# Cape Hatteras Lighthouse Repair and Landscape Improvements Public Review Newsletter

May 2022







# You Are Invited to Participate

Cape Hatteras National Seashore (the Seashore) is requesting your input on the environmental assessment for the repair of the Cape Hatteras Lighthouse and landscape improvements. Your participation is important to our planning process.

# Join Us for a Public Meeting

**Date:** June 2, 2022 **Time:** 5:30-6:30pm

**Location:** Fessenden Center Annex

47013 Buxton Back Road, Buxton, NC 27920

# **Background**

The Cape Hatteras Light Station (the light station), which includes the Lighthouse as well as its associated support buildings and grounds, was designated as a National Historic Landmark on August 5, 1998. This designation defines the light station's period of significance as 1870-1936, which encompasses the construction of the Lighthouse in 1870 through the deactivation of the light station by the U.S. Coast Guard in 1936. The light station is significant for its association with navigational aids for safe maritime transportation in the late 19th and early 20th centuries, as well as for its design and method of construction typical of coastal lighthouses during the late 19th century. Today, the light beacon still serves as a functional navigational aid, operated and maintained by the U.S. Coast Guard.

The National Park Service (NPS) has defined the period 1870-1920 for restoration of the site. This period will incorporate the restoration of missing character-defining features of the site that existed together, including the decorative metal fence, window pediments/hoods, interior wooden doors, Fresnel lens and keepers' quarters fencing.

## **Purpose and Need**

The NPS proposes to rehabilitate the interior and restore the exterior of the Lighthouse at the Seashore and implement landscape improvements. Specifically, the purpose of this project is to rehabilitate the interior and restore the exterior of the Lighthouse and its character-defining features, to repair or replace deteriorated materials and finishes, and to selectively reverse unsympathetic treatments added to the Lighthouse and the Oil House after 1920. Additionally, the project purpose includes providing a more immersive experience of the light station by defining pedestrian circulation patterns and considering ways to improve the resiliency of the light station and grounds suited to a coastal environment that is subject to heavy visitation.

## **Impact Topics and Alternatives**

Based on public input and discussions among the planning team and subject matter experts, the environmental assessment analyzed the following resource topics:

- Historic Structures
- Cultural Landscapes
- Visitor Use and Experience

The planning team reviewed a full range of alternatives for the repair of the Cape Hatteras Lighthouse including alternatives to improve the landscape.

Three alternatives were retained for full analysis in the environmental assessment and are highlighted in the following pages: the no-action alternative and two action alternatives.

The no-action alternative (alternative A) would continue the current management of the light station. The action alternatives would include restoration and rehabilitation of the Lighthouse and the Oil House as well as different degrees of improvements to the landscape to accommodate heavy visitation of the site. Alternatives B and C include the same restoration and rehabilitation actions at the Lighthouse and Oil House (for example, repointing and repairing damaged masonry, repairing or replacing corroded metal components, and refinishing or repainting metalwork). Alternative B envisions a restoration of the original Fresnel lens being reinstalled in the Lighthouse, and the extent of the proposed circulation improvements would be relatively modest. Alternative C would install a replica of the original Fresnel lens in the Lighthouse, and circulation improvements would be more substantial.









### **Alternative A: No-Action**

### **Elements of Alternative A:**

- Routine maintenance at the light station site but no comprehensive rehabilitation, restoration, or improvements. Conduct routine maintenance and critical repairs as needed, as determined by current management practices.
- Existing rotating light beacon and metal platform remains in the Lighthouse lantern.
- No repairs or rehabilitation of the Oil House.
- No plans for comprehensive improvements to visitor circulation, or to interpretive signs, or the availability of shaded areas for those waiting to climb the Lighthouse.
- Existing pedestrian walkways and the employee parking lot would remain the same.



### Impacts of Alternative A:

- Existing appearance of the historic structures would remain, including the unsympathetic modern treatments, and certain character-defining features would remain missing.
- Although this would not introduce new impacts to historic structures, the current loss of historic character due to the existing appearance would continue.
- The existing metal elements would remain and would continue to corrode due to the harsh salt air to which the historic structures are exposed.
- The site would continue to represent changes that occurred during the latter part of the light station's National Historic Landmark period of significance (1870-1936), most notably due to the existing window openings on the Oil House and the lack of fencing around the keepers' quarters.
- The existing beacon or another modern beacon would continue to detract from the historic character of the lantern because its appearance and function are different than that of the original Fresnel lens.
- The landscape would continue to be impacted from soil erosion from the high levels of visitor use and the limited width and number of pathways currently present.
- The existing grassy landscape would continue to be compacted leading to larger bare spots where heavy foot traffic occurs, which would continue to diminish the appearance and character of the recreated historic setting.

# Section through the Lighthouse showing the interior organization (NPS 2016, pg. 163)

## **Actions Common to Alternative B and C:**

Under both Alternative B and C, the Lighthouse interior would be rehabilitated, and the exterior restored in accordance with *Secretary of the Interior Standards for the Treatment of Historic Properties*, including repair or replacement of the character-defining features and deteriorated and damaged elements. Some modern, unsympathetic treatments, materials, and finishes would be reversed. Rehabilitation would occur to the following elements in the Lighthouse:

- Masonry
- Metal Components
- Windows and Vents
- Watch Room Balcony
- Lantern and Lantern Balcony
- Interior Wooden Doors
- Marble Floors

The Oil House would be rehabilitated and repaired and returned it to its appearance during the period of restoration.



### **Alternative B: Circulation Modified and Lens Restored**

### **Elements of Alternative B:**

- Remove existing rotating light beacon and metal platform from Lighthouse lantern. Restore the original historic Fresnel lens, pedestal, and clockwork to the greatest extent practicable and reinstall it in the Lighthouse with a new light source to replace the existing modern beacon.
- Remove existing vinyl perimeter fence around the Lighthouse. Construct a replica of the original (pre-1920) decorative metal octagonal fence with granite bases. The new fence would be of a painted, non-corrosive metal.
- Restore Oil House by infilling the window openings added circa 1934 with brick, removing non-sympathetic modern additions, such as the exterior canopy and the modern six-panel door, and replicating and restoring missing elements, such as the metal door.

Add replica stockade fence around both the Principal Keeper's Quarters and Double Keepers' Quarters to the look and feel of the original landscape of the early historic period (1870-1890s).

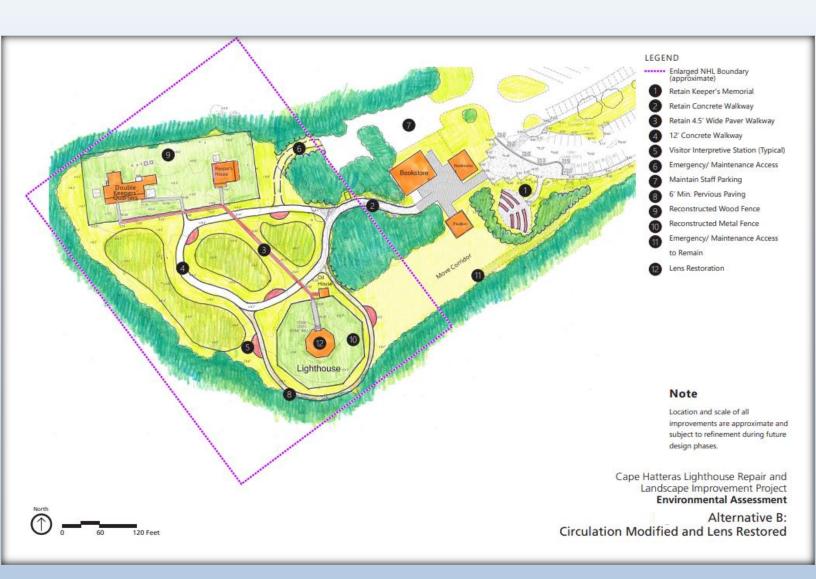
- Construct circular 10-12' wide walkway between the Lighthouse and the keepers' quarters, including some "pull-off" areas for interpretation and photographic opportunities.
- Construct new pervious 6' wide pedestrian path around the Lighthouse.
- Replace existing concrete paver walkways with clay brick pavers. Retain the historic width of the paths.
- Re-establish lawn grasses on the interior of the stockade and Lighthouse fences. Landscape lawn areas outside of the fenced areas with native grasses in select locations.

### Impacts of Alternative B:

- Interior rehabilitation and exterior restoration of the Lighthouse would restore some lost historic integrity of materials and design through repair of damaged and deteriorated elements such as corroded metal, deteriorated paint, broken glass, and cracked marble.
- Removal of some of the unsympathetic modern elements would restore the historic integrity of design and feeling that was lost due to these additions.
- Restoration of the Oil House would restore some of the lost historic character.
- Restoring the original First-Order Fresnel lens and reinstalling it into the Lighthouse would restore a missing character-defining feature of the Lighthouse.
- Proposed fences and re-establishment of lawn grasses around the Lighthouse and keepers' quarters would restore some of the historic spatial arrangement and appearance of the setting that was diminished with the loss of the original fence.
- Proposed new walkways would be noticeable within the setting of the historic structures but would not impede views
  from or to the historic structures. Furthermore, proposed walkways would help improve connections to historic
  structures.
- Replicating the decorative cast iron perimeter fence around the Lighthouse would restore the appearance of the Lighthouse to its pre-1920 historic appearance, which would in turn restore some of the historic spatial arrangement and integrity of setting that was lost when the original fence was removed.



# **Alternative B: Circulation Modified and Lens Restored**







# Alternative C: Circulation Enhanced and Lens Replicated (NPS Preferred / Proposed Action)

### **Elements of Alternative C:**

- Actions related to the rehabilitation and repair of the Lighthouse and the Oil House would be the same as described under "Common to Both Action Alternatives" above. Actions related to the fencing around the Lighthouse and the keepers' quarters would be the same as under alternative B above.
- Produce complete replica of the original lens and install in the Lighthouse. Like alternative B, remove existing rotating light beacon and metal platform from the Lighthouse lantern.
- Create new, flow-through circulation pattern to the site wherein visitors enter the site via a new visitor entrance to the north of the bookstore. The new walkways would be like those proposed under alternative B but would be wider to better accommodate heavy use and emergency/maintenance vehicles and would include interpretive signs. The new pedestrian walkway loop circulating between the keepers' quarters and the Lighthouse to follow the same alignment and width as under alternative B; would be approximately 10-12 feet wide to accommodate heavy visitation.
- Use modern light source, such as an LED, inside the lens. The beacon would either be a fixed flashing light or would rotate and flash through the bullseye prism.
- Create contoured landscape with native vegetation (1-3 feet high) in strategic locations. The contoured landscape would encourage visitors to stay on walkways.
- Retain historic circulation route along the paver walkway between the Lighthouse and the keepers' quarters. Replace existing concrete pavers with clay brick pavers. Widen walkway from 4.5 feet to 7 feet to accommodate heavy visitation.
- Construct new shade pavilion set back into the woods to accommodate waiting tour groups near the Lighthouse.
- Remove Keepers of the Light Amphitheater foundation stones from the move corridor. The stones would be placed along the path in areas shaded by the maritime forest canopy and to provide respite to visitors from the hot sun.

### Impacts of Alternative C:

- Interior rehabilitation and exterior restoration of the Lighthouse and Oil House would result in the same beneficial impacts as described above for alternative B.
- Replicating the original Fresnel lens under the proposed action would restore the historic appearance of the lantern by reintroducing a lens that looks and functions like the historic Fresnel lens.
- Although modern materials such as acrylic for the recreated prisms would be introduced into the Lighthouse, it would not detract from the historic character of the Lighthouse overall because the replicated lens would restore the function of the lantern during the Lighthouse's National Historic Landmark period of significance (1870-1936) when it rotated, and light flashed through the bullseye prisms.
- Changes to the landscape would approximate the historic setting of the historic buildings, including the Lighthouse, the Oil House, and the keepers' quarters.
- Proposed walkways and the contoured landscape would be conspicuous within the viewshed between the Lighthouse
  and the keepers' quarters; however, these features would be low enough that they would not obscure the views of the
  site.

• The shade structure would introduce a non-historic structure along the edge of the historic area, which would somewhat

intrude upon the landscape. The intrusion would be minimized because shade structure would be sited within an existing wooded area that bounds the historic zone on the east.

 Allowing the reuse of the Keeper's Quarters stones as benches along the proposed walkways to the south of the Lighthouse would allow the original below-ground foundation stones to maintain their connection to the Lighthouse while remaining unintrusive upon the open viewshed between the Lighthouse and the keepers' quarters.



# Impacts of Alternative C: Circulation Enhanced and Lens Replicated (NPS Preferred / Proposed Action)







# **How to Comment**

The public comment period ends on June 22, 2022. Your participation will help shape this project. We welcome your ideas, concerns regarding the proposed alternatives.

Please comment by using one of the following methods.

Submit comments via the NPS planning website: <a href="https://parkplanning.nps.gov/caha\_lighthouse">https://parkplanning.nps.gov/caha\_lighthouse</a>. This is the preferred method.

Submit written comments by mail to:

Superintendent 1401 National Park Drive Manteo, NC 27954 Please note that your entire comment, including your personal information, may be made publicly available at any time. Although you can request that we withhold your personal identifying information from public view, we cannot guarantee that we will be able to do so.

