

National Park Service Cultural Landscapes Inventory 2022



Cape Hatteras Light Station

Cape Hatteras National Seashore

[Internal Review/Park Review/SHPO Review]

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Chapter 1: General

Region

Southeast

Park Alpha Code

CAHA

Park Org Code

5190

Resource Type

Cultural Landscape

Resource Classification

Cultural Landscape

Inventory Status

Complete

Resource ID

550150

Resource Name

Cape Hatteras Light Station

Parent Landscape

N/A

Parent Resource ID

N/A

State

NC

Park Name

Cape Hatteras National Seashore

Cultural Landscapes in the Cultural Resources Inventory System:

CRIS is the National Park Service's database of cultural resources on its lands, consisting of archaeological sites, historic structures, ethnographic resources and cultural landscapes. The set of CRIS records for cultural landscapes is referred to as CRIS-CL. CRIS-CL records conform to a standardized data structure known as the Cultural Landscapes Inventory (CLI).

The legislative, regulatory and policy directions for conducting and maintaining the CRIS are: Section 110 of the National Historic Preservation Act, NPS Management Policies (2006), Director's Order 28 (Cultural Resources) and Director's Order 28a (Archeology).

The Cultural Landscapes Inventory (CLI)

The CLI is the data structure within CRIS used to document and evaluate all potentially significant landscapes in which NPS has, or plans to acquire any enforceable legal interest.

Each CRIS-CL record is certified complete when the landscape is determined to meet one of the following:

Landscape individually meets the National Register of Historic Places criteria for evaluation; or,
Landscape is a contributing element of a property that is eligible for the National Register; or,
Landscape does not meet the National Register criteria, but is managed as cultural resources because law, policy or decisions reached through the park planning process.

Cultural landscapes vary from historic sites, historic designed landscapes, historic vernacular landscapes to historic ethnographic landscapes, but may also fit within more than one type.

Those eligible for the National Register have significance in the nation's history on a national, state or local level, as well as integrity or authenticity.

The legislative, regulatory and policy directions for conducting and maintaining the CLI within CRIS are: *National Historic Preservation Act of 1966 (16 USC 470h-2(a)(1)). Each Federal agency shall establish...a preservation program for the identification, evaluation, and nomination to the National Register of Historic Places...of properties...*

Executive Order 13287: Preserve America, 2003. Sec. 3(a)...Each agency with real property management responsibilities shall prepare an assessment of the current status of its inventory of historic properties required by section 110(a)(2) of the NHPA...No later than September 30, 2004, each covered agency shall complete a report of the assessment and make it available to the Chairman of the Advisory Council on Historic Preservation and the Secretary of the Interior...

Executive Order 13287: Preserve America, 2003. Sec. 3(c) each agency with real property management responsibilities shall, by September 30, 2005, and every third year thereafter, prepare a report on its progress in identifying...historic properties in its ownership and make the report available to the Council and the Secretary...

The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act, 1998. Standard 2: An agency provides for the timely identification and evaluation of historic properties under agency jurisdiction or control and/or subject to effect by agency actions (Sec. 110 (a)(2)(A) Management Policies 2006. 5.1.3.1 Inventories: The Park Service will (1) maintain and expand the following inventories...about cultural resources in units of the national park system...Cultural Landscape Inventory of historic designed landscapes, historic vernacular landscapes,...and historic sites...

Cultural Resource Management Guideline, 1997, Release No. 5, page 22 issued pursuant to Director's Order #28. As cultural resources are identified and evaluated, they should also be listed in the appropriate Service-wide inventories of cultural resources.

Landscape Description

The Cape Hatteras Light Station is located on Hatteras island and is a cultural landscape within the Cape Hatteras National Seashore. The light station landscape includes the lighthouse, oil house, double keeper's quarters, and principal keeper's quarters as well as the cisterns, a portion of the move corridor, and historic views. The light station complex is a cluster of associated buildings adjacent to the lighthouse that contribute to the history of Cape Hatteras as a navigational beacon. The circulation routes and spatial organization of the light station complex also contribute to the historic period of significance (1870-1936). The lighthouse was built in 1870 to warn ships of the dangerous shoals along the Outer Banks, while the remaining buildings were added to house the keepers' family and the operating functions of the light. The lighthouse was moved in 1999 to prevent structural damage from the eroding shoreline. The associated outbuildings were also moved and the light station landscape recreated around the new lighthouse site. The National Register historic district boundary corresponds with the cultural landscape boundary and encloses approximately five acres. Outside of the National Register/National Historic Landmark boundary, a Visitor Contact Station, ticket booth, parking area, and walkways were constructed around 2000. A stone amphitheater was constructed in the move corridor of the light station between 2014 and 2015. Although these structures are outside of the boundary, they diminish the historic integrity of the cultural landscape's setting.

SIGNIFICANCE SUMMARY

The Cape Hatteras light station, including the tallest lighthouse in the United States, is nationally significant to the history of navigational water transportation (Criterion A). The light station encompasses the lighthouse, outbuildings, and landscape features, as well as the view from the tower. The period of significance (1870 -1936) spans the functioning of the lighthouse and the later Civilian Conservation Corps (CCC) landscape restoration efforts. The lighthouse and outbuildings were relocated in 1999 and qualify for National Register Criteria Consideration B. The historic structures and landscape features retain their original orientation and spatial relationship but were transported 2,900 feet to a better protected portion of the beach. Despite the relocation, the light station landscape maintains good integrity.

ANALYSIS AND EVALUATION SUMMARY AND CONDITION

Little if any integrity remains of the old lighthouse site. All historic features, including structures, fences, and circulation patterns, have been either lost or removed. Likewise, the CCC camp south of the existing lighthouse location has lost its integrity. This camp was not particularly different from other camps at the Outer Banks and therefore has no outstanding significance, other than its affiliation with the light station.

Resources associated with the Cape Hatteras Light Station Complex are the lighthouse, the oil house, the double keepers' quarters, the principal keeper's quarters, the cisterns, the move corridor, and historic views. Monuments include two stone markers. One commemorates the new site as a National Historic Landmark and the other, as a National Civil Engineering Landmark.

Landscape Hierarchy Description

The Cape Hatteras Light Station is a landscape in the Cape Hatteras National Seashore, North Carolina. The national seashore extends along 80 miles of coastline on Bodie, Hatteras, and Ocracoke islands. The light station landscape, located on Cape Point of Hatteras island, retains integrity of outbuildings and features that are significant to the historic period (1870-1936). The cultural landscape includes the lighthouse, double keeper's quarters, principal keeper's quarters, oil house, fencing and circulation routes. The light station landscape was relocated in 1999 during the move of the Cape Hatteras lighthouse. The Cape Hatteras National Seashore also includes two identified cultural landscapes at Bodie Island Light Station and Little Kinnakeet Lifesaving Station. The remainder of the park has not been surveyed or evaluated for cultural landscapes.

Recent Condition

Fair

Subsite/Child components

N/A

Landscape Type

Historic Site

Historic Vernacular Landscape

Cover Page Graphic

See Cover Page.

Site Plan(s)

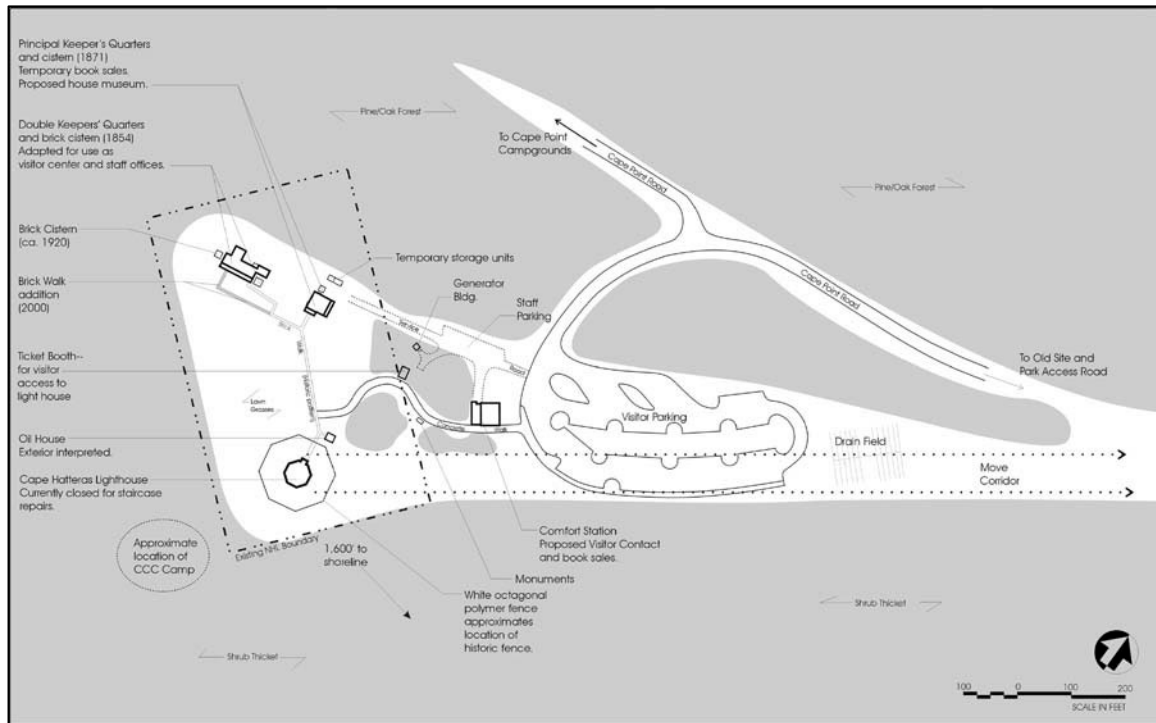
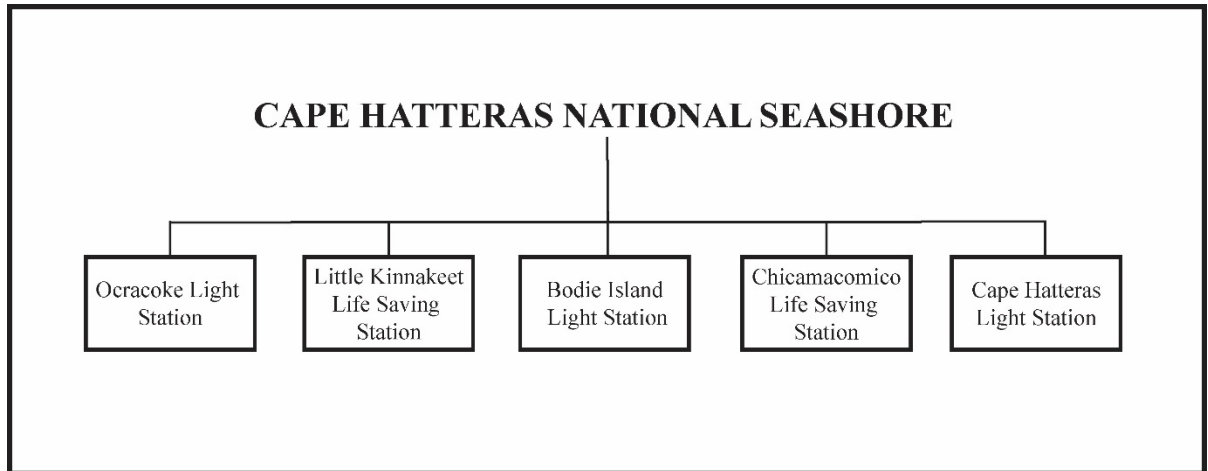


Fig 1. Site Plan 1 – to be updated early FY23

Hierarchy Description Graphic



Other Names

Seq. No.	Name	Type
1	Cape Hatteras/Phipps Memorial State Park	Historic
2	Cape Hatteras National Seashore Recreation Area	Historic
3	Cape Hatteras Light Station	Both Current and Historic

Chapter 2: Concurrence Status

Park Superintendent Concurrence Date

07/29/2005

Park Superintendent Concurrence

Yes

Completion Status Explanatory Narrative

A CLR was completed for Cape Hatteras Light Station in 2003. The information from that report was used to complete this inventory.

Concurrence Graphics

CULTURAL LANDSCAPE INVENTORY CONDITION ASSESSMENT CONCURRENCE SHEET – 31 August 2011

Park Information

Park: Cape Hatteras National Seashore
Name: Cape Hatteras Light Station
Location: North Carolina
County: Dare
CLI#: 550150

Cultural Landscape Condition Information

Landscape Condition:

Good _____

Fair X

Poor _____

Previous Condition Assessment:

Fair – 7/29/2005

Park Superintendent Concurrence

Concur ✓

Do Not Concur _____

Michael B. Munay 9-12-11
Superintendent Date

Recertification September 2011



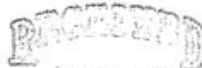
United States Department of the Interior

NATIONAL PARK SERVICE
Southeast Regional Office
Atlanta Federal Center
1924 Building
100 Alabama St., S.W.
Atlanta, Georgia 30303



H22 (SERO-CRD)

July 19, 2005



Dr. Jeffery Crow
Department of Cultural Resources
Division of Archives and History
4617 Mail Service Center
Raleigh, North Carolina 27699-4617

HISTORIC PRESERVATION OFFICE

EROS- 1692

Juliane 9/1/04
8/15

Dear Dr. Crow:

Enclosed please find a copy of the Cultural Landscape Inventory (CLI) for the Cape Hatteras Light Station. The CLI is an evaluated list of landscape properties in the National Park System considered eligible for the National Register of Historic Places or that contribute to an existing historic property. In order for CLI data to become certified, National Park Service regulations require concurrence from the SHPO on the potential eligibility of these properties. We are requesting your review of the Cape Hatteras Light Station CLI and ask that you return the signed concurrence form.

The Cape Hatteras Light Station district was listed on the National Register in 1978, and designated a National Historic Landmark in 1998. The significance and integrity of the Lighthouse and associated structures is addressed in both nominations, however, the vegetation, topography, circulation and development patterns, and views are not fully addressed. The CLI, and the Cultural Landscape Report (2003), propose that these features contribute to the integrity of the site in terms of feeling, setting, location and association.

If you have any questions about this document, please contact David Hasty, CLI Coordinator, Southeast Region (SER), at (404) 562-3117 extension 630 or by e-mail at david_hasty@nps.gov. The concurrence form can be returned by fax at (404) 562-3202, or mailed to the address above. We greatly appreciate your office's assistance with the project.

Sincerely,

Chief, Cultural Resource Division
Southeast Region
JUL 27 2005

Enclosures



Letter to the SHPO

We have reviewed the submitted documentation that identifies cultural landscape features at Cape Hatteras Light Station. We concur with the findings of the Cultural Landscape Inventory and understand that these features contribute to the existing National Register of Historic Places nomination for the property.



North Carolina State Historic Preservation Office
Historic Preservation Division Representative
Environmental Review Board

9.1.05
Date

SHPO Signature of Concurrence

CULTURAL LANDSCAPE INVENTORY
CONDITION ASSESSMENT CONCURRENCE SHEET

<u>Park Information</u>	
Park:	Cape Hatteras National Seashore
Name:	Cape Hatteras Light Station
Location:	North Carolina
County:	Dare
CLI#:	550150

<u>Cultural Landscape Condition Information</u>	
Landscape Condition:	
Good	_____
Fair	<u> X </u>
Poor	_____
Management Category:	
Must be preserved	<u> X </u>
Should be preserved	_____
May be preserved	_____
May be released, altered or destroyed	_____

<u>Park Superintendent Concurrence</u>	
Concur ☒	Do Not Concur _____
	
Superintendent	Date

Superintendent Signature of Concurrence

**CULTURAL LANDSCAPE INVENTORY
CONDITION RE-ASSESSMENT CONCURRENCE SHEET – August 2022**

Park Information

Park: Outer Banks Group: Cape Hatteras National Seashore, Wright Brothers National Memorial, and Fort Raleigh National Historic Site
State: North Carolina **County:** Dare

Cultural Landscape Information

<u>Inventory Name</u>	<u>CRIS CLI ID #</u>	<u>Previous Condition</u>	<u>New Condition</u>
Cape Hatteras Light Station	550150	Fair	Fair
Wright Brothers NM	550169	Good	Good
Fort Raleigh NHS	550168	Fair	Fair

Management Category: Must Be Preserved and Maintained

Park Superintendent Concurrence

Cape Hatteras National Seashore/Outer Banks Group concurs with the CLI updates for Cape Hatteras Light Station, Wright Brothers National Memorial, and Fort Raleigh National Historic Site.

Concur



Not Concur



**Superintendent Signature
and Date**


9/14/2022

Good: Indicates the inventory unit shows no clear evidence of major negative disturbance and deterioration by natural and/or human forces. The inventory unit's cultural and natural values are as well preserved as can be expected under the given environmental conditions. No immediate corrective action is re-quired to maintain its current condition.

Fair: Indicates the inventory unit shows clear evidence of minor disturbances and deterioration by natural and/or human forces, and some degree of corrective action is needed within 3-5 years to prevent further harm to its cultural and/or natural values. If left to continue without the appropriate corrective action, the cumulative effect of the deterioration of many of the landscape characteristics will cause the inventory unit to degrade to a poor condition.

Poor: Indicates the inventory unit shows clear evidence of major disturbance and rapid deterioration by natural and/or human forces. Immediate corrective action is required to protect and preserve the remaining historical and natural values.

CLI Superintendent Reassessment Signature 2022

Revision

[enter text here]

Chapter 3: Geographic Information

Area (Acres)

5.912 acres

Land Tract Number(s)

10-101

Boundary Description

The boundary of the Cape Hatteras light station cultural landscape is based on the National Register/National Historic Landmark nomination amended in 1998. The boundary of the new district, which reflects the relocation of the light station, is delineated by a rectangle whose corners are marked by the following UTM reference points: A 18 564443 3035607, B 18 564748 3035857 C 18 564328 3036353 D 18 564020 3036105. The 650-foot-long sides of the district's boundary run northwest to southeast and the 400-foot-long sides run northeast to southwest. The four sides of the boundary are each about 100 feet from the nearest historic structure in the district. The eastings and northings of each of the four historic structures are given on the attached site plan. The boundary includes the lighthouse, double keepers' dwelling, principal keepers dwelling, oil house, and approximately 6 acres of land, completely encompassing the light station. As part of the 1999 relocation, the configuration of the structures to one another as well as their orientation to the shoreline was maintained by surveying the horizontal and vertical relationship of the four structures at their historic location and carefully positioning them at the new site to match.

Latitude/Longitude

[enter text here (eg 'See spreadsheet in Appendix.')]

Seq. No.	Geo-metry	Lati-tude	Longi-tude	Geo-Datum	Eleva-tion (Meters)	Position Source	Positi on Arrura cy	Date	Narra-tive
01	Area	75.5293339	-35.2520432	1984 WGS		GIS			

02	Area	75.5278251	-35.2505344	1984 WGS		GIS			
03	Area	75.5291943	-35.2496659	1984 WGS		GIS			
04	Area	75.5306631	-35.2511911	1984 WGS		GIS			

Regional Landscape Context

Physiographic

The light station landscape is located on the Outer Banks of North Carolina, barrier islands along the coast of the Atlantic Ocean. The islands form a cape (Hatteras) that extends into the ocean at Diamond Shoals. Diamond Shoals is a shallow sandbar extending fourteen miles into the ocean at the point where the Labrador Current and Gulf Stream are closest. This feature makes the North Carolina coast dangerous for ships navigating close to the islands and has given Cape Hatteras and the Outer Banks the reputation as the “Graveyard of the Atlantic.”

The topography of Cape Hatteras consists of beaches, dunes, sand ridges, sand flats, ponds, and salt water marshes. Live oaks, pine and cedar trees cover the inland portion of the island with native yaupon, wax myrtle, red bay, and pepper vine. A variety of vegetation grows in the sand flats, while the dunes and beach only support beach grass and sea oats. Cape Hatteras has a dynamic environment, repeatedly changing with wind and water erosion. The shoreline continually changes and migrates westward, especially with yearly hurricanes and winter storms.

Cultural

Native Algonquins occupied the Outer Banks in 100 B.C.E. and inhabited villages near present-day Buxton, Frisco, and Hatteras villages. The barrier island was also the site of early exploration by European colonists in the sixteenth century. Permanent settlement occurred (despite the failed attempts of Sir Walter Raleigh), though the Outer Banks remained sparsely populated until the twentieth century. Hatteras island was used mainly for raising livestock, but most residents were completely self-sufficient. Small villages grew at hammocks and inlets along the islands, while locals based their livelihood on piracy, whaling, and later commercial fishing. Recently the

Outer Banks has developed as a tourist destination. Cape Hatteras is currently a recreation area of the National Park Service with vacation-related development on adjacent private lands.

Political

Cape Hatteras is located in Dare County, a part of the Third Congressional District of North Carolina.

Location Map Graphic Information

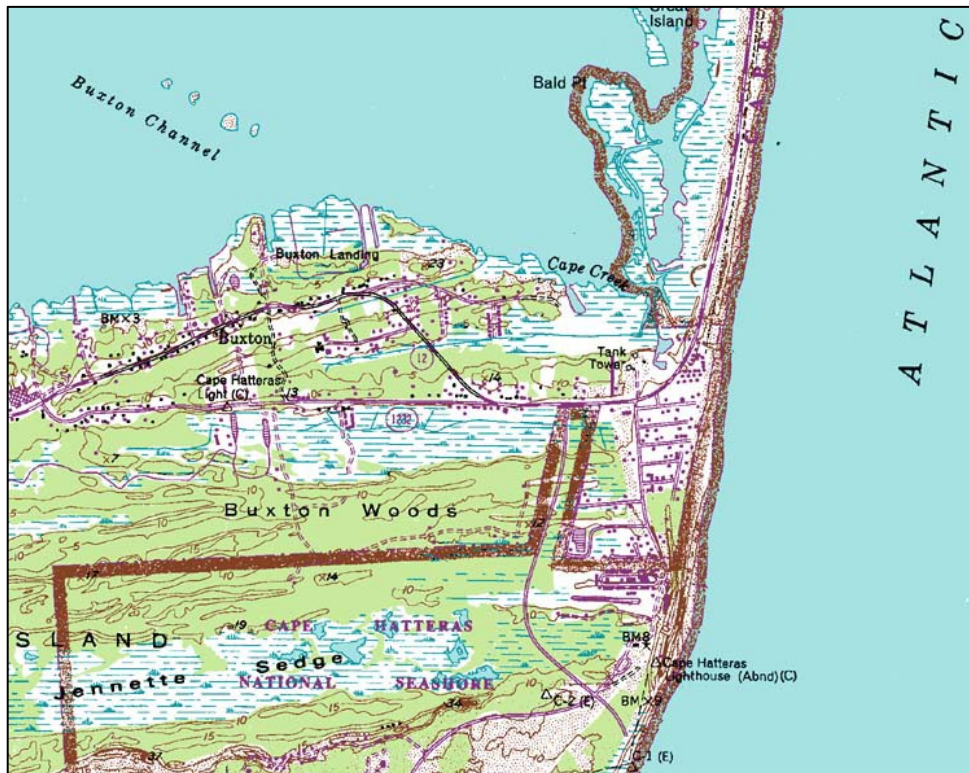


Fig 2. Location map - Buxton, NC USGS quadrangle (1948; photorevised 1983)

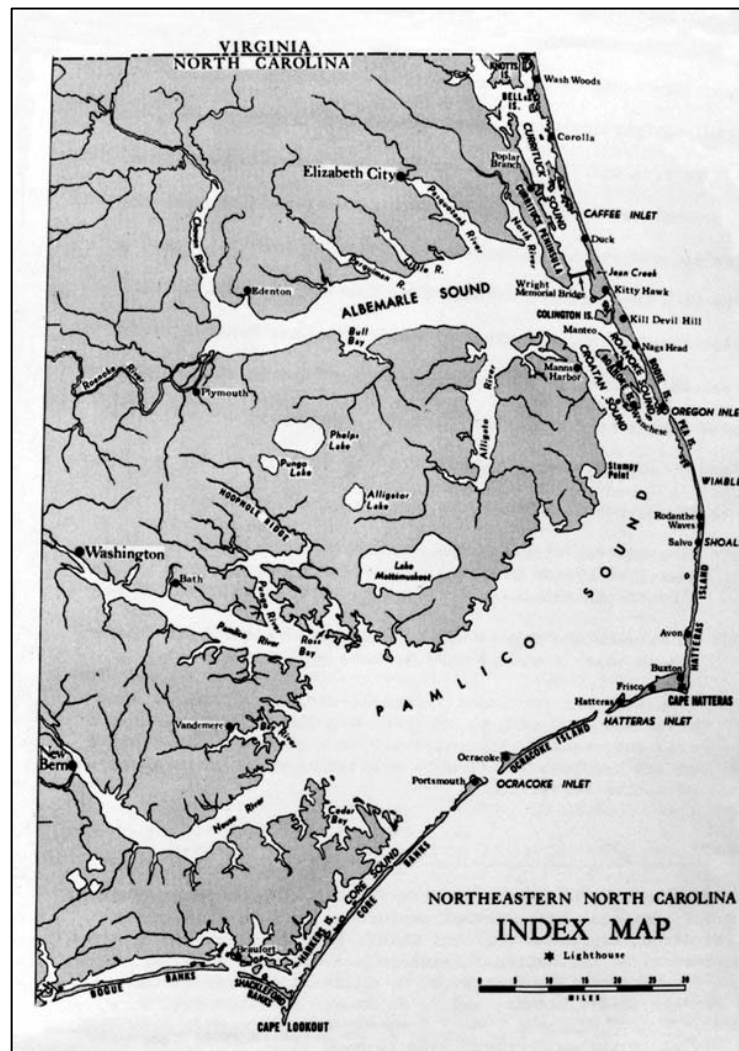


Fig 3. Outer Banks Location Map

Counties and States

Dare County, North Carolina

Chapter 4 : Management Information

Management Category

Must be Preserved and Maintained

Management Category Date

07/14/2004

Management Category Explanatory Narrative

As a National Historic Landmark, the Cape Hatteras Light Station must be preserved and maintained. The complex was constructed in 1870 and is an exceptional site for interpreting the history of water transportation and navigation on the Outer Banks. The Cape Hatteras Lighthouse was relocated in 1999 to rescue the building from the encroaching ocean. The other buildings associated with the light station were also moved.

Management Agreements

Management Agreement	Other Management Agreement	Management Agreement Expiration Date	Management Agreement Explanatory Narrative
Special Use Permit	N/A	01/01/2222	National Park Service/US Coast Guard to maintain the modern navigational aid on the Cape Hatteras Lighthouse

Legal Interests

Legal Interest Type	Fee Simple Reservation Expiration Date	Other Organization/Agency	Legal Interest Narrative
Fee Simple			

Located in a managed wilderness?

Unknown

Adjacent Lands Information

Do Adjacent Lands Contribute?

Yes

Narrative

The light station cultural landscape is surrounded by the National Seashore and the Atlantic Ocean. The adjacent land is privately owned and developed with hotels, private homes, and small businesses. Although the historic views from the lighthouse were compromised with the CCC dune restoration, private development, and the relocation of the lighthouse, the light station complex is intact. The move corridor currently dominates the northeast viewshed from the lighthouse but no impact from adjacent lands threatens the cultural landscape.

Adjacent Lands Graphic



Fig 4. Adjacent Lands

Chapter 5: National Register Information

National Register of Historic Places

Documentation Status

Entered – Inadequately Documented

Documentation Narrative Description

The National Register nomination includes documentation of the structures and landscape features associated with the light station. Further research on the significance of the relocation should be undertaken to include this period of potential significance.

Eligibility

Eligible -- SHPO Consensus Determination

Concurrence Eligibility Date

09/01/2005

Concurrence Eligibility Narrative

Renee Gledhill-Earley of NC-SHPO reviewed the CLI in August 2005 and concurs with the findings of the document.

Significance Level

National

Contributing/Individual

Contributing

National Register Classification

District

Statement of Significance

The Cape Hatteras light station, including the tallest lighthouse in the United States, is nationally significant to the history of navigational water transportation (Criterion A). The light station encompasses the lighthouse, outbuildings, and landscape features, as well as the view from the tower. The period of significance (1870 -1936) spans the functioning of the lighthouse and the later Civilian Conservation Corps (CCC) landscape restoration efforts. The lighthouse and outbuildings were relocated in 1999 and qualify for National Register Criteria Consideration B.

The historic structures and landscape features retain their original orientation and spatial relationship but were transported 2,900 feet to a better protected portion of the beach. Despite the relocation, the light station landscape maintains good integrity.

The Cape Hatteras light station is part of the history of maritime navigation along the Atlantic coastline during the late nineteenth century. As more and more ships traveled the Gulf Stream after the Civil War and commercial activity increased, many vessels perished at the shoals along the North Carolina coast. The coast became known as the “Graveyard of the Atlantic” for the frequent shipwrecks. The wrecks emphasized the need to broadcast the danger of the Outer Banks, particularly the treacherous Diamond Shoals at Cape Hatteras. This also prompted the government to construct a series of lighthouses, beacons, lightships, and life saving stations up and down the east coast to prevent such disasters. The Cape Hatteras lighthouse was built in 1869 to replace a smaller 1803 lighthouse and aid in navigation around Diamond Shoals. The new lighthouse was placed to the southwest of the original tower, revealing the continuous pattern of erosion on the Outer Banks and foreshadowing the eventual relocation.

The Cape Hatteras Lighthouse, Double Keeper’s quarters, and Principal Keeper’s quarters were built in 1869-1870 to provide guidance for ships and house the resident lightkeeper, his assistant, and their families. The lighthouse, constructed with brick atop a pink granite octagonal base, rises 193 feet to support a first order flashing lens. In 1873, the existing black and white spiral was painted on the lighthouse to identify the tower and in 1881 the old lighthouse was torn down. The current lighthouse has only been minimally physically altered with the removal of the original Fresnel lens, window pediments, and wooden doors, but most architectural features date to the original construction. The lighthouse was relocated in 1999 after erosion threatened the structural integrity. The Cape Hatteras lighthouse is still operational and is open to the public.

The Double Keepers’ and Principal Keepers’ quarters housed the staff that maintained the lighthouse. The Principal Keepers’ quarters was painted red during the historic period. The two structures along with cisterns, privies, sheds, and detached kitchens were located 200 feet northwest of the lighthouse. A wooden boardwalk and picket fences connected the two quarters

in 1871 and the entire enclosed area was planted with exotic grasses. An iron picket fence was added the same year to enclose the base of the lighthouse and a brick walkway connected the lighthouse to the other buildings. The historic structures are significant to the history of lighthouse and are currently used for museum space and offices. The walkway and picket fence were reconstructed in 2001 as a temporary feature, prior to recommendations from the cultural landscape report. The picket fence was constructed with white vinyl, but a metal replica is proposed during the upcoming lighthouse restoration.

The light station landscape, clustered around the Cape Hatteras lighthouse, altered slightly over the next decades. The fencing was replaced in 1888 and again in 1920 with a concrete post and wire fence. The Double Keeper's quarters was expanded in 1892 to accommodate the assistant keeper's family and a brick oil house was built at the base of the lighthouse to store fuel. In 1893, all walkways were replaced with concrete. Additional land was fenced outside of the complex during the nineteenth century for grazing cattle and hogs, but by 1930 all other fences and gates had been removed. (Vincent, 16).

Though the lighthouse remained in operation, beach erosion continued to encroach on the light station landscape. The 1870 lighthouse was constructed 1,500 feet from the shore and by 1937 the water had reached a distance of only 600 feet. The Civilian Conservation Corps (CCC) began an extensive beach restoration effort in 1935 to stop dune erosion and revegetate the landscape. The CCC constructed sand fences and wooden revetments in the 1930s and planted American beach grass, sea oats, and native shrubs to stabilize the shifting sands. These plantings are still evident today. The CCC also constructed a camp a half-mile away and installed four miles of brush fences in the area. The light station buildings were briefly occupied by CCC workers while the barracks were under construction and later painted white in 1936. The kitchens, privies, and sheds near the light station were removed by 1937. Exotic grasses were also replanted within the light station landscape in the 1930s. The National Park Service obtained 44 acres including the Cape Hatteras light station in 1936 and formed the extended National Seashore in 1937. As time passed, the attempts to prevent the natural shoreline from overtaking the lighthouse and landscape proved futile.

In 1999, the lighthouse and remaining outbuildings were moved 1,500 feet away from the shoreline. The relocation preserved the original structures and recreated the spatial organization and circulation paths of the light station landscape. The historic district includes fenced-in grass areas and concrete and brick walkways that were reconstructed. The move qualified the light station for Criteria Consideration B of the National Register. The integrity of the landscape is good and conveys the period of significance with both historic architecture and landscape features. The location of the lighthouse (in relation to the shoreline) was replicated in 1999 and the setting is similar to the original site. The integrity of design (spatial relationships) and feeling are also apparent at the relocated light station. Integrity of association in the existing landscape is related to the latter portion of the period of significance, with vegetation contributing to the 1930s CCC restoration. The move corridor dominates the northeast vista from atop the tower, yet disrupts the historic view of the beach and ocean. The view from the lighthouse is a primary component of the cultural landscape but does not contribute to the period of significance. This corridor does provide information about the history (and relocation) of the lighthouse however, and should be assessed for potential significance.

National Register Significance Criteria

A – Associated with events significant to broad patterns of our history

National Register Criteria Considerations

B – A building or structure removed from its original location

National Register Periods of Significance (with Historic Context Themes)

Seq. No.	Start Year/Era and End Year/Era	Historic Context Theme	Subtheme	Facet
1	1870 CE – 1936 CE	Developing the American Economy	Shipping and Transportation by Water	

National Register Areas of Significance

Seq. No.	Category	Subcategory (only for Archeology and Ethnic Heritage)	Narrative
1	Transportation		

NRIS Information

Seq. No. (R)	NRIS Name (R)	NRIS ID (R)	NRIS URL (R)	Other Name	Primary Certification Date (R)
1	Cape Hatteras Light Station	78000266	Asset Detail (nps.gov)	Museum of the Sea; Cape Hatteras Lighthouse	

State Register Documentation

Seq. No. (R)	Identification Number	Name	Listed Date	Narrative

National Historic Landmarks

Status	Theme	Contributing	NHL ID	NHL URL	Date
Yes	V. Developing the American Economy: 3. Transportation and Communication ; III. Expressing Cultural Values: 5. Architecture, Landscape, Architecture and Urban Design	Individual	NARA – 47718776	https://catalog.archives.gov/id/47718776	08/05/1998

Statement of Significance for National Historic Landmark

The Atlantic coast of the United States served as a major transportation corridor for commercial traffic from the late 18th through the 20th centuries. The construction of the Cape Hatteras Light

Station is directly associated with federal government efforts to provide an integrated system of navigational aids and to provide for safe maritime transportation. The present light tower completed in 1870 is the second tallest brick lighthouse tower in the world and tallest in the United States. Located near the middle of the Outer Banks, Cape Hatteras Lighthouse is among the most popular lighthouses in America. Its majestic setting at the bend of the Outer Banks provides a striking presence, attracting close to a million visitors per year.

Service as an Aid to Navigation and Importance to Maritime Trade

After the Spanish settled in the New World they soon found that their ships could return to Europe from the Caribbean more quickly by sailing north with the Gulf Stream to the general area of Cape Hatteras and then veering to the northeast for home, often saving weeks. Later, mariners used the same route to reach the mid-Atlantic coast of the U.S. The Gulf Stream moved at over four knots in places and was safely offshore. To travel south mariners could follow the Labrador Current but it narrowed and took ships considerably close to Cape Hatteras and the dangerous "diamond shoals" located just offshore. Because the shoreline along the Outer Banks is generally flat, there were no landmarks visible to mariners unless they steered too close to the dangerous shore. Known as the Graveyard of the Atlantic, it is estimated "that more than 2,200 craft of various sizes and types have met disaster in the vicinity of Cape Hatteras."

With the exception of Nantucket shoals, it is supposed there is no part of the American coast where vessels are more exposed to shipwreck, than they are in passing along the shores of North Carolina, in the neighborhood of these shoals. The Gulf Stream certainly approaches very near the American coast in this quarter; indeed, experienced navigators assert, that it touches Cape Hatteras shoals in its progress to the northeast, out of the Mexican gulf, and, as it turns with great rapidity hereabouts, they can place very little dependence on the ship's reckoning. Their estimated distance from land, therefore, is often found to be very erroneous, and as no soundings are to be procured within a short distance from the outer part of the shoals, it too frequently happens that shipwrecks take place; and hardly a season passes that does not afford the melancholy spectacle of

stranded ships, and a great destruction of property is sure to follow: and it is fortunate, indeed, if the friendless mariner escapes with his life. Report from Congress 1806.

There were 27 lighthouses in the United States in 1800. These early light stations marked entrances to harbors and estuaries; but only three were located south of Cape Henry, Virginia. Seen as a crucial coastal aid to navigation and given a high priority, the light station at Cape Hatteras was conceived in 1794 and completed in 1803.

The Atlantic coast was and still is the principal sea lane for the shipping of goods between ports along the East coast of the United States. Before the completion of the Inland Waterway by 1940, which runs from just north of Boston, Massachusetts, to Key West, Florida, the Atlantic coast was the only means of such travel and still is for larger ships. During this course, there are several key changes in direction. As the primary navigation aid for mariners rounding the treacherous Diamond Shoals until the offshore Diamond Shoals Texas Tower was built in 1967, Cape Hatteras was perhaps the most significant in the chain of lights marking the Atlantic coastal shipping lane. "There is perhaps no light on the entire coast of the United States of greater value ' to the commerce and navigation of the country than this."

Significance as a Masonry Tower

The present light station embodies a distinctive design and method of construction that typified first-order coastal lighthouse construction on the East coast of the United States during the second half of the 19th century. Coastal lights, as opposed to harbor lights, were generally taller and used more powerful optics. Early lighthouses in this country were built on land to warn mariners of offshore shoals; it was not until the mid-nineteenth century that advances in building technology allowed offshore lighthouse construction. The earliest materials used for lighthouse construction were wood and/or rubblestone. Later cut stone and brick were used, allowing towers increased height for better visibility. The design of the tall brick towers consisted of a double wall with a hollow space between the walls, thereby lightening the load, creating an insulation "member," and reducing the overall cost by using less bricks.

Brick is the most popular construction material of the surviving 640 lighthouse towers in the United States—approximately 200 are constructed of brick. Of those constructed of brick, approximately half are attached to another structure, generally a keepers dwelling. Two-thirds of those remaining are unattached structures and a third are integral to another structure. Most brick towers are conical in shape, although some are octagonal with a few square, cylindrical, or pyramidal. Less than 12 of the surviving brick towers are over 150 feet, with 25 over 100 feet, 43 over 75 feet, and 97 over 50 feet. Of the surviving towers of every construction type, 16 are more than 150 feet and at least 66 are over 100 feet. The Cape Hatteras Lighthouse tower is the tallest brick light tower in the United States and second tallest in the world.

World Heritage Site

Status	Category	WHS ID	WHS ID URL	Date
No				

Is Resource within a designated National Natural Landscape?

No

Chapter 6: Chronology & Physical History

Chronology

Seq. No.	Major Event	Major Event Narrative	Start Year of Event	Start Era	End Year of Event	End Era
01	Inhabited	Native Americans inhabit Hatteras Island Algonquin	100	BCE	100	BCE
02	Colonized	Roanoke Island inhabited by John White and settlers sent by Sir Walter Raleigh	1587	CE	1587	CE
03	Settled	English and European settlers use land for stock grazing	1660	CE	1660	CE
04	Built	Shell Castle (lighthouse) on Ocracoke Island	1792	CE	1792	CE
05	Purchased/Sold	Land for lighthouse from William Jennett, Mary Jennett, Jabez Jennett, Aquilla Jennett, and Christian Jennett	1798	CE	1798	CE
06	Built	Original Cape Hatteras Lighthouse Builder: Henry Dearborn, Massachusetts Congressman	1803	CE	1803	CE
07	Restored	Lantern replaced on original lighthouse	1834	CE	1834	CE
08	Restored	Reflectors changed to strengthen beacon	1845	CE	1845	CE
09	Restored	Reflectors changed to strengthen beacon	1848	CE	1848	CE
10	Altered	Height of lighthouse raised to 150 feet	1854	CE	1854	CE
11	Exploited	Privateers raid ships during the Civil War	1861	CE	1861	CE
12	Built	Current Cape Hatteras Lighthouse, keeper's quarters and temporary buildings (cement house, superintendent's quarters, men's quarters, kitchen) Temporary buildings were moved to Bodie island once construction of the lighthouse was complete.	1869	CE	1870	CE
13	Eroded	Landscape consisted of wind-swept dunes with beach grass and shrub thickets	1870	CE	1870	CE
14	Built	Boardwalk from double keeper's quarters to the	1871	CE	1871	CE
15	Built	Bodie Island Lighthouse	1872	CE	1872	CE

16	Altered	Lighthouse painted with alternating black and white spiral bands	1873	CE	1873	CE
17	Established	Lifesaving Stations; Chicamacomico and Little Kinnakeet; Hatteras Weather Bureau at light keeper's quarters.	1874	CE	1874	CE
18	Built	Currituck Lighthouse	1875	CE	1875	CE
19	Destroyed	Old Cape Hatteras lighthouse	1881	CE	1881	CE
20	Built	Small coal bin, near the tower	1884	CE	1884	CE
21	Built	Small wooden fuel shed (to store empty oil cans) and storage shed	1888	CE	1888	CE
22	Built	Brick oil house with tin roof	1892	CE	1892	CE
23	Expanded	Doublekeeper's dwelling was expanded to accommodate assistant keeper's family. Second chimney was added and kitchen was moved to northwest corner, back porch enlarged.	1892	CE	1892	CE
24	Developed	Site included summer kitchen, storage structures, cistern, and double privy; all painted white. Paths were all concrete	1893	CE	1893	CE
25	Altered	Wooden picket fence replaced around principal keeper's house	1898	CE	1898	CE
26	Established	Pea Island Hunt Club; private clubs to hunt migratory fowl	1909	CE	1909	CE
27	Built	Privies	1919	CE	1919	CE
28	Altered	Iron picket fencing removed around base of lighthouse and replaced with concrete posts and metal railing	1920	CE	1920	CE
29	Built	Bridges between islands; including Nags Head to Roanoke Island and Wright Memorial Bridge.	1920	CE	1930	CE
30	Built	Steel groins to protect lighthouse from erosion by the Lighthouse Service	1930	CE	1930	CE
31	Built	Additional steel groin reinforcements	1933	CE	1933	CE
32	Conserved	Artificial dunes constructed to prevent beach erosion Civilian Conservation Corps. Improvements made to the roads.	1935	CE	1937	CE
33	Land Transfer	Commerce Department transfers light station to National Park Service	1936	CE	1936	CE

34	Preserved	Light station becomes part of National Seashore	1937	CE	1937	CE
35	Built	Septic system	1937	CE	1940	CE
36	Built	Five CCC houses, designed by the NPS	1939	CE	1940	CE
37	Maintained	Coast guard occupied lighthouse as lookout station	1942	CE	1945	CE
38	Retained	Buildings and dunes	1950	CE	1950	CE
39	Moved	Lighthouse moved to new location 2,900 feet away International Chimney Corporation	1999	CE	1999	CE
40	Moved	Keeper's dwellings and oil house	1999	CE	1999	CE
41	Reconstructed	Fences and walkways	1999	CE	1999	CE
42	Built	Visitor Contact Station with shade structures built; ticket booth, monuments, visitor parking built and walks reconstructed	2000	CE	2000	CE
43	Built	Amphitheater built in the move corridor	c.2015	CE	c.2015	CE

Physical History

Sequence Number and Physical History Time Period

1 - Pre-European Landscape, 100 B.C.E-c.1700s C.E.

Physical History Narrative

Native American groups occupied North Carolina's barrier islands as early as 100 B.C.E. The English encountered their descendants, the Poteskeets, Corees and Croatons, in the 16th century. The Indians occupied villages on high ground amidst maritime forests. The availability of freshwater, fish, and wild game was also a factor in determining village locations on the islands.

Three aboriginal occupations were found on Hatteras Island. Areas of present-day Buxton, Frisco, and Hatteras Village now occupy former Indian towns. The "Hatteras Indians," known by this name by the 1730s, were members of the Croaton Tribe and lived in a village on the Albermarle Sound side of present Buxton. They grew maize, beans, and curcubits, to supplement their diets of fish, shellfish, and deer (TOrres 1985, 16, 27).

Vegetation. Beaches, dunes, sand ridges, sand flats, ponds, and salt marshes made up the barrier island topography. Distribution of native plants was dependent upon several factors, including moisture, salinity, elevation, and wind exposure. The earliest accounts (1798) describe Hatteras Island as covered with evergreen trees, including live oak (*Quercus virginiana*), pine (*Pinus sp.*), and cedar (*Juniper sp.*). These species were primarily found on old dunes and sandy ridges located inland and on the sound side of the islands. Here, climax maritime forests grew, protected from salt spray and high wind.

Interspersed and at lower elevations were sand flats--open, wind-swept sandy areas of considerable acreage. Depending upon the availability of moisture and protection from salt spray, the sand flats varied in their vegetative content. Inland areas were dominated by trees, shrubs, and woody vines such as yaupon (*Ilex vomitoria*), wax myrtle (*Myrica cerifera*), bayberry (*M. pennsylvanica*), red bay (*Persea borbonia*), live oak, and pepper vine (*Ampelopsis arborea*). Moist sand flats included narrow-leaf cattail (*Typha angustifolia*), smooth cordgrass (*Spartina alterniflora*), and black rush (*Juncus roemerianus*). These freshwater species, along with beggar ticks (*Bidens sp.*), pennywort (*Hydrocotyle sp.*), and black willow (*Salix nigra*), also grew along the edges of creeks and ponds.

Dunes varied from hills of shifting sands with little or no vegetation, to those where grasses had taken hold. American beach grass (*Ammophila breviligulata*) and sea oats (*Uniola paniculata*) were especially suited to this environment.

On the sound side, salt marshes were dominated by smooth cordgrass, saltmeadow cordgrass (*Spartina patens*), black rush, and marsh elder (*Iva frutescens*) (Brown 1957, 3). A more extensive list of native plants can be found in the appendix.

Sequence Number and Physical History Time Period

2 – European Settlement, 1524-c.1700s C.E.

Physical History Narrative

The first European to see the coast of North Carolina was probably Giovanni Verrazano, a Florentine, who sailed the eastern coast of North America in 1524. Verrazano described the barrier islands as an "isthmus" that separated the "Eastern Ocean" from the "Western Ocean." He described the land feature as one mile wide and 200 miles in length.

The next Europeans to sail to these islands were sent by Englishman Sir Walter Raleigh, whose expeditions to the New World are well known. His first expedition lasted 11 months, and the ethnographic information that John White and Thomas Hariot recorded about the Native Americans during 1585-86 is significant. Raleigh's second try at Roanoke Island, entrusted to John White, in 1587, survived tenuously for a few years. Within a few months of landing, White returned to England for much-needed supplies. When he returned to Roanoke Island in 1590, the colonists had abandoned the site, leaving the mysterious carving "Croatoan" on a post at the entrance to the palisade.

The Roanoke Island colonists adopted Indian names of landmarks, such as "hatterask," referring to Pea and Hatteras Islands. "Croatoan" referenced a site west of Cape Hatteras on the sound side where an Indian village existed. Unfortunately, White failed to persuade his ship's captain to search additional sites and they sailed away, never learning the colonists' fate.

Sequence Number and Physical History Time Period

3 – Colonial Period, c.1700s-1776 C.E.

Physical History Narrative

A Carolina Charter issued by King Charles II of England in 1663 brought settlers to the mainland along the western shore of Albermarle Sound. The first to move to the barrier islands came from Virginia to Collington and Roanoke Islands around 1700.

As the English population grew and spread to other islands, settlers came in frequent contact with local Indians. In 1709, approximately forty Indians lived near present-day Buxton in a village known then as "Indian Town" or "Cape Hatteras Indian Town." English retaliation for an

Indian attack in 1733 reduced the Hatteras Indian population to a handful. From then on the remainder lived in great poverty. By 1761, the tribe had moved to the mainland and was absorbed into English culture (Torres 1985, 17).

Land Use. The barrier islands were excellent locations for stock grazing. The small islands prevented the need for fencing, and marsh grasses were good sources of stock food. By 1776, all the islands were grazed by livestock, including sheep, horses, cattle, and hogs. In addition to meat, settlers also maintained small vegetable gardens to supplement their diet. Many hunted waterfowl and fished as additional sources of food.

During the American Revolution, British soldiers frequently raided the islands for livestock. The easy access and defenseless inhabitants made such raids easy. For a short period during the war, however, a militia group protected the islands and on one occasion turned back a British landing party intent on taking cattle.

Maritime Industries. One of the earliest occupations in the Outer Banks, besides stock raising, was piloting. In 1734 the colonial government appointed and licensed pilots to guide ships through Ocracoke and Roanoke Inlets. Pilots and their families in 1766 were provided with land that later became the village of Ocracoke.

Other families in the Outer Banks supplemented their livelihood by scavenging. Whale oil and whale bones were extracted from whales that washed up on shore. In addition, locals scavenged shipwrecked cargo and timbers from wrecks offshore. By 1700, these were primary occupations.

Oral accounts of pirating and smuggling confirm a well-established practice in the 18th century, especially around Currituck and Ocracoke Inlets. The infamous Edward Teach, also known as Blackbeard, terrorized the area in the early 18th century. Such a dangerous reputation as that attributed to the barrier islands was a large commercial disadvantage. Not only did the threat of pirates exist, but treacherous waters also created mayhem for ships traveling along the colony's coast.

Hydrology/Topography. Reports of changing shorelines appeared early in the 18th century. New Currituck Inlet opened in 1728, causing the loss or closing of Old Currituck Inlet by 1731. Hatteras Inlet, continually accreting sand, closed in 1755. Ocracoke Inlet, still dangerous and tricky, remained the main channel of supplies into the colony.

Circulation. The first English homesteads appeared on the sound side of the islands with enclosed gardens and yards to keep out livestock. Located in wooded tracts, or in hammocks, all had access to the sound for transportation. Rowboats and canoes were the primary means of travel.

Sequence Number and Physical History Time Period

4 – The Outer Banks – Federal Period, 1776-1865 C.E.

Physical History Narrative

Through most of the 18th century, the Outer Banks were part of Hyde County, formed in 1775. In 1870, however, Dare County was created and included the barrier islands and part of the mainland.

Land Use. Bankers continued to live primarily on the sound side of the islands, protected from high winds and floodwaters. Population was sparse. The 1850 census showed a population of only 661 inhabitants, including 106 enslaved people, in the Cape Hatteras area.

All were self-sufficient, mastering the skills of mariner, farmer, stockman, carpenter, boat builder, fisherman, and hunter. Bankers allowed their horses, sheep, cattle, and goats to roam freely among the freshwater grasses and woodlands. They raised Indian corn, sweet potatoes, and other vegetables in small garden plots. In addition, fish and waterfowl brought protein to the table.

Primary occupations remained in fishing and stock raising. Most fishing occurred on a small scale until the 1850s when ice became available, and a local market developed.

Piloting was also an important occupation. Ships traveling to and from North Carolina's main coast had to negotiate the ever-changing inlets. Over the century, some were closed to large ships due to sand accretion. For example, the Roanoke Inlet closed to commercial traffic in 1811 and Currituck Inlet closed in 1828.

Other times new inlets would be created by storms. Hatteras and Oregon Inlets opened during the same storm on September 8, 1846. Continuous scouring made Hatteras Inlet an important byway by mid-century. Given these constant changes, the guidance of knowledgeable pilots was a necessity.

Other occupations defined the self-sufficiency of the Bankers. Harnessing the area's wind resources, they milled corn brought from the mainland in exchange for yaupon leaves and salted mullet. Three, possibly four, windmills were located on Hatteras Island. Shipbuilding grew out of the abundant oak and cedar forest near Bodie Island and Roanoke Island. Wrecking was another occupation, although much of this work involved sacrifice on the part of some and opportunity on the part of others. The saving and care of shipwrecked sailors and cargoes fell upon the inhabitants as maritime trade increased. Many regarded the task as an obligation to assist those in danger. Others took advantage of the goods washed ashore for their personal gain.

The isolation of the Outer Banks soon succumbed to tourism. Lowcountry planters and townsfolk came to Nags Head and Ocracoke to escape the summer diseases of the mainland. Small cottages were built at Nags Head on the leeward side around 1830 and Ocracoke built a hotel in 1838 (Dunbar 1958, 38).

Aids to Navigation. The U.S. Congress recognized the importance of navigation protection in 1789 when it was reported that only eleven lighthouses operated along the east coast. Two stood in the South, on Tybee Island, Georgia, and on Morris Island near the entrance to Charleston harbor, South Carolina. Of particular urgency was protection around the treacherous Diamond Shoals.

The Department of the Treasury was authorized to administer all aids to navigation and appropriated funds for the construction of lighthouses. Among them, Shell Castle (1798) on Ocracoke Island, and the Cape Hatteras Lighthouse (1803) were built. Shell Castle Lighthouse was abandoned in 1820 and another one was built in 1823 near Ocracoke village. The Bodie Island Lighthouse was built in 1848 just south of Oregon Inlet.

Fifty-five lighthouses were constructed in the country by 1820. This figure grew to 204 by 1837. In 1852, the Department of the Treasury established the Lighthouse Board to govern all lighthouse establishments. That year 331 lighthouses stood around the nation's coastline.

1803 Cape Hatteras Light Station

Land Purchase. In April 1794, Congress allocated \$44,000 for the construction of two light stations on the Outer Banks--Shell Castle on Ocracoke Island and Cape Hatteras on Hatteras Island. Four acres were purchased for \$50 from William Jennett, Mary Jennett, Jabez Jennett, Aquilla Jennett, and Christian Jennett (designated guardian of minors under twenty-one years of age) on October 26, 1798, for the Cape Hatteras Light Station (fn: 1. The sale was registered in the Registrar's Office of Currituck County on February 28, 1801).

Several years later, an additional forty acres were purchased for land to build a new keeper's quarters, the first one having been in disrepair. Pharoah Farrow was paid \$200 on July 21, 1828, for the deed, which described the property line as:

Beginning at Elizabeth Williams' line on the Cape Creek, and running with a line westward to a cedar stake, thence southwardly with another of said Elizabeth's lines to Jacob Farrow's line, thence East with said Jacob Farrow's line to the Cape Creek and from thence with said Elizabeth Williams' lines to the beginning (A survey of the property has not been found).

The 1803 lighthouse was a ninety-foot brown sandstone and brick octagonal tower. It was built by Henry Dearborn, a former Congressman from Massachusetts. Built at a time of limited technology, the structure quickly proved inadequate.

Dearborn also built an oil vault near the tower. The first keeper's house was a two-story wood frame dwelling. It stood thirty- four by sixteen feet and was built in 1800. The location is unknown. Dearborn sunk a well "at a convenient Distance" from the house.

With additional land available, a larger dwelling was built in 1854. This two-story wooden structure was painted white and contained six rooms to house two, sometimes three, assistant keepers and their families.

Circulation. Water transportation persisted throughout the 19th century with the use of shad boats, Carolina sharpies, canoes, and dugouts. Also, ferry services were provided across the inlets. On land, sandy trails followed high ground from village to village, and by 1865 a dirt road connected Hatteras Inlet with Loggerhead Inlet. Bankers traversed these difficult routes with carts drawn by horses or oxen. The best routes, however, were along the beaches at low tide. Here, horse- or ox-drawn beach carts, or two-wheeled buggies, moved more quickly.

Civil War Period. Confederate forts were built on the Outer Banks to protect the ocean trade routes of the South-- Fort Oregon at Oregon Inlet near Roanoke Island, Fort Ocracoke near Ocracoke Inlet on Beacon Island, and Forts Hatteras and Clark near Hatteras Inlet on Hatteras Island. The Hatteras forts were located ten miles south of the light station.

Hatteras Inlet, open for only fifteen years before the outbreak of the Civil War, was the deepest and most stable. From there, Confederate privateers raided ships bound for northern ports in the summer of 1861. That same year Confederate soldiers removed the Cape Hatteras lighthouse lantern before Union soldiers took control of the inlet. The Yankees replaced the lantern and were garrisoned at Forts Clark and Hatteras for the remainder of the war.

Sequence Number and Physical History Time Period

5 – The Outer Banks –Post-Civil War to Early 20th Century, 1866-1935 C.E.

Physical History Narrative

Land Use. Approximately 1,000 to 1,500 people lived on Hatteras Island by 1870 (Holland 1968, 89). Ice, for packing and storing, became widely available at this time and caused commercial fishing to become an important industry.

In the early decades of the 20th century, private clubs were established for seasonal hunting of migratory fowl. Pea Island Hunt Club was established as early as 1909. The Phipps family and other wealthy northerners bought land on the South Banks in the 1920s (Jim Senter, email correspondence to Doug Stover, CAHA Cultural Resource Specialist, July 2, 2002).

Circulation. With sandy trails still unimproved at the turn of the 20th century, travel by boat remained the preferred means of transportation. But the 20th century brought improved transportation options for the island inhabitants. Cars arriving from the mainland in 1919 on private ferries could drive on the beaches (Dunbar 1958, 62). The first hard-surfaced road was built in the 1920s on Roanoke Island. During the same period, a bridge from Roanoke Island to Nags Head was constructed. Shortly thereafter, the Wright Memorial Bridge, built in 1930, connected Point Harbor across the Currituck Sound with Kitty Hawk and Nags Head. In addition, ferries from island to island began running in the 1930s.

Aids to Navigation. The federal government launched two programs in the late 19th century that would battle the problem of inadequate aids to navigation at North Carolina's Outer Banks. The first was to construct a series of lighthouses that would have sufficient power in their beacons and be constructed close enough that ships could follow one after the other. On Cape Hatteras, three modern brick lighthouses were built--the new Cape Hatteras Lighthouse (1870), the Bodie Island Lighthouse (1872), and the Currituck Lighthouse (1875). Each was given distinct markings for day identification and different sequences of flashing lights and intervals between flashes for night identification.

The second federal program was the construction of life saving stations along the coastline. Permanent crews were hired to save lives. Between Virginia and Cape Lookout twenty-five stations were built. On Hatteras Island were Chicamacomico (1874) and Little Kinnakeet (1874), both located north of the light station.

1870 Cape Hatteras Light Station

Over the period from 1867-1870, Congress appropriated \$167,000 for the construction of a new light station. Located 1,500 feet from the shore, the light was put into operation on December 16, 1870.

Boundaries and Station Layout. The 1870 light station was surveyed in 1893 by H. Bamber for the Office of the Lighthouse Board.

The survey showed the boundaries of the reservation enclosing a square area of approximately 40 acres. How the property holdings changed from forty-four acres to forty acres is not known.

Bamber's boundaries are incongruous with the 1854 map.

The new light was constructed 600 feet north of the 1803 tower and 370 feet southeast of the double keepers' dwelling. Both keepers' dwellings were oriented slightly east of south and a connecting walk led to the lighthouse. A natural freshwater pond surrounded the two houses on the north, west, and southwest.

The new lighthouse was built of brick with an octagonal pink granite base. It was 193 feet tall and had a focal plain at 191 feet. A first order flashing lens with pedestal was installed. In 1873 the Lighthouse Board approved the official designation of two black and two white spiraling bands to mark the Cape Hatteras Lighthouse by day. The tower was painted the same year.

Another dwelling was constructed in 1871 and assigned to the principal keeper and his family. The house was a two-story brick and wood frame structure. It was painted red until around 1933.

The old lighthouse was destroyed on February 16, 1881, after the new lighthouse was constructed. It was reported to be in danger of collapsing in the next heavy storm. What happened to the tower rubble is not known, although it is likely that the rubble washed away in a storm in 1980; however, the ruins of the base remained visible for one hundred years.

A fifteen-by-thirteen-foot brick oil house with a tin roof was built around 1892. It was located 65 feet north of the light tower. Prior to that time, oil was stored in the base of the lighthouse and in the wooden fuel shed. It is not known what happened to the 1803 oil vault.

In 1892, the double keepers' dwelling was expanded to make more room for the assistant keepers' families. The west facade was extended sixteen feet and a second chimney was added. The flanking kitchen was moved behind the dwelling near the northwest corner. The back porch was also enlarged and enclosed. By 1893 the site also contained a summer kitchen, three storage structures, a cistern, and double privy (fig. 6). All structures were painted white.

Sequence Number and Physical History Time Period

6 – Park Development Period, 1935-1942 C.E.

Physical History Narrative

The Outer Banks

Land Use. Free-ranging cattle were no longer permitted on the barrier islands by the end of the 1930s. The use was incompatible with the extensive re-vegetation project initiated by the Civilian Conservation Corp in 1935.

Commercial fishing and building trades remained the leading occupations through the 1950s. But improved roads impacted the ferry and fishing transport to the mainland. As a result many inhabitants turned to tourism and sport fishing for income.

Circulation. An improved infrastructure made traveling the length of the Outer Bank easier. After World War II, a hard-surfaced road was built from the north banks at Southern Shores to Nags Head. A second two-lane asphalt road (Highway 12) was also built from Oregon Inlet to Hatteras

Village by 1952. New bridges included the Croatan Sound (1953) and the Oregon Inlet bridges (1963).

Aids to Navigation. Congress abolished the Lighthouse Board in 1910 and replaced it with the Bureau of Lighthouses, under the Commerce Department. The number of lighthouses throughout the nation at that time had increased to 1,462. In 1915, the U. S. Coast Guard was created under the U. S. Department of the Treasury. Later, in 1939, Franklin Roosevelt returned the Bureau of Lighthouses to the Department of the Treasury, to be administered by the Coast Guard.

The New Deal. President Roosevelt's national "back to work" policies of the New Deal included the development of recreational facilities for the American people. Given the responsibility to design and develop state and national parks throughout the nation, the NPS worked closely with state agencies to carry out their task. In North Carolina, the Department of Conservation and Development helped coordinate the work of approximately 12,000 men in sixty-one CCC and WPA camps throughout the state.

Cape Hatteras State Park and the CCC. Cape Hatteras State Park, or Phipps Memorial State Park, was originally owned by the John Phipps and Henry Phipps families. The date of inception is not known, nor has information been located to indicate the type of facilities present. The state park included approximately 1,400 acres and surrounded the Cape Hatteras Light Station to the north, west, and south (fig. 8).

CCC and WPA workers were brought to the Outer Banks to protect the shore and revitalize the natural vegetation of the islands (Torres 1985, 153). A CCC camp, variously known as SP-6, NP-1, the "Buxton Camp" and the "Beach Camp," opened in September 1935 to build artificial dunes in the Cape Hatteras State Park. It was located one-half mile southwest of the lighthouse and housed 200 young men (MacNeill 1937, sec. M, 1).

Cape Hatteras National Seashore In 1936, the Department of Commerce ceded the forty-four-acre light station property to the National Park Service. The following year, the NPS undertook a

recreation study of the Outer Banks. The report inventoried regional recreational needs by analyzing existing and potential park and recreation areas (McClelland 1998, 339).

On August 17, 1937, Congress authorized legislation establishing the Cape Hatteras National Seashore, the nation's first national seashore. It specified a minimum of 10,000 acres "including the existing Cape Hatteras State Park." Park development policies emphasized recreational use and the avoidance of conflicts with the interests of wildlife. Fishing by village residents would be allowed within the park boundaries.

The park was re-designated Cape Hatteras National Seashore Recreational Area on June 29, 1940. The legislation specifically permitted bird hunting within the park boundaries. This sport was restricted to designated areas of the park.

CCC Revegetation Project. When the CCC left the Outer Banks in 1942, native grasses planted on the dunes totaled an area of 142 million square feet. Behind the dunes, 2.5 million tree seedlings and shrubs were planted.

At Cape Hatteras State Park, CCC workers installed four miles of brush fences. Native grasses planted on twenty-two acres of dunes took root and began collecting sand. Approximately 18,000 shrubs and trees, including yaupon, American beauty bush (*Callicarpa americana*), loblolly pine (*Pinus taeda*), redbay, live oak, and wax myrtle were planted on nearby sand flats (fig. 10) (Byrum 1936-37, n.p.).

Sequence Number and Physical History Time Period

7 – Mission 66, 1955-1966 C.E.

Physical History Narrative

Cape Hatteras National Seashore Recreation Area was renamed Cape Hatteras National Seashore in 1953. By that time the park had acquired approximately 28,000 acres. Administration headquarters and a park visitor center were established at Bodie Island.

The NPS Mission 66 initiative grew out of the service's obligation to meet the increasing demands for recreational activity in the nation's parks. It was a ten-year plan in preparation for the NPS's 50th anniversary in 1966. For Cape Hatteras National Seashore, five management priorities were established:

- 1) Control beach erosion above all improvements.
- 2) Contain dune breaches where over-wash had denuded areas of vegetation.
- 3) Rehabilitate the CCC dune system and maintain it perpetually.
- 4) Provide adequate roads, walkways, trails, and parking to overlooks, beaches, ponds, and forests.
- 5) Avoid heavy concentrations of people in any one area (Mission 66 for Cape Hatteras National Seashore Recreational Area. Unpublished NPS report, 1-7. Park Archives).

The park's 1966 Master Plan emphasized the protection of Cape Hatteras resources from development. Most of the plan focused on natural resources and the protection and rehabilitation of the artificial dunes. Proposed were the continuation of erosion studies and beach re-nourishment projects. The plan urged dune protection by restricting foot traffic and improving methods of dune stabilization. The continuation of grass nurseries as a source of dune vegetation was also suggested, as well as expanding them to include shrub and tree seedlings. In the document's land classification map, fifty acres of the park were classified historic, including the light station.

Sequence Number and Physical History Time Period

8 – 1984 General Management Plan, 1978-1989 C.E.

Physical History Narrative

By 1978, the NPS realized the futility of attempting to stabilize the shore. It moved to evaluate existing control measures and to make an "informed decision" that would protect the site's

cultural resources (Status Report, Seashore Management Strategy, Cape Hatteras National Seashore/North Carolina. (NPS, 1978), 21-22). Public concern grew stronger after a March 1980 storm that again threatened the lighthouse. The Secretary of the Interior called for the Corps of Engineers (COE) to develop a long-range plan to save the structure.

In 1982, the COE recommended encircling the lighthouse with a seawall and revetments and relocating the two keepers' quarters to safer ground. Over time, the report added, ocean waters would surround the lighthouse as the shoreline moved westward. Other alternatives considered were 1) relocation of the lighthouse, 2) installation of offshore breakwaters, and 3) construction of additional groins.

Management Objectives. Despite the COE's recommendation, the 1984 General Management Plan (1984 GMP) recommended the lighthouse's fate be determined in a separate decision process. GMP management objectives reiterated the park's commitment to protecting historic resources, but also realized the futility of fighting a moving shoreline. The GMP identified four objectives:

- 1) The future development of the lighthouse complex was to be dependent upon the permanent method of protection.
- 2) The park would be committed to identifying and preserving the cultural resources of the Outer Banks, particularly those relating man's adaptation to life at the ocean's edge.
- 3) The park would cooperate with the Chicamacomico Historical Association and other local and civic organizations to preserve the unique cultural traditions and historic structures of the Outer Banks.
- 4) Natural processes would be allowed to occur by halting future stabilization measures.

Three exceptions to the last objective were listed in the GMP - Highway 12, Ocracoke Village, and the Cape Hatteras Lighthouse. Protection of the tower would be guided by the chosen permanent method. The Coast Guard and NPS agreed to maintain the three existing groins along the nearby shore. Elsewhere, control measures would be based on shoreline processes, the threat to the resource, the significance of the resource, and alternative costs.

The GMP designated the light station complex a Historic Zone, which precluded any modern development in the site. This selection also committed the park to preserving the historic and archeological resources of the light station in perpetuity.

Sequence Number and Physical History Time Period

9 – 1989 Cape Hatteras Protection Alternatives/Design Concept Plan/Environmental Assessment, 1987-1999 C.E.

Physical History Narrative

In 1987, at the request of the NPS, the National Academy of Sciences (NAS) took on the task of determining the best alternative for long-term protection of the lighthouse. Alternatives considered were 1) the COE's recommendation of constructing a seawall with a revetment around the lighthouse, 2) rehabilitating the groin field only, 3) rehabilitating the groin field with a partial revetment, and 4) relocation.

Among the public policies addressed in the study were the National Historic Preservation Act of 1966, the Coastal Barriers Resources Act of 1982, the National Flood Insurance Act of 1968, the National Environmental Policy Act of 1969, and other policies concerning navigation protection, recreation and tourism, and public education. In 1988, the NAS concluded that moving the light station was the best alternative.

Shortly thereafter, the NPS published its 1989 Cape Hatteras Lighthouse Complex Protection Alternatives/Development Concept Plan/ Environmental Assessment (1989 DCP/EA). The document's preferred alternative was the relocation of the light station, with the recommendation that the move occur during the spring and summer months, when hurricanes and winter storms were less likely to occur. Development details followed the directives established in the 1984 GMP and are discussed below.

Site Design. Seeking to guarantee one hundred years of protection from the moving shoreline, the NPS proposed moving the complex 2,500 feet southwest of the original site and 1,500 feet from

the shoreline, the 1870 distance from the shore. A move corridor, linking the two sites, would be carved out of the existing shrubs and trees growing on the surrounding sand flats.

Although a period of significance was not determined in the plan, the intent to retain the historic integrity of the light station is clear. Based on consultation with the North Carolina State Historic Preservation Office, the structures would retain their original spatial relationships and orientation at the new site. They would be placed in a new eight-acre historic zone that was planted in lawn grasses. Any damage to the structures during the move would be repaired, and all structure exteriors would be restored according to existing historical reports. Historic circulation and fencing patterns among structures would also be reconstructed.

Visitor facilities and access were planned for the area immediately west of the new historic zone and buffered by existing vegetation. The facilities included a parking area, a comfort station, and a walkway to the site. The new site would be retained for bathers and surfers. Accommodations included parking, a comfort station, and showers. Additional details of the plan are found in the following sections.

National Register Eligibility Status. 36 CFR, Part 60.14(b), required the new setting and location to be reviewed by the Keeper of the National Register. In the case of damage to the structures during the move, repairs would be made and the North Carolina State Historic Preservation Officer would determine if they still met the eligibility requirements. If the structures were no longer eligible, the NPS would have the complex de-listed. If they remained eligible, the NPS would amend the National Register to reflect the move.

Rare and Endangered Species. The 1989 DCP/EA stated the Fish and Wildlife Service and the National Marine Fisheries Service had advised the NPS that the endangered and threatened species listed might frequent the lighthouse area as "visitors" but were not known to so significantly use the area as to be affected by the move.

Sequence Number and Physical History Time Period

10 – 1999 Relocation and Site Development, 1998-Present C.E.

Physical History Narrative

In 1998, the NPS selected International Chimney Corporation (ICC) of Buffalo, New York, to move the Cape Hatteras Light Station

The relocation project received national recognition. After the move, the National Society of Civil Engineers designated the Cape Hatteras Lighthouse a National Historic Civil Engineering Landmark in 1999. The following year ICC received the Outstanding Civil Engineering Achievement Award from the American Society of Civil Engineering, and the Grand Award from the American Consulting Engineers Council for excellence in engineering design.

ICC cleared and graded the new site in December 1998. Attention was given to providing proper drainage away from all structures. In 1999 they cleared the move road of all vegetation, and graded out a sandy corridor approximately 150 feet wide and 2,900 feet long.

Once all the structures were relocated, ICC removed the tracks and any debris that resulted as a byproduct of the move. The move corridor was back-filled and re-graded to resemble pre-move elevations (fig. 14).

Spatial relationships and orientation of the light station structures were carefully duplicated at the new site. The two keepers' quarters, oil house, and cisterns were moved in February and March 1999 before the lighthouse. All structures were moved successfully and without damage.

Following the successful relocation of the lighthouse, keepers' quarters, oil house, and cisterns, walks were reconstructed at the new site. A visitor contact station was constructed just outside of the new National Register/National Historic Landmark district boundary in 2000. During this time, a ticket booth, visitor parking, and visitor roads and walkways were constructed outside of the boundary. Between 2014 and 2015, a stone amphitheater was built to the south of the visitor contact station in the move corridor. In 2021, a repainting of the Double Keepers Quarters, based

on the HSR, went through compliance (PEPC 103633). As of 2022, a rehabilitation of the site is scheduled to begin (PEPC 57581) using a plan contracted through Denver Service Center with Quinn Evans. The rehabilitation would include the relocation of the stones from the Keepers of the Light amphitheater to new pathways; a removal of exterior and interior paint coatings on lighthouse and subsequent repointing; lantern cleaning and repair; replacement of vinyl fencing with more historically appropriate material; restoration of maintained grass with beach dune species; and compatible visitor amenities improvements (circulation, shade structure, interpretive wayfinding elements).

Chapter 7: Uses

Functions and Uses

Seq. No. (R)	Major Category (R)	Category (R)	Use/ Function (R, if exists)	Historic (Yes/No)	Current (Yes/No)	Primary (Yes/No)
01	Government	Public Works	Public Works	No	Yes	Yes
02	Transportation	Water-Related	Lighthouse	Yes	No	Yes

Public Access

Public Access

With Permission

Public Access Narrative

[enter text here]

Associated Ethnographic Groups

Seq. No. (R)	Ethnographic Group [Select from drop down pick list.]	Current (Yes/No)	Historic (Yes/No)
01	Atqasuk Village	No	Yes

Ethnographic Study Status:

No Survey Conducted

Ethnographic Narrative:

N/A

Chapter 8: Analysis & Evaluation

Analysis and Evaluation Summary

LANDSCAPE CHARACTERISTICS

The Cape Hatteras Lighthouse stands today as testimony of man's determination to maintain a light at Cape Hatteras in the midst of one of the nation's most dynamic environments. For 200 years shifting sands, flooding, overwash, and high winds have been met with the most advanced engineering of the time. Such response has led to the relocation of the complex to a new site.

Today, the lighthouse setting represents the later part of the historic period (1870-1936) when the Civilian Conservation Corps built dunes and planted them extensively with native vegetation. The existing shrub thickets and pine/oak woodland are a direct result of those protection methods. The 2003 CLR recommends a preservation/ rehabilitation strategy to return the lighthouse complex landscape to this later part of the site's period of significance as it provides a direct link to the site's environmental history and the many efforts to protect the Cape Hatteras Lighthouse.

Furthermore, this strategy allows for future endorsements of significant events that are associated with efforts to protect the tower. It links the historic period's earlier efforts to the 1999 move as part of the lighthouse's ongoing history.

The analysis section identifies and objectively analyzes a site's significant landscape characteristics. The process is the groundwork for establishing a period of significance and for identifying a framework against which all changes in the landscape are compared. It is an important step for sorting and integrating natural and cultural resource data in order to develop appropriate and relevant treatment strategies.

Little if any integrity remains of the old lighthouse site. All historic features, including structures, fences, and circulation patterns, have been either lost or removed. Likewise, the CCC camp south of the existing lighthouse location has lost its integrity. This camp was not particularly different

from other camps at the Outer Banks and therefore has no outstanding significance, other than its affiliation with the lighthouse station.

For these reasons, this chapter discusses only the integrity of the new site and its ability to convey its association with the past. In addition, features associated with the move are evaluated.

Resources associated with the Cape Hatteras Light Station Complex are the lighthouse, the oil house, the double keepers' quarters, the principal keeper's quarters, the cisterns, the move corridor, and historic views. Monuments include two stone markers. One commemorates the new site as a National Historic Landmark and the other, as a National Civil Engineering Landmark.

INTEGRITY

Location

The aspect of location concerns the place where the historic event occurred, or where the historic property was built. The new site approximates the original 1870 location from the shore, i.e., 1,500 feet. This reconstruction of distances reinforces integrity of location.

Design

Design involves the conscious decisions made to form or develop an historic property's space, structure, and/or style. The new site reflects elements of this aspect in the replication of spatial relationships among structures and the walkway pattern that connects the dwellings with the lighthouse. Although reconstructed, this element of integrity is present.

Setting

Setting refers to the character of a landscape and how it played a role in the historical event. It is the physical environment and its relationship to the period of history. The light station's setting is probably the most important aspect of the site's significance. It is the barrier islands' dynamic environment that has provoked the centuries-old protection measures for the lighthouse. The 1999 move event is simply the latest, most monumental, event in the history of the complex.

Today's lighthouse setting most closely reflects the later part of the period of significance, more specifically, the 1930s. First, it is found in the number of structures currently present. By the mid-1930s, the only outbuildings remaining were the privies and cisterns. By 1940, the cisterns were the sole survivors. These structures, along with the lighthouse and station dwellings, exist today.

Second, existing shrub thickets and pine/oak forest reflect the outcome of the CCC revegetation project. Such surroundings reinforce the integrity of setting by illustrating the CCC vision of protecting the shore with native vegetation that would slow erosion and lower wind damage and salt spray.

Restored spatial arrangements and period walkways among the station's four structures contribute to the site's historic setting. The area between structures has been cleared of woody vegetation and restores historic interior views.

Impacts to integrity can be found in the loss of vistas so prevalent throughout the historic period. CCC vegetation has obscured views to the sea and the surrounding landscape. From the top of the lighthouse one can enjoy a panoramic view of the old site, the move corridor, the new site, the shore, and the island's extensive cover of native vegetation.

Other impacts are found in the loss of historic fences, walkways, roads, and the freshwater pond. Also, non-contributing structures, such as the visitors parking area, above-ground drainfield, ticket booth, and comfort station intrude into the historic setting because of their proximity. Additionally, a stone amphitheater built around 2015 is located in the move corridor, also impacting the historic setting of the landscape.

Finally, the biggest impact to setting is the 1999 move corridor. It dominates the complex's setting, and frames a view from the tower to the old site. Although this feature is not part of the 1870-1936 landscape, it illustrates the continuing theme of protecting the Cape Hatteras Light by utilizing the most advanced technology available.

Feeling

A landscape with integrity of feeling can express the historic sense of a particular period of time. The new site contains contrasting elements that evoke a sense of the historic period and recent NPS development. The architecture of the historic lighthouse, oil house, and the two keepers quarters remind one of an earlier time. Reconstructed circulation patterns give meaning to spatial arrangements of the past. But the non-contributing park features (walks, parking area, structures) promote a feeling of newness.

A sense of history is somewhat affected, too, by the lack of vistas, prevalent during the entire historic period. Today, visitors see the shrub thickets and woodlands that have grown as a result of the CCC vegetation planted in the 1930s. The sense of confinement within the existing setting diminishes the site's integrity of feeling. Yet, it was the intent of the CCC to "protect" the shore by covering it with native vegetation and, therefore, eliminate long distance views.

Association

Integrity of association is the direct link between an important historic event and a cultural landscape. It is not only the expression of where an event took place but a combination of other aspects of integrity that defines the quality of that association.

Although the lack of open views weakens the site's association with the historic period, the existing dense vegetation is a reminder of the CCC work to protect the lighthouse at the end of the historic period. In essence, the new site represents a mature CCC landscape of the 1930s. Spatial relationships and orientation of historic structures contribute to the integrity of this period. Impacts to association are found in the proximity of new non-contributing structures and features.

Association with the light station's constant struggle with nature is strongly exhibited in the wide, sandy move corridor. This feature is unquestionably prominent and connects the new site to the former lighthouse location physically and thematically.

Summary

The integrity of the new site is most strongly associated with years ending the historic period. The impact of the CCC work at Cape Hatteras is still evident in the vegetation that surrounds the complex and the number of historic structures that remain.

Spatial relationships and orientation of buildings, circulation patterns, and the distance from the shore promote strong integrity of setting, feeling, and association with the historic period. In addition, the relocation ties directly to the site's theme of constant vigilance and response to protect and maintain the Cape Hatteras light.

The proximity of newly-developed non-contributing structures and the loss of extensive views diminish integrity of setting and feeling. But overall site integrity is very good in its representation of the later part of the historic period.

The move corridor has strong integrity of association with the 1999 relocation, and represents a possible new period of significance for the light station complex.

Landscape Characteristics and Features

Buildings and Structures

Buildings are elements constructed primarily for sheltering any form of human activity in a landscape, while structures are elements constructed for functional purposes other than sheltering human activity.

Historic Condition:

Several buildings and structures, including the original 1803 lighthouse, are no longer extant. These are detailed below.

1803 Lighthouse. The 1803 lighthouse was a ninety-foot brown sandstone and brick octagonal tower. It was built by Henry Dearborn, a former Congressman from Massachusetts. Built at a time of limited technology, the structure quickly proved inadequate.

First, the significance of recognizing a light tower by day, or a tower's "day mark," had never been considered. Thus, the tower was not painted and could not be discerned from the sea. At night, the twelve-foot lantern was visible, at best, for only eighteen miles. Finally, by 1834, the lantern was in such poor condition as to require replacement. The reflectors were changed in 1845, and again in 1848 to strengthen the beacon to 20 miles.

A letter, dated July 1851, from Lieutenant David D. Porter, U.S.N., commanding the mail steamer *Georgia* summarized the issue:

Hatteras light, the most important on our coast,...[is], without doubt, the worst light in the world. Cape Hatteras is the point made by all vessels going to the south, and also coming from that direction; the current of the Gulf stream runs so close to the outer point of the shoals that vessels double as close round the breakers as possible, to avoid its influence. The only guide they have is the light, to tell them when up [sic] with the shoals; but I have always had so little confidence in [Cape Hatteras Lighthouse] that I have been guided by the lead, without the use of which, in fact, no vessel should pass Hatteras. The first nine trips I made I never saw Hatteras light at all, though frequently passing in sight of the breakers and when I did see it I could not tell it from a steamer's light, excepting the steamer's lights are much brighter. It has improved much latterly, but is still a wretched light (Holland 1968, 53).

In 1854, Congress appropriated \$15,000 for refitting the light and raising the tower to 150 feet. The addition was made of brick and housed a first order fresnel lens. At the same time the tower was painted white for the first seventy feet and red for the remainder. The red and white day mark would improve sailors' ability to see the tower during the morning and afternoon hours.

The 1803 lighthouse was destroyed on February 16, 1881, after the new lighthouse was constructed. It was reported to be in danger of collapsing in the next heavy storm. What happened to the tower rubble is not known, although it most likely washed away in a storm in 1980; however, the ruins of the base remained visible for one hundred years. In 1974, the old lighthouse was perched on the edge of the beach. It eroded into the sea during the 1980 northeaster.

Oil Vault. Dearborn also built an oil vault near the tower. It was twenty by twelve feet and covered with a shed. Inside, each of the nine cedar cisterns contained one hundred gallons of whale oil (Holland 1968, 130). Within a year, the cisterns were considered too small and were replaced with larger ones capable of holding a total of 2000 gallons of oil (Holland 1968, 19). It is not known what happened to the 1803 oil vault.

Keeper's House. The first keeper's house was a two-story wood frame dwelling. It stood thirty-four by sixteen feet and was built in 1800. The location is unknown. Dearborn sunk a well "at a convenient Distance" from the house. Unfortunately, this property was not maintained and was in poor condition by 1827 (Holland 1968, 130). When additional land was purchased in 1828, a new keeper's dwelling was built (Holland 1968, 37). Details of the second structure and how long it stood are presently not known.

1870 Lighthouse Outbuildings and Temporary Structures. Outbuildings near the tower included a small coal bin (1884) and a small wooden fuel shed (ca.1888) that stored empty oil cans (Holland 1968, 99).

Temporary structures associated with construction of the light station were located near the tower. They included a seventy-five-by- eighteen-foot cement house, a sixteen-by-twenty-three-foot superintendent's quarters, a fifty-by-eighteen-foot men's quarters, and a twelve-by-fourteen-foot kitchen. All structures were removed to Bodie Island when work was completed at Cape Hatteras.

The CCC Camp. The SP-6 Beach Camp in 1937 consisted of approximately twenty structures one-half mile southwest of the Cape Hatteras Light Station. In addition to barracks were a garage, oil house, tool house, office building, water tank, workshop, incinerator, education building, latrine, and flagpole (Byrum 1936-37). Tennis courts were also built in the center of the camp. All structures were removed in 1942 when the camp was closed.

West of the camp, the CCC built five one-story frame houses. They were designed by the NPS and completed in 1939-40.

All structures of the camp were removed in 1942. Foundation locations were visible in 1952 and 1958 aerial photographs.

Post-Historic and Existing Conditions:

Only the primary outbuildings that once served the lighthouse are extant. Resources associated with the Cape Hatteras Light Station Complex are the lighthouse, the oil house, the double keepers' quarters, the principal keeper's quarters, the cisterns, a portion of the move corridor, and historic views. The LCS buildings within the light station complex contribute to the historic period of significance.

Cape Hatteras Lighthouse (LCS 000113). The new lighthouse was built of brick with an octagonal pink granite base. It was 193 feet tall and had a focal plain at 191 feet. A first order flashing lens with pedestal was installed. In 1873 the Lighthouse Board approved the official designation of two black and two white spiraling bands to mark the Cape Hatteras Lighthouse by day. The tower was painted the same year.

The Coast Guard abandoned the lighthouse in 1935, after building a new light one mile inland. When CCC efforts appeared to slow the shore erosion, the NPS granted the Coast Guard permission to use the 1870 tower as a lookout station in 1942. The Coast Guard occupied the lighthouse for three years and the permit was cancelled in 1947.

In 1948, the NPS granted the Coast Guard a second permit to use the tower as a lighthouse. Use of the oil house was also granted. A working light was moved back into the structure, and visitors were allowed inside as high as the balcony.

The lighthouse was still operated by the Coast Guard in 1986. No visible change to the structure was recorded. Following the 1989 Cape Hatteras Protection Alternatives/Design Concept Plan/Environmental Assessment, the 1870 light tower would retain its original foundation and height. After ensuring a sound and safe tower, the park would re-open the lighthouse to visitors.

The famous journey began on June 17, 1999. After stabilizing and raising the tower, ICC moved it along a track system where horizontal hydraulic jacks pushed the tower five feet at a time. Only one-third of the track system was laid. Once that distance was covered the track was re-assembled in front of the lighthouse and the process began again. Twenty-three days later, the Cape Hatteras Lighthouse, traveling 2,900 feet, reached its home on July 9, 1999. The lighthouse lantern was turned on in a ceremony on November 13, 1999, and the tower was opened to the public on May 26, 2000.

Today, the 208' high brick lighthouse rises from its rough-cut granite, octagonal base with a circumference of 160'. The base rises about 30' and has a molded cornice and quoins. Double wood doors on the north side have granite pediment and surround. The lighthouse has a tapering shaft.

Double Keepers' Quarters (LCS 007251). With additional land available, a larger dwelling was built in 1854. This two-story wooden structure was painted white and contained six rooms to house two, sometimes three, assistant keepers and their families. Two attached kitchens flanked the structure. A double privy, brick cistern, and other storage buildings that appear in later surveys were probably built at this time.

The 1854 survey illustrates the quarters north of the lighthouse and within the forty-acre tract purchased in 1828. Although not shown in the survey, a smokehouse may have been built along

with other necessary outbuildings (Holland 1968, 140; Holland does not cite his source of information).

In 1892, the double keepers' dwelling was expanded to make more room for the assistant keepers' families. The west facade was extended sixteen feet and a second chimney was added. The flanking kitchen was moved behind the dwelling near the northwest corner. The back porch was also enlarged and enclosed. By 1893 the site also contained a summer kitchen, three storage structures, a cistern, and double privy (fig. 6). All structures were painted white.

A 1916 drawing, commissioned by the Office of the Lighthouse Inspector, Fifth District, in Baltimore, Maryland, proposed removal of the three storage houses. It also recommended replacement of the double privy with a double storage structure and separate single privies (Plan of Cape Hatteras Light Station, November 24, 1916). The privies were constructed by 1919 and it appears that the storage structure was erected shortly afterwards. A second cistern on the west side of the house was also constructed by 1920. The single storage unit east of the privies remained.

The double keepers' quarters was occupied by CCC workers assigned to the state park in 1935. They most likely stayed there until the CCC camp barracks were constructed. The dwelling underwent repairs in 1937 and running water and electricity were installed. In addition, the entire exterior was repainted white. The double storage unit (ca. 1920) in the north yard was used to store construction materials.

A septic system was added around 1940 and the single-hole privies were removed. No outbuildings except the cisterns were extant by this time.

Beginning as early as 1947, the double keepers' quarters was operated under a concessions contract for public accommodation ("Report on Sanitary Facilities at the Cape Hatteras Lighthouse Area," April 23, 1947; and letter from Elbert Cox, Assoc. Regional Director, NPS, to Percy Williams, Avon, NC, 1948. As cited in General History. Unpublished report. Park

Archives). As early as 1955 the double keepers' quarters was adapted to house the park Museum of the Sea and a visitor center. The park installed a metal flagpole south of the structure, the first such structure on the site.

The park's Museum of the Sea and visitor center remained in the double keepers' quarters. The 1984 GMP proposed improvements to the dwelling that included areas for storage, sales, and public restrooms. The plan called for relocation of the structure if it was threatened by the eroding beach line.

According to the 1989 DCP/EA, the double keepers' quarters would remain a visitor contact facility with a restroom for park staff. Only the aboveground portions of the three cisterns would be relocated.

ICC moved the double keepers' quarters and principal keeper's quarters via rubber-tired dollies to the new site. Only the aboveground parts of the three cisterns were moved. They were carried on a flat-bed trailer and were positioned after both keepers' quarters were relocated.

Today, the double keepers' quarters stands as a 65' x 28', two-story, rectangular building with a side-gabled roof and brick pier foundation. The building is clad in weatherboard siding and has a symmetrical facade. The front (south) elevation has a one-story shed roof porch. A side-gabled, one-story addition is attached to the east end.

Oil House (LCS 007241). A fifteen-by-thirteen-foot brick oil house with a tin roof was built around 1892. It was located 65 feet north of the light tower. Prior to that time, oil was stored in the base of the lighthouse and in the wooden fuel shed.

The oil house was used as a visitor contact station in 1940. The oil house later contained the auxiliary generator for the light beacon.

Following the 1989 Cape Hatteras Protection Alternatives/Design Concept Plan/Environmental Assessment, the oil house would not be open to the public but would be utilized for U.S. Coast Guard or NPS needs.

The oil house was moved on a flat bed trailer but was not positioned until July after the lighthouse was moved.

At its current location, the 15' x 13' x 12.5'-high, one-story, front-gabled oil house has a door on the front (west) facade with a basket arch of soldier-laid brick overhead. The sides and rear of the structure each have one wood frame window. The window on the north elevation has louvered vent, and the others are boarded up.

Principal Keeper's Dwelling (LCS 000112). Another dwelling was constructed in 1871 and assigned to the principal keeper and his family. The house was a two-story brick and wood frame structure. It was painted red until around 1933.

A summer kitchen (also painted red), a brick cistern, and privy were also constructed. In 1892, two wooden frame storage buildings were added to the site. One was newly constructed, and the other, built in 1888, was moved from the tower area. Both were painted white and located in the north yard of the dwelling.

By 1916, one of the storehouses had been removed. The cistern, summer kitchen, privy, and one storehouse remained.

CCC workers stayed in the principal keeper's quarters briefly in 1935 until accommodations were built in the camp one-half mile away. In 1937 the dwelling underwent interior and exterior repairs. The house was painted white and running water and electricity were installed. In 1938, a septic system and disposal field were constructed.

Outbuildings were removed as they deteriorated. The summer kitchen, remaining storage building, and privy were gone by 1937. Two new structures (ca. 1940) appeared in the principal keeper's north yard—one near the northwest corner of the house and the other near the pond. A 1938 pump house, with a 1,500-gallon pressure tank to serve both dwellings, was probably housed in one of these structures. A "power house" mentioned in a 1938 plan could have occupied the other.

The principal keeper's quarters also accommodated visitors overnight from as early as 1947 under a concessions contract. It became a ranger station in 1953. From 1968 to 1980, it was used for VIP, or guest, accommodations (Franzen, HSR, Part I).

Only one of the two ca. 1940 outbuildings was extant by 1958. This structure, located at the end of the staff access road and north of the dwelling, may have been moved. It was used as a garage or maintenance building.

The principal keeper's quarters was used for VIP housing in 1980. The 1984 *GMP* proposed it become a "house museum." It, too, was slated for relocation if threatened.

The 1989 *DCP/EA* recommended the principal keeper's quarters become a house museum to be based on a historic furnishings plan. Only the part of the cistern above ground would be relocated to its historical location behind the dwelling.

ICC moved the double keepers' quarters and principal keeper's quarters via rubber-tired dollies to the new site. Only the aboveground parts of the three cisterns were moved. They were carried on a flatbed trailer and were positioned after both keepers' quarters were relocated.

Today, the principal keeper's quarters is a two-story, brick, cross-gabled building that faces south. Its hipped roof porch extends from the gable on the west end of front façade. The gable consists of a center door flanked by two windows and a paired window at the upper level over the porch roof. A shed-roofed porch fills the ell.

Cisterns. By 1940, the cisterns were the sole outbuildings surviving in the light station landscape. These structures, along with the lighthouse and station dwellings, exist today and contribute to the cultural landscape.

Fencing. The 1870 lighthouse was enclosed by a four-foot-high, octagonal, iron, picket fence. The fence was secured with a base of eight rectangular granite stones. Constructed to keep out free-ranging cattle and hogs, the fence remained in place until around 1920 when it was removed. The Bureau of Lighthouses constructed a new fence of white concrete posts and metal railing, approximately three to four feet high. The original granite stones formed the same octagonal base.

The principal keeper's wooden picket fence, constructed in 1870, was replaced in 1888. Although historical sources cite 400 feet of new fence being built, it appears that approximately 900 feet were needed to construct the white board fence that surrounded both dwellings in 1893 photographs (Holland 1968, 99. Four hundred feet would have surrounded either dwelling, but not both). The fence was approximately 110 by 270 feet, with a 110-foot segment dividing the two properties.

Period drawings indicate seven single gates, approximately four feet wide, built in the new fence: a north, east, and south gate at the principal keeper's quarters; a south gate and two north gates at the double keepers' quarters; and a shared gate between the two dwellings. By 1920, the storage unit in the principal keeper's northeast corner had been removed and a double gate, approximately eight feet wide, was added.

The wooden board fence eventually rotted and was replaced with a concrete post and wire fence. This occurred around 1920, possibly at the same time of the tower's new enclosure. Gates were not reconstructed, but double and single openings were left in the new fence where they had originally been located. Additions included a single opening south of the left entrance to the

double keepers' quarters, and a new double opening near it on the south side. The single gate between the two quarters was not rebuilt.

Finally, an additional fenced area of approximately one acre was indicated in an 1893 photograph south of the tower. The unpainted wooden board fence contained no animals at the time. This feature was removed by the 1930s. Other fenced areas were found north of the freshwater pond. A circular wooden-paling fence, approximately fifteen feet in diameter, was located on a very small island in the pond. On higher ground further north, three fenced, cultivated fields were sited.

In the 1950s, the fences surrounding the lighthouse and both keepers' quarters were removed. Remaining at the tower were the eight granite stones that formed the octagonal base.

The eight granite stones, part of the first lighthouse fence (ca. 1870), still encircled the tower in 1987. No fencing was proposed. However, the 1984 *GMP* recommended reconstruction of a 370-foot, four-foot-high wood fence of three rails around the south and east sides of the two keepers' dwellings. This fence was not built.

The eight granite blocks comprising the base of the original fence surrounding the lighthouse would also be moved according to the 1989 *DCP/EA* and the wrought iron fence restored. Fencing was also proposed between and surrounding the two keepers' houses. Type and materials were not specified.

Monuments. Monuments include two stone markers. One commemorates the new site as a National Historic Landmark and the other as a National Civil Engineering Landmark. These monuments were added after the relocation and are non-contributing to the cultural landscape.

New Construction. At the new site, the plan proposed new facilities for bathers that included a comfort station, a water fountain, and an external shower. A new thirty-five-by-forty-foot comfort station with wood siding and deck was built in 2000. It was located west of the new

parking area. A Visitor Center/Bookstore was also constructed around this time and was connected to the comfort station by the pavilion deck. A ticket booth and generator house, both small and wood-sided were additionally installed west of the comfort station and visitor center as well as two storage buildings. A stone amphitheater was constructed between 2014 and 2015 in the move corridor. While these new buildings and structures were constructed outside of the NHL boundary, they impact the historic setting of the light station cultural landscape, diminishing its integrity, and are therefore non-contributing to its significance.

Landscape Features:

Feature Name: Cape Hatteras Lighthouse

Feature Contribution: Contributing

Latitude: 35.252303681785975

Longitude: -75.52883692303614

CRIS-HS Resource name: Cape Hatteras Lighthouse

CRIS-HS Resource ID: 000113

FMSS Record Type: Location

FMSS Record Number: 28658

Is FMSS Record Exact Match?: Yes

Associated CRIS-AR Resource ID: [enter text here]

Feature Name: Double Keepers' Quarters

Feature Contribution: Contributing

Latitude: 35.25302967669098

Longitude: -75.5298419316085

CRIS-HS Resource name: Hatteras Light Station Double Keepers' Quarters

CRIS-HS Resource ID: 007251

FMSS Record Type: Location

FMSS Record Number: 28661

Is FMSS Record Exact Match?: Yes

Associated CRIS-AR Resource ID: [enter text here]

Feature Name: Oil House

Feature Contribution: Contributing

Latitude: 35.252538313872336

Longitude: -75.52879447813092

CRIS-HS Resource name: Hatteras Light Station Oil House

CRIS-HS Resource ID: 007241

FMSS Record Type: Location

FMSS Record Number: 28659

Is FMSS Record Exact Match?: Yes

Associated CRIS-AR Resource ID: [enter text here]

Feature Name: Principal Keeper's Dwelling

Feature Contribution: Contributing

Latitude: 35.25308613535637

Longitude: -75.5293036789506

CRIS-HS Resource name: Hatteras Light Station Principal Keeper's Quarters

CRIS-HS Resource ID: 000112

FMSS Record Type: Location

FMSS Record Number: 28662

Is FMSS Record Exact Match?: Yes

Associated CRIS-AR Resource ID: [enter text here]

Feature Name: Cisterns

Feature Contribution: Contributing

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: [enter text here]

FMSS Record Number: [enter text here]

Is FMSS Record Exact Match?: [enter selection here]

Associated CRIS-AR Resource ID: [enter text here]

Feature Name: Fencing

Feature Contribution: Contributing

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: Asset

FMSS Record Number: 1253158

Is FMSS Record Exact Match?: Yes

Associated CRIS-AR Resource ID: [enter text here]

Feature Name: Monuments

Feature Contribution: Non-contributing, compatible

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: [enter text here]

FMSS Record Number: [enter text here]

Is FMSS Record Exact Match?: [enter selection here]

Associated CRIS-AR Resource ID: [enter text here]

Feature Name: Visitor Center/Bookstore

Feature Contribution: Non-contributing, Compatible

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: Location

FMSS Record Number: 108679

Is FMSS Record Exact Match?: Yes

Associated CRIS-AR Resource ID: [enter text here]

Feature Name: Visitor Center Pavilion Deck

Feature Contribution: Non-contributing, Compatible

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: Location

FMSS Record Number: 108679

Is FMSS Record Exact Match?: Yes

Associated CRIS-AR Resource ID: [enter text here]

Feature Name: Visitor Center Comfort Station

Feature Contribution: Non-contributing, Compatible

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: Location

FMSS Record Number: 28664

Is FMSS Record Exact Match?: Yes

Associated CRIS-AR Resource ID: [enter text here]

Feature Name: Ticket Booth

Feature Contribution: Non-contributing, Compatible

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: Location

FMSS Record Number: 28672

Is FMSS Record Exact Match?: Yes

Associated CRIS-AR Resource ID: [enter text here]

Feature Name: Lighthouse Storage Shed 1

Feature Contribution: Non-contributing, Compatible

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: Location

FMSS Record Number: 28666

Is FMSS Record Exact Match?: Yes

Associated CRIS-AR Resource ID: [enter text here]

Feature Name: Lighthouse Storage Shed 2

Feature Contribution: Non-contributing, Compatible

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: Location

FMSS Record Number: 28668

Is FMSS Record Exact Match?: Yes

Associated CRIS-AR Resource ID: [enter text here]

Feature Name: Amphitheater

Feature Contribution: Non-contributing, Incompatible

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: [enter text here]

FMSS Record Number: [enter text here]

Is FMSS Record Exact Match?: [enter selection here]

Associated CRIS-AR Resource ID: [enter text here]



Fig 5. View of lighthouse (c. 1935)



Fig 6. Relocated 1870 Cape Hatteras Lighthouse and oil house, 2015



Fig. 7. View of Keeper's Quarters (2001)



Fig 8. View of Keepers' Quarters, 2015



Fig 9. Double Keepers' Quarters, 2015



Fig 10. Principal Keeper's Quarters, 2015



Fig 11. View of the Move Corridor (2001)



Fig 12. Reconstructed fencing around lighthouse, 2015



Fig 13. Monuments, 2015



Fig 14. Visitor Center, Comfort Station, and Visitor Center Pavilion, 2015



Fig 15. View of amphitheater in move corridor, 2015



Fig 16. Ticket booth, 2015

Circulation

Circulation refers to the spaces, features, and applied material finishes that constitute systems of movement in a landscape.

Historic Condition:

Roads. When the extant lighthouse was constructed in 1870, a dirt road, approximately ten feet wide, ran south from Buxton Woods and parallel to the beach. It passed the principal keeper's quarters on the east and continued south to the lighthouse.

The old lighthouse road was extended south in 1935 about one-half mile to the CCC camp. From there it continued west and then south to the point of Cape Hatteras. All roads leading to the light station were narrow sandy trails that were difficult to traverse.

A circular dirt road in the Light Station was built that allowed one to drive from the principal keeper's quarters to the double keepers' house and back around to the light tower. This was installed sometime between 1937 and 1945. A smaller access drive to the north or rear of the dwellings came across the filled area of the pond from the lighthouse road. It terminated near one of the outbuildings constructed in the 1940s.

The CCC maintained eight miles of dirt roads in the state park. Debris and overhanging branches were removed from the roads. In 1937 the CCC "improved" at least three miles of road leading to the camp. Utilizing local materials, the workers removed soil containing half-oxidized humus from the wet sand flats, mixed it with sand and placed it at a depth of nine inches in the roadbed. The mixture was raked smooth and then covered with one and one-half inch of sand. The work resulted in a firmer foundation that "greatly eliminated tremendous strain on trucks, and . . . offered valuable information in constructing permanent roads, cheaply built, and from native material" (Byrum 1936-1937, n.p.)

The camp road from the lighthouse split at the northeastern edge of the camp. One section ran east-west across the northern third of the camp while the other skirted the edge of the eastern

and southern boundary. These roads met on the west side of the camp and continued to the NPS cabins and to Cape Hatteras.

Aerial photos showed a grid formation of dirt roads within the camp. A broad avenue, part of the camp road, with a planted median ran through the northern section of camp.

Parking occurred informally at the light station in the 1930s and 1940s. No parking area was constructed at this time.

Within the light station, the circular dirt road was obliterated and planted with lawn grasses by 1952. A pull-off for parking cars was positioned at the base of the lighthouse.

A complete overhaul of circulation patterns resulted from Mission 66 planning to improve access to the lighthouse. Perhaps the catalyst was the new naval station construction adjacent to the NPS boundary north of the light that obliterated a section of the old lighthouse road. In response, the NPS proposed a two-lane, asphalt entrance road from Highway 12 at Buxton Woods, about one-half mile west of the old lighthouse road junction. The new road, known as the Park Access Road, traveled due south, then curved east toward the light station. Here, a four-way stop intersection provided choices to the visitor. A left turn traveled northeast to the light station. If one continued straight, the road name changed to Cape Point Road, which realigned with the old lighthouse trace. It traveled south and parallel to the CCC dunes for about two miles to Cape Point. If one turned left at the intersection the road ran west to the CCC cabins, then turned south towards Cape Point. These roads appeared in a 1956 drawing and were constructed by 1958. None of the routes was curbed.

The old lighthouse road remained visible during this period. The NPS allowed the road to gradually disappear under scattered successional grasses and forbs.

Also built was an uncurbed asphalt service road from the lighthouse visitor parking area. The two-lane road ran north beside the freshwater pond to the northwest side of the double keepers'

quarters, then turned east to the principal keeper's quarters where it terminated at a maintenance garage. This road replaced an earlier access from the lighthouse road across the north yard of the principal keeper's quarters.

Other changes affected the CCC camp road, which, at the time, was still discernible. A 1955 Development Plan proposed its obliteration and the road was left to be covered by natural successional processes.

Proposed in the 1966 *Master Plan*, two connecting parking areas, juxtaposed in a "butterfly" style design, were installed around 1958 directly south of the double keepers' quarters.

Accommodating approximately sixty vehicles, the asphalt parking area was striped but uncurbed. Staff parking was assigned in the north yard of both keepers' quarters. Here, an unstriped, uncurbed parking area near the maintenance garage was sited to accommodate approximately ten vehicles.

Two additional parking areas located outside the light station were installed along Cape Point Road. The bathers parking area (approximately fifty vehicles) was constructed about one-half mile south of the tower. Another was installed adjacent to a walking trail one-half mile southeast of the station (about thirty cars). These parking areas were striped but not curbed.

Cape Point Road was relocated inland after being washed out in the Lincoln Birthday storm of 1973. The old site staff road along the rear of the dwellings was widened by 1987 to accommodate parallel parking on both sides.

Additional parking was added to the light station complex in 1974. A rectangular parking area for approximately fifty vehicles adjoined the existing butterfly parking on the south and east sides. The 1984 *GMP* proposed retaining both parking areas for the two keepers' quarters and museum if the lighthouse remained in place. A separate parking area for bathers was recommended, although the location was not indicated. If the light was relocated, the plan

suggested utilizing the existing parking for bathers and constructing new parking near the new lighthouse site.

A third parking area of approximately 180 spaces was installed for bathers in 1988. It was located about 400 feet west of the existing lighthouse parking.

The 1989 DCP/EA proposed that the park access road from Highway 12 would end at a "T" intersection west of the old site parking area. A left turn would take visitors to the old station site. A right turn, to the west, would take visitors along Cape Point Road running on the north side of the new light station location. From there visitors could turn south on a new twenty-four-foot-wide lighthouse access road to the parking area of the new site. This road would have three-foot-wide shoulders and a bicycle path. Service access would be provided via a ten-foot-wide grasscrete lane leading from the parking area to the rear of the dwellings.

The 1989 DCP/EA recommended new parking for approximately one hundred visitor vehicles, ten staff vehicles, and service vehicles at the new site. Proposed approximately 400 feet west of the light tower, the parking would be paved and curbed. At the old site, the existing parking would be redesigned, paved, and uncurbed, to include 120 additional spaces.

At the original site, ICC removed all concrete walkways within the complex and corridor. The 1974 parking addition to the complex was removed because it stood in the corridor path. Part of the 1988 bathers parking area was also removed for the same reason.

At the old site, the 1984 GMP recommended removal of the service road that ran behind both keepers' houses and redesigning the existing parking to improve circulation.

Pedestrian Circulation. In 1871, a wooden boardwalk was laid from the double keepers' quarters to the principal keeper's south gate. From there it continued in a straight line to the oil house and light tower. At some point after 1871, it was replaced by a brick walk. A second change in materials occurred by 1893, when period photographs show a five-foot-wide concrete walk

replacing the brick. The walk expanded to seven feet in width once it entered the iron fence surrounding the lighthouse.

Concrete walks within the principal keeper's quarters were extant as early as 1893. Maintained with straight clean edges, the south door walkway was five-feet wide and lined with white stones. Another concrete walk, three or four feet wide, went directly from the east door to the single gate at the lighthouse road. A third walk, five feet wide, connected the east door with the cistern. A narrower, possibly three-foot-wide, concrete walk led to the privy in back (north) of the house.

Walks within the double keepers' quarters were also concrete by 1893. Around 1920, new three-foot-wide concrete walks were installed around the double keepers' dwelling. The addition followed the footprint of the house, beginning and ending at the southeast entrance. On the northwest corner of the house, a separate segment turned west toward the summer kitchen. On the north side, another walk led from the rear of the house directly north to the two privies (1916 Plat of Cape Hatteras Light Station). Finally, to the south, a three-foot-wide, concrete walk from the double keepers' quarters left entrance was extended to a single gate in the new concrete post and wire fence.

A wooden boardwalk was added, ca. 1950, from the lighthouse to the double keepers' quarters. The walk bypassed the principal keeper's quarters which, at the time, was used for ranger housing.

When the butterfly parking area was installed, ca. 1960, however, historic circulation patterns were removed and new ones introduced. The NPS removed the east and south walks of the principal keeper's quarters (ca. 1890), the east and west walks of the double keepers' quarters (ca. 1920), and the walk between the two structures (ca. 1870). Two six-foot-wide concrete walks were installed between the parking area and the double keepers' quarters, and from the double keepers' quarters to the lighthouse.

A three-foot-wide concrete walk from the lighthouse to the 1803 ruins provided visitors a view of the ocean and area surrounding the station. Continuing one-half mile south, the trail (possibly sand at this point) ran along the top of the dunes to the bathers parking area. Also built near the lighthouse was a five-foot-wide boardwalk over the dunes providing access to the beach.

The 1984 *General Management Plan* did not recommend the replacement of the connecting walk between both houses. The 1960s six-foot-wide concrete walkways from the lighthouse to the double keepers' quarters and from the lighthouse to the butterfly parking area were extant. A third walk, from the double keepers' quarters to the parking area, was added around 1988.

The 1984 *GMP* recognized the need to protect what remained of the artificial dune system along the shore. It recommended the use of boardwalks where appropriate to minimize erosion and the disturbance of wetlands. Boardwalks were installed within the light station around 1989. A four-foot-wide boardwalk, constructed next to the oil house, crossed over a nearby dune to give visitors access to the beach. Another boardwalk connected the parking area to the beach about 200 feet south of the tower.

The three-foot-wide concrete walk that led to the 1803 lighthouse ruins was washed away during the 1980 storm. However, two sandy paths from the parking area led to the beach about 400 feet south of the lighthouse by 1989.

Concrete sidewalks were proposed in the 1989 *DCP/EA* around the new parking area. From the edge of the parking area, a brick walk was proposed to lead visitors north to the historic zone. Once inside the zone, visitors could choose a brick walk west to the double keepers' dwelling or continue north to the lighthouse. A second brick walk would lead west from the lighthouse to the principal keeper's dwelling, and turn south to the double keepers' house.

At the old site, the 1990 circulation pattern would be restored, connecting the parking area to either the light tower or the double keepers' quarters. Concrete walks were proposed to line the exterior of the parking area. Existing (1989) beach access walks and trails would be retained.

Post-Historic and Existing Conditions:

The circulation patterns between light station buildings remains the same as before the move, but roads leading to the lighthouse have been rerouted several times. All walkways were reconstructed out of similar material in corresponding locations after the 1999 move.

Brick walkways in historic zone. The NPS reconstructed the historic walk that connected the two dwellings to the lighthouse. The new four-and-a-half-foot- wide, brick-on-sand walk was installed in 2000. At the same time, the NPS added a brick extension that led to the dwelling's left entrance. These walks are surrounded by grass pavers, which stabilize turf in high use areas. Restored period walkways among the station's four structures contribute to the site's historic setting.

Move Corridor. The biggest impact to setting is the 1999 move corridor. It dominates the complex's setting and frames a view from the tower to the old site. Although this feature is not part of the 1870-1936 landscape and only a portion of it is within the NHL boundary, it illustrates the continuing theme of protecting the Cape Hatteras Light by utilizing the most advanced technology available.

Roads. In 1999, access to the new light station site was constructed. Visitors arriving from Highway 12 on the Park Access Road came to an intersection about 400 feet west of the old site. A left turn (northeast) went to the old site; going straight (southeast) arrived at the bathers' parking area. Turning west on Cape Point Road led visitors to the new lighthouse site.

Because parking was located east (not west) of the complex, Cape Point Road was redesigned to lead directly to the new parking area. As one approached the comfort station, a gravel service road led west to the generator house. Visitors driving to the Cape Point campground, however, were directed to turn right approximately 200 feet before (north of) the complex to continue west on Cape Point Road. Roads are non-contributing to the cultural landscape but compatible.

Visitors Parking Area. In 2000, the NPS installed parking for 110 vehicles and ten buses on the east side of the new site. The area was paved and curbed with four parking islands to be planted with native vegetation. The location was changed to the east side most likely because the park wanted to avoid the archeological remains of the CCC camp for future study and interpretation. The parking area is non-contributing but compatible.

Walk from parking to historic zone. A ten-foot-wide concrete walk was constructed the same year to bring visitors west from the visitor parking to the historic zone. Additional five-foot-wide concrete walks were installed around the parking area. These walks are non-contributing but compatible.

The 2021 DSC/QE rehabilitation plan includes improvements to circulation that would be compatible with the historic landscape (PEPC 57581).

Landscape Features:

Feature Name: Brick walkways in historic zone

Feature Contribution: Contributing

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: Asset

FMSS Record Number: 1464641

Is FMSS Record Exact Match?: Yes

Associated CRIS-AR Resource ID: [enter text here]

Feature Name: Move Corridor

Feature Contribution: Non-contributing, Compatible

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: [enter text here]

FMSS Record Number: [enter text here]

Is FMSS Record Exact Match?: [enter selection here]

Associated CRIS-AR Resource ID: [enter text here]

Feature Name: Roads

Feature Contribution: Non-contributing, Compatible

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: [enter text here]

FMSS Record Number: [enter text here]

Is FMSS Record Exact Match?: [enter selection here]

Associated CRIS-AR Resource ID: [enter text here]

Feature Name: Visitor Parking Area

Feature Contribution: Non-contributing, Compatible

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: Location

FMSS Record Number: 28674

Is FMSS Record Exact Match?: Yes

Associated CRIS-AR Resource ID: [enter text here]

Feature Name: Walk from parking to historic zone

Feature Contribution: Non-contributing, Compatible

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: Asset

FMSS Record Number: 1331652

Is FMSS Record Exact Match?: Yes

Associated CRIS-AR Resource ID: [enter text here]



Fig 17. Aerial view of move corridor and other circulation features, 2015



Fig 18. Aerial view of move corridor and other circulation features, 2015



Fig 19. Reconstructed brick walkways, 2015



Fig 20. Concrete walk to historic zone, 2015

Cluster Arrangement

Cluster arrangement is the locations and patterns of buildings, structures, and associated features in the landscape.

Summary:

The Light Station historic district is a cluster of buildings focused near the base of the Cape Hatteras lighthouse. The close spatial relationship between the outbuildings has been reconstructed around the relocated lighthouse and surrounded by the natural landscape. While visitor facilities have been added to the site along with parking lots and roads, the original cluster of outbuildings remains the same. Only the major buildings (double keepers' quarters, principal keeper's quarters, oil house and lighthouse) still remain.

Spatial Organization

Spatial organization is the three-dimensional organization of physical forms and visual associations in a landscape, including the articulation of ground, vertical, and overhead planes that define and create spaces.

Historic Condition:

The 1870 light station was surveyed in 1893 by H. Bamber for the Office of the Lighthouse Board. The survey showed the boundaries of the reservation enclosing a square area of approximately 40 acres. How the property holdings changed from forty-four acres to forty acres is not known. Bamber's boundaries are incongruous with the 1854 map.

The new light was constructed 600 feet north of the 1803 tower and 370 feet southeast of the double keepers' dwelling. Both keepers' dwellings were oriented slightly east of south and a connecting walk led to the lighthouse. A natural freshwater pond surrounded the two houses on the north, west, and southwest.

Post-Historic and Existing Conditions:

Spatial relationships and orientation of the light station structures were carefully duplicated at the new site. The two keepers' quarters, oil house, and cisterns were moved in February and March 1999 before the lighthouse. All structures were moved successfully and without damage.

Spatial Arrangement among station's four structures. The Light Station historic district is a cluster of buildings focused near the base of the Cape Hatteras lighthouse. The close spatial

relationship between the outbuildings has been reconstructed around the relocated lighthouse and surrounded by the natural landscape. While visitor facilities have been added to the site along with parking lots and roads, the original cluster of outbuildings remains the same. Only the major buildings (double keepers' quarters, principal keeper's quarters, oil house and lighthouse) still remain. Restored spatial arrangements among the station's four structures and reconstructed walkways contributes to the site's historic setting.

Landscape Features:

Feature Name: Spatial Arrangement among station's four structures

Feature Contribution: Contributing

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: [enter text here]

FMSS Record Number: [enter text here]

Is FMSS Record Exact Match?: [enter selection here]

Associated CRIS-AR Resource ID: [enter text here]



Fig 21. Cape Hatteras Light Station aerial, June 2015

Topography

Topography is the three dimensional configuration of the landscape surface characterized by features (such as slope and articulation) and orientation (such as elevation and solar aspect).

Historic Condition:

1803 Lighthouse Location Topography. Eighteenth-century documentation reveals astonishing topographical changes taking place in the area of the Cape Hatteras Light Station. The 1854 survey depicted a long dune line east of the lighthouse that paralleled the beach. In view of Nicholson's sketch, it appears the lighthouse stood atop this line of dunes, with the flat barren beach to the east.

However, dramatic topographic and hydrologic changes took place near the lighthouse through the next twenty years. In 1852, a narrow linear pond stretching east-west lay at the western edge of the light station. Another north-south pond ran parallel to the lighthouse road approximately one-half mile to the north. This pond may have been associated with Cape Creek, the eastern boundary of the station property (formerly Farrow's) that drained north to the Pamlico Sound. By 1872, the north-south pond had moved east and enlarged, leaving a thin piece of land between it and the ocean. The linear east-west pond also appears to have enlarged.

At the same time, the shoreline was moving westward. As early as 1810 the sand hill at the base of the lighthouse was blowing away and its foundations were exposed. The problem persisted as late as 1850 when a board fence was erected around the base, four feet from the wall. The center was filled with brushwood. By 1872, beach erosion had claimed approximately 1,800 feet in front of the tower.

1870 Lighthouse Location Topography. A good description of the new 1870 tower location was found in the 1869 Annual Report of the Lighthouse Board:

The Site selected bear [sic] north by east 600 feet distant from the old tower, and is therefore as near it as well could be. The sailing directions will be very slightly affected if at all. It is on the general level of the beach, and therefore is secure from the destructive action of the wind, which has always so seriously threatened the foundations of the old tower, and to counteract which very heavy expense was incurred through many years. The site is also above the highest level of the sea and so far removed from the water line as to render it safe from encroachment of the sea" (History of Cape Hatteras Light Station, North Carolina 1954, n.p.).

Despite the optimism of this report, the shoreline erosion near the lighthouse was increasing. The 1893 Bamber survey indicated the water had moved to within approximately 1,300 feet of the new tower. In addition, photographs of the same period show a flat, open sandy beach south and southwest of the tower. In 1919, a low sand ridge, remnant of an old dune line, ran parallel with

the shore about 500 feet east of the light. Soon after, the ocean overcame the dunes and washed to within 300 feet of the lighthouse.

Federal efforts to protect the tower began in 1930 when 900 linear feet of interlocking sheetpile groins were installed along the beach by the Lighthouse Service. A few years later, storm- driven water moved within one hundred feet of the structure. In 1933, more steel groins were installed.

Other water features included the freshwater pond that wrapped around the two dwellings on the north and west sides. The water varied in depth but was generally less than two and one- half feet deep. The bottom was hard and occasionally the pond would dry up.

CCC efforts during the park development period from 1935 to 1942 to save the lighthouse resulted in the construction of a series of wooden revetments and sand fences to check erosion. Sand fences constructed both in front of and behind the lighthouse lowered wind velocity and allowed dunes to form. By 1937, the dunes had reached "considerable height." Shoreline erosion eased somewhat afterward, but the ocean was only 600 feet from the tower.

In total, 115 miles of Outer Banks beach was protected with 600 miles of log and brush fences. By 1940, artificial dunes extended the length of the Outer Banks from the Virginia line to Ocracoke Inlet.

Additional changes occurred in the early 1940s, when the NPS filled a section of the light station's freshwater pond. The shallow section directly behind the principal keeper's quarters was filled, apparently, to install a new drain field. Fill was also added to the low-lying area south of the dwellings to eliminate standing water.

The Mission 66 priority to repair the dune system illustrated the unstoppable changes in the shoreline. The dune system had started to fail. Although it had prevented over-wash during small storms, overall erosion was narrowing the beaches. A reduced area of "run up" for waves

increased turbulence and sand broken into finer particles would wash away. This created a steeper beach profile that magnified wave turbulence.

A 1958 aerial shows Hatteras Island beaches narrowing and dunes destroyed by wave over-wash and breaching. The Ash Wednesday Storm, in March 1962, caused considerable damage when the island itself was breached and a new inlet opened north of Buxton. In 1966, the NPS renourished the beach immediately north of the light station with 312,000 cubic yards of sand.

Shoreline Erosion. Storm surges and shoreline erosion highlighted the imminent threat facing the Cape Hatteras Lighthouse. Protective measures taken in 1970 included three concrete and steel sheet pile groins built by the Naval Station. The southernmost groin was one hundred feet south of the lighthouse. Despite this, beaches north of the complex continued to erode. Renourishment projects occurred in 1971 and 1972.

The Lincoln Birthday storm, a 1973 northeaster, damaged the shores near the light station. Over-wash occurred around houses one mile north. To the south, wave action destroyed a one-half-mile segment of the Cape Point Road. The bathers parking area and nearby dune system were also washed away.

A second northeaster in March 1980 moved the waters to within seventy feet of the tower and washed away the 1803 lighthouse ruins. For short-term protection, the southernmost groin was extended 150 feet landward and additional sandbag revetments were placed at the south base of the tower. The following year, in 1981, the groin was extended another 150 feet landward. This seemed to help temporarily as sand accumulated near the lighthouse; however, 1986 estimates of shoreline erosion expected losses of six to twelve feet per year. In 1988 the lighthouse stood only 180 feet from the water's edge (Swartz 1986).

Flooding. Inland, the mean freshwater table rose with the mean sea level. Landward drainage from the dunes to the pond also contributed to the rise. When shifting sands accumulated underneath the dwellings, moisture was brought to the first-floor structural system. These sands

were removed in 1986, but the problem persisted. Standing water near and under the dwellings also occurred many times in the 1980s, and resulted in damage to the brick pier foundation systems of the dwellings (Swartz 1986).

The once twenty-five-foot-high CCC dunes now stood at fifteen feet, and the light station's dune system was beginning to fail. Wave action undercut the dunes causing them to crumble into the sea. By 1987, no dunes existed immediately south of the tower.

Freshwater Pond. In the early 1970s, the pond was dredged and fill was used to redefine the edges. A deeper "kidney-shaped" water feature emerged with cattails and other vegetation limited to the smooth, shallow edges.

Post-Historic and Existing Conditions:

The topography of Cape Hatteras is constantly changing due to wind and water erosion. Eighteenth-century accounts noted the lighthouse was bordered on the east by dunes and the beach, with ponds located to the west and north. Later, the shoreline pattern began moving west, threatening the lighthouse. The current topography is similar to historic patterns, but dunes stabilized by the CCC protect the cultural landscape.

Rough grading of the new site was recommended to give the appearance of the original setting and to provide for proper drainage. ICC cleared and graded the new site in December 1998. Attention was given to providing proper drainage away from all structures. In 1999 they cleared the move road of all vegetation, and graded out a sandy corridor approximately 150 feet wide and 2,900 feet long.

Once all the structures were relocated, ICC removed the tracks and any debris that resulted as a byproduct of the move. The move corridor was back-filled and re-graded to resemble pre-move elevations.

Aboveground drainfield. An aboveground drainfield detracts from the lighthouse's historic setting and is a non-contributing structure.

Landscape Features:

Feature Name: Aboveground drainfield

Feature Contribution: Non-contributing, Compatible

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: [enter text here]

FMSS Record Number: [enter text here]

Is FMSS Record Exact Match?: [enter selection here]

Associated CRIS-AR Resource ID: [enter text here]

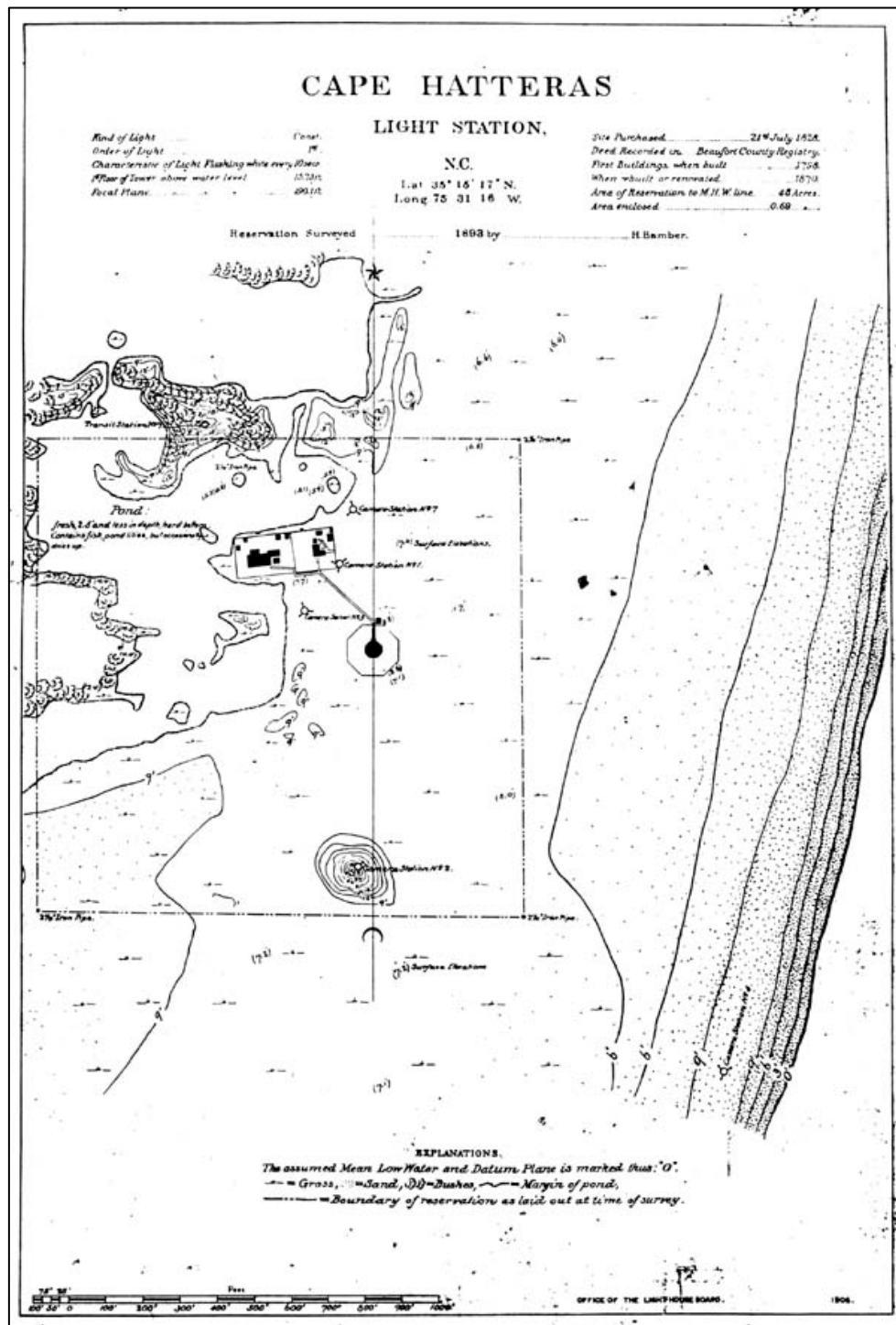


Fig 22. Shoreline survey (1893)

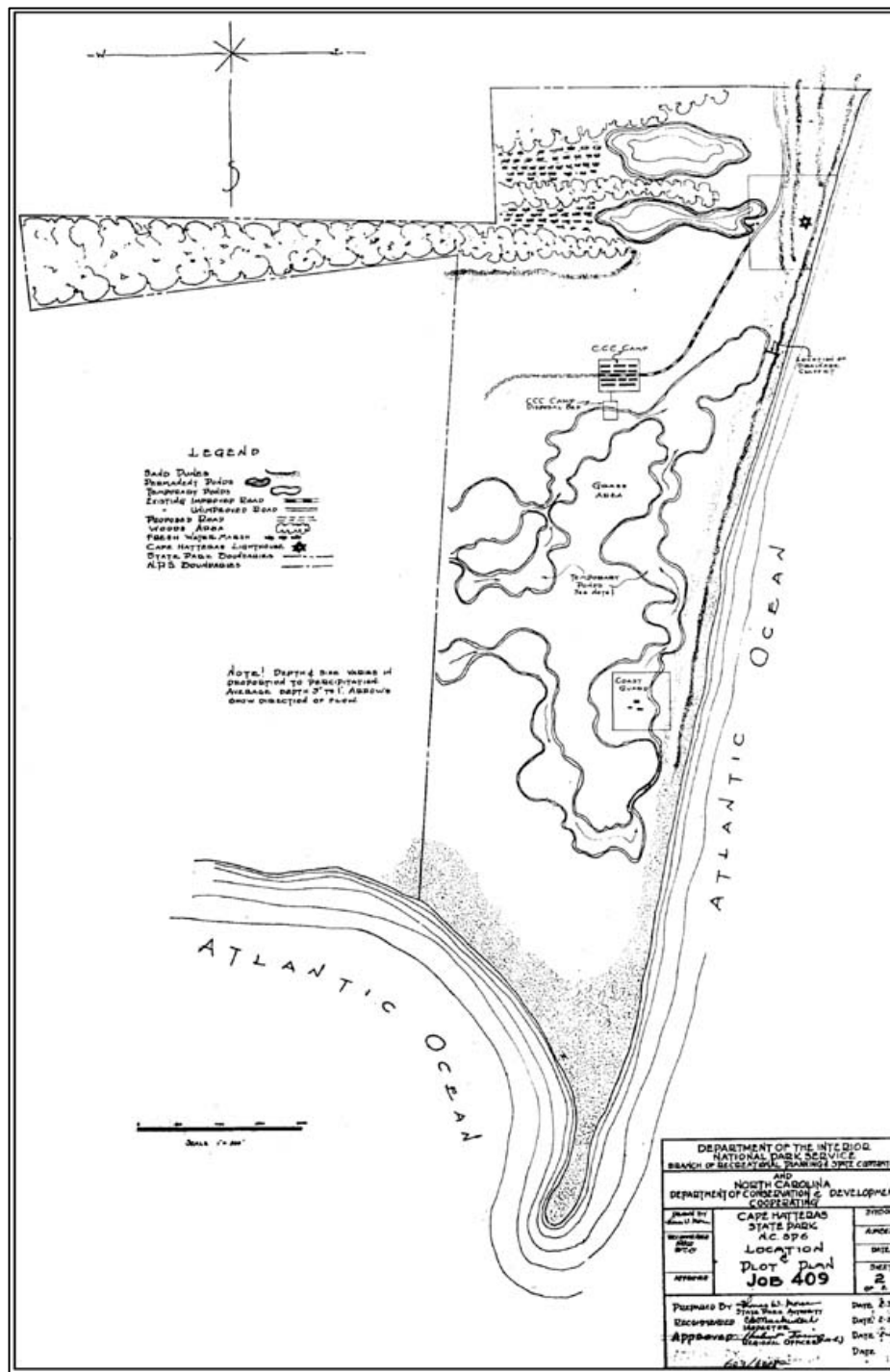


Fig 23. Location Plan (1937)



Fig 24. Sandbagging for erosion control (1968)

Vegetation

Vegetation includes deciduous and evergreen trees, shrubs, vines, groundcovers, and herbaceous plants and plant communities, whether indigenous or introduced in the landscape.

Historic Condition:

The 1803 light station area was covered in maritime forest (Holland 1968, 7). This vegetation disappeared over the course of the century, however, with much of the wood lost to salt spray or cut for shipbuilding. Vegetation losses exposed the landscape to more wind, shifting sand, and salt spray. By 1870, an open windy landscape of sand, beach grass, and shrub thickets existed.

Period photographs of the light station post-1870 showed a dramatically changed landscape since 1803. Remnants of the maritime forests could only be found in the sand ridges northwest of the station beyond the freshwater pond. Gone were the dunes and the vegetation that covered them.

The station keepers maintained a well-kept landscape of predominantly exotic grasses. The grounds were mowed regularly, and grasses were clipped around fence posts. None of the structures had foundation plantings.

Scattered forbs and taller grasses grew among small open patches of sand south of the carefully maintained station area. To the east, the beach was barren. Unidentified vegetation, possibly native grasses or cattails, grew along the edges of the freshwater pond.

In 1919, the vegetation was little changed. However, by 1933, wind and over-wash had destroyed the grass immediately south of the lighthouse and a barren sandy beach remained.

During the park development period (1935 to 1942), two series of brush fences ran parallel to the beach along each side of the lighthouse. Grasses planted on the dunes quickly established themselves. American beach grass and sea oats surrounded the tower, keeping the sand from blowing away.

Also during the park development period (1935 to 1942), the vegetation within the fenced area of both quarters consisted of exotic grasses that were mowed regularly. No foundation plantings existed. Beyond the fences, however, grew native grasses and shrubs.

CCC Revegetation Project. When the CCC left the Outer Banks in 1942, native grasses planted on the dunes totaled an area of 142 million square feet. Behind the dunes, 2.5 million tree seedlings and shrubs were planted.

At Cape Hatteras State Park, CCC workers installed four miles of brush fences. Native grasses planted on twenty-two acres of dunes took root and began collecting sand. Approximately 18,000

shrubs and trees, including yaupon, American beauty bush (*Callicarpa americana*), loblolly pine (*Pinus taeda*), redbay, live oak, and wax myrtle were planted on nearby sand flats (fig. 10) (Byrum 1936-37, n.p.).

CCC Nursery. CCC workers installed five nursery areas in the southern part of the camp. Raised beds were grouped and surrounded by picket fences. Seed collected from Buxton Woods was planted in defined beds, and later transplanted as seedlings to another part of the nursery (MacNeill 1937, 2). In 1937, beds totaled 19,014 square feet. The camp had 7,910 square feet of one-year-old seedlings, 4,740 square feet of willow cuttings, and 6,639 square feet of transplant beds. Trees and shrubs included red bay, wax myrtle, persimmon (*Diospyros virginiana*), live oak, loblolly pine, prickly ash (*Zanthoxylum americanum*), yaupon, American holly (*Ilex opaca*), willow (*Salix sp.*), and eastern red cedar. One-year-old seedlings were removed to "protective grasses" or to the transplant beds (Byrum 1936-37, n.p.).

Little is known about plantings in the area of the camp structures. Period photographs show grasses planted between buildings to hold shifting sands. Aerial photographs suggest more formal plantings along the main camp road median.

Freshwater Pond. Increased amounts of vegetation inside the pond indicated lowered water levels north of the double keepers' dwelling. The western part was still deep enough to restrict vegetation to the pond edges.

Vicinity. The artificial dunes created a barrier to salt spray, over-wash, and wind to areas west of the lighthouse. Shrubs and heavy grasses grew on the leeward sides of dunes. Beyond them in the sand flats, an open shrub thicket of wax myrtle, yaupon, spartina, and marsh elder began to grow. The landscape was still dotted with open sand in areas of higher elevation where moisture was a limiting factor. Fenced areas north of the pond were no longer in cultivation. Successional processes resumed as shrubs and grasses were mixed with trees.

Little change in vegetation occurred during the Mission 66 period. Dunes near the lighthouse remained covered with grasses planted by the CCC. Around the two keepers' quarters and parking area exotic lawn grasses were mowed during the summer. A healthy specimen of yucca (*Yucca sp.*) grew at the principal keeper's south foundation beside the porch in 1968. No other foundation plantings existed at that time.

The freshwater pond continued to vary its plant composition depending on the water level. Photographs from the 1950s and 1960s indicate a shallow period when large sections of the pond appear filled with vegetation.

At the light station, artificial dunes sustained conditions suitable for shrub thickets of yaupon, wax myrtle, and cedar. Species in sand flats and ridges of higher elevations covered 80 or 90 percent of the land area. Trees, such as pine and live oak, took root as the protection from salt spray and wind was reduced. Areas of the CCC camp slowly succumbed to shrubs, pines, and oaks.

The 1984 GMP recommended only indigenous plant material for landscaping within the park. It prohibited climbing or driving on dunes except in designated places. This attempt to protect the remaining vestiges of the artificial dune system was tempered by the knowledge that eventual loss would change the existing landscape.

The park continued to mow light station grasses in the summer growing season, and no foundation plantings were present. Vegetation cover of the surrounding area increased to the point where small trees, such as pine, live oak, and cedar, took root among the protective shrubs of wax myrtle, yaupon, and red bay.

Post-Historic and Existing Conditions:

The current vegetation patterns reflect the setting of Cape Hatteras during the CCC landscape restoration program. Although the historic light station landscape was once comprised of barren dunes and beaches, the CCC efforts protect and maintain the current light station.

At the new site, the NPS cleared an eight-acre area encompassing the structures and planted turf grass to resemble the 1870 site. Another area was cleared for the parking and service road. The surrounding "natural buffer" of pine and hardwood trees would be maintained, especially the area screening the parking area from the historic zone.

At the old site, lawn grasses were restored and maintained to assist in the interpretation of the former site's historic setting. The NPS would retain part of the moving route near the lighthouse for interpretation, but native vegetation would be restored to the rest of the corridor.

Lawn Grass. At the new site, lawn grass was planted to resemble the 1870 site. This lawn grass is contributing to the significance of the cultural landscape.

The 2021 DSC/QE rehabilitation plan calls for restoration of some maintained lawn to native dune vegetation.

Landscape Features:

Feature Name: Lawn Grass

Feature Contribution: Contributing

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: Asset

FMSS Record Number: 1141237

Is FMSS Record Exact Match?: Yes

Associated CRIS-AR Resource ID: [enter text here]



Fig 25. CCC grass planting in process circa 1935



Fig 26.. View of lighthouse and CCC grass planting c. 1950

Views and Vistas

A view is the expansive and/or panoramic prospect of a broad range of vision that may be naturally occurring or deliberately contrived. A vista is a controlled prospect of a discrete, linear range of vision, which is deliberately contrived.

Historic Condition:

In the early 1800s, the lighthouse was visible from the beach for miles. Interior views within the light station, however, were probably limited. Sight distances improved once trees were removed and existing vegetation died from salt and wind exposure.

Period photographs indicate that the former landscape of old dunes and maritime vegetation had disappeared by 1893. The flat, open, and treeless landscape provided a sweeping 270-degree view of the shore and the land south and west of the lighthouse. Dominating this view was the lighthouse itself towering over all other structures and vegetation. In 1933, this viewshed remained unchanged.

During the park development period (1935 to 1942), the artificial dunes blocked views of the ocean from the light station. Instead of a sweeping vista of the sea, one had long views of low-growing shrubs on the salt flats west and south of the tower. To the east, the line of dunes stretched north and south along the beach. One had to climb the dunes or the light tower in order to see the ocean.

By the 1960s, light station views were still affected by successional processes. Grasses and forbs tolerant of salt spray covered the dunes completely. No view of the ocean could be seen except from atop a dune or from the lighthouse. To the south and west, low shrubs covered the flat topography.

To the north, a modern intrusion was constructed in the viewshed. In the mid-1950s, the NPS issued a special use permit to the U.S. Navy for fifty acres north of the principal keeper's quarters. The facility the Navy constructed consisted of low concrete-block buildings, storage

tanks, and utility poles visible from anywhere in the light station. In 1981, the Navy vacated the premises and use of the property was transferred to the U.S. Coast Guard.

The new park access road proposed by the *1984 General Management Plan* provided a controlled view of the light tower as visitors left Highway 12. Initially, the growth of shrubs and trees impeded any sight of the tower and focused the viewer on the immediate foreground. A long sweeping curve then gave way to a distant view of the lighthouse rising above the surrounding vegetation. The lighthouse remained visible above the trees until arrival at the station and the entire station was revealed.

From the parking area, visitors saw a grassy, flat landscape punctuated by the black-and-white-banded tower. Nearby were the white structures of the two keepers' dwellings surrounded by a flat mowed lawn. The starkness was accentuated by the incessant wind, reminding visitors of the presence of powerful forces of nature.

A view from the lighthouse in 1987 revealed the southernmost groin holding the beach sands on the north side. To the south, however, erosion created a different picture. Here, the beach had moved inland approximately one hundred feet. Sand revetments encircled the southeast side of the tower.

To the north, residential development and small business establishments dotted the Buxton Wood area. South and west, the island was covered with dense vegetation of shrubs and young trees.

Post-Historic and Existing Conditions:

The view from the Cape Hatteras lighthouse has changed dramatically from the period of significance. Not only has the location been altered to the south, resulting in a new perspective, but the move corridor dominates the current vista.

View from the top of the lighthouse. From the top of the lighthouse one can enjoy a panoramic view of the old site, the move corridor, the new site, the shore, and the island's extensive cover of native vegetation. The view is still a primary component of the cultural landscape but does not have integrity and is therefore non-contributing.

Landscape Features:

Feature Name: View from the top of the lighthouse

Feature Contribution: Non-contributing, Compatible

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: [enter text here]

CRIS-HS Resource ID: [enter text here]

FMSS Record Type: [enter text here]

FMSS Record Number: [enter text here]

Is FMSS Record Exact Match?: [enter selection here]

Associated CRIS-AR Resource ID: [enter text here]

Small-Scale Features

Small-scale features are elements that provide detail and diversity for both functional needs and aesthetic concerns in the landscape.

Historic Condition:

Utility Lines. Utility lines on wooden posts were erected along the old lighthouse road in the early 1930s. Period photographs indicate the line ran on the shore side (east) of the road and continued south to Cape Point, via the CCC camp. A second row of utility lines on the west side of the old lighthouse road appeared in the late 1940s.

Post-Historic and Existing Conditions:

Granite foundation stones. At the old site, five of the 1870 granite foundation stones surrounding the base of the lighthouse were not moved, but were laid on top of the sand in a circular position to temporarily mark the tower's former location. The rest of the stones were

moved to a storage area. The remaining foundation stones were moved to create the amphitheatre near the lighthouse. Because they were moved, the foundation stones are no longer contributing to the cultural landscape.

Landscape Features:

Feature Name: Granite foundation stones
Feature Contribution: Non-contributing, compatible
Latitude: [enter text here]
Longitude: [enter text here]
CRIS-HS Resource name: [enter text here]
CRIS-HS Resource ID: [enter text here]
FMSS Record Type: Asset
FMSS Record Number: 142166
Is FMSS Record Exact Match?: Yes
Associated CRIS-AR Resource ID: [enter text here]

Archeological Sites

Archeological sites are the locations of ruins, traces, or deposited artifacts in the landscape and are evidenced by the presence of either surface or subsurface features. Only sites identified in approved National Register documentation are identified in this report.

Summary:

The 1989 DCP/EA recommended an archeological inventory and evaluation before any ground disturbance. The document recognized the CCC camp location west of the move site where archeological remains were visible.

Original Lighthouse Ruins. The ruins of the original, 1803 Cape Hatteras Lighthouse are now submerged because of shoreline erosion. They exist only as an underwater archeological site and are contributing to the cultural landscape as such.

Landscape Features:

Feature Name: Original Lighthouse Ruins

Feature Contribution: Contributing

Latitude: [enter text here]

Longitude: [enter text here]

CRIS-HS Resource name: Ruins of Original Cape Hatteras Lighthouse

CRIS-HS Resource ID: 000014

FMSS Record Type: Asset

FMSS Record Number: 1332255

Is FMSS Record Exact Match?: Yes

Associated CRIS-AR Resource ID: [enter text here]

Chapter 9: Condition Assessment

Assessment Interval:

10

Condition

Condition:

Fair

Condition Date:

07/29/2005

Primary Inspector Name:

N/A

Profession/Credentials:

N/A

Narrative:

N/A

Condition:

Fair

Condition Date:

09/12/2011

Primary Inspector Name:

N/A

Profession/Credentials:

N/A

Narrative:

Condition:

Fair

Condition Date:

9/14/2022

Primary Inspector Name:

N/A

Profession/Credentials:

N/A

Narrative:

The Cape Hatteras Light Station cultural landscape is currently in 'fair' condition, as the light station and its environs are susceptible to negative impacts, especially to the historic setting and character of the site. Shoreline erosion has had the most drastic impact on the light station cultural landscape, forcing the relocation of the light station buildings in 1999 further inland. Erosion continues to impact the landscape and will most likely be exacerbated in the future by climate change. Private development on Hatteras Island impacts the historic setting of the light station landscape. Additionally, high visitation has led to the development of park amenities at the site of the relocated light station including a visitor center and amphitheater, which has diminished the integrity of the historic setting of the site. As of 2021, a rehabilitation plan (etic 603/150692; PEPC 57581) was completed and plans from it will improve condition of the cultural landscape once implemented. It would be helpful to reassess condition and update site map once the plans have been fully implemented.

Impacts

Seq. No.	Type	Impact Type – Other	Internal Source?	External Source?	Narrative	Date Identified
xx			Yes/No	Yes/No	1000 Char.	mm/dd/yyyy
	Erosion		Yes	No	The topography of the site has been continuously impacted by wind and water erosion. Shoreline erosion forced the relocation of the light station in 1999. Although the light station was moved further inland, erosion is and will be a continuing issue. The light station is at a site that has constantly shifted historically, and that is exacerbated by issues of climate change.	07/29/2005
	Adjacent Lands		No	Yes	The adjacent land is privately owned and developed with hotels, private homes, and small businesses. Proximity of newly developed non-contributing buildings have the potential to affect the historic site, its setting, and its interpretation.	07/29/2005

	Visitation		Yes	No	As the tallest lighthouse in the United States, the Cape Hatteras Light Station receives a high number of visitors. This poses a threat to cultural resources as it creates a higher potential for damage.	07/29/2005
	Impending Development		Yes	No	Between 2014 and 2015, a stone amphitheater was constructed in the move corridor. The amphitheater, and especially its location, impact the setting of the cultural landscape. Lighthouse repairs are set to begin later in 2022, and that construction along with landscape improvements will most likely continue over the next couple of years. This development could impact the historic integrity of the cultural landscape.	07/29/2005

Chapter 10: Treatment

Stabilization Measures

Stabilization Measure Narrative (R)	Stabilization Cost (R)	Stabilization Cost Date (R)	Estimate Level (R)	Cost Estimator (R)	Cost Narrative

Approved Treatments

Type	Completed	Approved Treatment Doc.	Doc Date	Narrative	Approved Treatment Cost	Cost Date	Estimate Level	Estimator	Cost Narrative
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Preservation	No	Cultural Landscape Report	03-27-2003	The treatment recommendations in the Cultural Landscape Report include expanding the NHL boundary and the following management suggestions. The interpretation of the move and both (new and old) lighthouse sites should be reassessed. The native vegetation should be maintained by the natural processes of wind and water with lawn grasses planted within the fenced historic zone. The panoramic views should be protected, as well as the move corridor. The brick and concrete walks should also be restored around the light station buildings.					

Chapter 11: Bibliography and Supplemental Information

Bibliography

Seq. No.	Citation Author	Citation Title	Year	Publisher	Citation Location	Citation Type	Citation Number	IRMA Number	Citation URL
	Lisle, Lorraine Dix and Nolan, Robert	Coastal Erosion at Cape Hatteras: A Lighthouse in Danger	1983		SERO, CAHA	Both Graphic and Narrative			
	Steinholtz, R.T.	A Brief Architectural Study of the Outer Banks	1977		SERO, CAHA	Both Graphic and Narrative			
	Torres, Louis	Historic Resource Study of Cape Hatteras National Seashore	1985				013274		
	Vincent, Susan Hart	Cultural Landscape Report	2003			Both Graphic and Narrative			

Supplemental Information

Seq. No.	Supplemental Information Title	Supplemental Information Narrative
	1893 Survey of Station Boundaries and Shore Line	Map by H. Bamber with information detailing the lighthouse and site. The light station boundaries are identified as well as the location of buildings and the shoreline.
	Cape Hatteras Light Station Survey November 29, 1854	Four acre tract and expanded forty acre tract shown

Appendix

Landscape Features

[illegible]

	Roads	NC, compatibl e									
	Visitor parking area	NC, compatibl e						Locatio n	28674	Yes	
	Walk from parking to historic zone	NC, compatibl e						Asset	1331652	Yes	
	Buildings and Structures										
	Cape Hatteras Lighthouse	Contributi ng		35.252303 681785975	- 75.52883692 303614	Cape Hatteras Lighthouse	000113	Locatio n	28658	Yes	
	Double Keepers' Quarters	Contributi ng		35.253029 67669098	- 75.52984193 16085	Hatteras Light Station Double Keepers' Quarters	007251	Locatio n	28661	Yes	
	Oil House	Contributi ng		35.252538 313872336	- 75.52879447 813092	Hatteras Light Station Oil House	007241	Locatio n	28659	Yes	

	Principal Keeper's Dwelling	Contributing		35.253086 13535637	- 75.52930367 89506	Hatteras Light Station Principal Keeper's Quarters	000112	Location	28662	Yes	
	Cisterns	Contributing									
	Fencing	Contributing						Asset	1253158	Yes	
	Monuments	NC, compatible									
	Visitor Center/Bookstore	NC, compatible						Location	108679	Yes	
	Visitor Center Pavilion Deck	NC, compatible						Location	108679	Yes	
	Ticket Booth	NC, compatible						Location	28672	Yes	
	Lighthouse Storage Shed 1	NC, compatible						Location	28666	Yes	

	Lighthouse Storage Shed 2	NC, compatible						Location	28668	Yes	
	Amphitheater	NC, incompatible									
	Views and Vistas										
	View from the top of the lighthouse	Contributing									
	Small-Scale Features										
	Granite foundation stones	Contributing						Asset	142166	Yes	
	Archeological Sites										
	Original Lighthouse Ruins	Contributing				Ruins of Original Cape Hatteras Lighthouse	000014	Asset	1332255		