% response rate). Most (n=178) visitors were intercepted at Cape Lookout Village (Portsmouth Village, n=38).

Over half (55%) of respondents were first-time visitors. Of the repeat visitors, a substantial proportion (41%) have been making visits to Cape Lookout National Seashore for more than 20 years.

Most visitors (83%) traveled over 100 miles to Cape Lookout National Seashore and the majority (85%) accessed the site via a ferry concessionaire.

Visitors heard most often about Cape Lookout through friends and family (24%) or other word of mouth (17%), as well as on the internet (13%) or in a magazine/brochure (12%).

*Visitors encountered were asked to participate in a 5-10 minute structured interview.

Experiences & Place Meanings at Cape Lookout

We asked visitors what was their motivation for visiting Cape Lookout National Seashore.

42% of visitors were motivated to see the lighthouse, 22% to share the experience with family/friends, 20% to vacation, 14% to enjoy the beach, 10% for cultural resources, 10% to go fishing/shelling, 5% to see the Shackleford horses, and 5% to go camping.

Few (9%) visitors were aware of the cultural resources on Cape Lookout National Seashore prior to their visit. One visitor said:

“We had read quite a bit about it so we expected to see the beautiful beaches and the incredibly clear water and the lighthouse. I did not know about the additional historical buildings.”

Visitors agreed most strongly with statements that:

“Cape Lookout is an important part of our nation’s history.”

"It is important that the historical and cultural resources at Cape Lookout are preserved and protected for future generations."
Perceptions of Site Conditions at Cape Lookout National Seashore

**Every respondent (100%) agreed the site was well-maintained.** The majority of respondents rated the site as in good (77%) or excellent (14%) condition. Visitors perceived that the site was well maintained in general, and specifically the lack of trash, well-kept boardwalk & facilities, and helpful staff & volunteers contributed to visitors' positive perception of site conditions.

Most visitors (57%) had no suggestions on how to improve the site. One visitor said: “The site is well landscaped without being artificial or detrimental to the setting. I like how it’s self-guided.”

Perceptions of Adaptation & Prioritization

- Visitors were asked if they were aware that the structures at Cape Lookout National Seashore could be damaged by climate-related risks, such as flooding or gradual sea level rise. Nearly all respondents (97%) indicated that they were aware of these risks.

- Visitors were then asked to rate 3 adaptation scenarios:
  - Elevating buildings: Many (58%) felt this strategy wouldn't affect their experience although some (21%) felt this would negatively impact their future visits.
    
    One visitor said: “If the structures were threatened by sea level or climate I think it is... perfectly natural to raise the elevation of the buildings to preserve them.”
    
    One visitor said: “I don’t think it would bother me. I don’t think I’d know it [moved] unless someone told me.”
  - Moving buildings: Many (46%) felt this strategy wouldn't affect their experience although nearly one-third (31%) felt this would negatively impact their future visits.
    
    One visitor said: “I don’t think it would bother me. I don’t think I’d know it [moved] unless someone told me.”
  - Removing buildings: Most visitors (75%) felt this strategy would negatively impact their experience at Cape Lookout National Seashore.

Respondents were asked, if they were a National Park Service manager, which buildings they would preserve first. The Lighthouse, Keeper's Quarters, historic villages, National Park Service (NPS) structures, and Methodist Church were the most commonly mentioned buildings.

Other visitors offered more general prioritization strategies, rather than naming specific buildings, such as one visitor who said:

“The ones with the most history... I don't know if those would be the oldest or the most relevant to the area.”

*Keep in mind that only 38 visitors (18% of our sample) were intercepted at Portsmouth Village.*
Key Insights

These results suggest that park managers are meeting the agency’s mission of preserving the natural and cultural resources for public enjoyment by providing quality visitor experiences. Park managers may consider that, while visitors are predominately unaware of the extent of the cultural resources located at Cape Lookout National Seashore, they do have preferences for adapting those resources to climate impacts (such as elevating & moving structures). Recommendations for enhancing visitor awareness of historic structures & climate adaption management include:

- Enhancing the presence of the park unit’s maritime history on the homepage of its web site. Information on the park’s web site or in print materials could include time, length, and difficulty of access when visiting the historic districts.
- At Cape Lookout Village: install signs at the ferry dock and provide additional information at the Harker’s Island Visitor Center, within the Light Station Complex, and on the Park’s website regarding specific histories and the presence of the other historic buildings.
- At Portsmouth Village: partner with park managers at Cape Hatteras National Seashore to enhance public awareness of Portsmouth Village and collaborate with the Ocracoke – Portsmouth Island ferry concessionaire to enhance marketing of the service.
- Primary attractors appear to be preservation priorities, as do specific types of buildings (i.e., buildings that supported a functioning community). Weaving climate change and adaptation into the historical narratives of these structures could be a successful strategy for communicating when and why historic buildings have undergone modifications through time.

Acknowledgements

We would like to thank the visitors who voluntarily participated in this study as well as Malorey Henderson for project management and the following data collection research assistants: Ginger Deason, Bruno Ferreria, Katelin McArdle, Sarah Spivey, Dalonna Williams.

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For full report of survey results, please see:

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