

National Park Service
U.S. Department of the Interior

Apostle Islands National Lakeshore
Wisconsin



Sand Island Light Station

Cultural Landscapes Inventory



July 2014

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The Cultural Landscapes Inventory Overview:

CLI General Information

The Cultural Landscapes Inventory (CLI) is a database containing information on the historically significant landscapes within the National Park System. This evaluated inventory identifies and documents each landscape’s location, size, physical development, condition, landscape characteristics as character-defining features, as well as other valuable information useful to park management. Cultural landscapes become approved inventory records when all required data fields are entered, the park superintendent concurs with the information, and the landscape is determined eligible for the National Register of Historic Places through a consultation process or is otherwise managed as a cultural resource through a public planning process.

The CLI, like the List of Classified Structures (LCS), assists the National Park Service (NPS) in its efforts to fulfill the identification and management requirements associated with Section 110(a) of the National Historic Preservation Act, National Park Service Management Policies (2001), and Director’s Order #28: Cultural Resource Management. Since launching the CLI nationwide, the NPS, in response to the Government Performance and Results Act (GPRA), is required to report information that responds to NPS strategic plan accomplishments. Two goals are associated with the CLI: 1) increasing the number of certified cultural landscapes (1b2B) servicewide; and 2) bringing certified cultural landscapes into good condition (1a7). The CLI is maintained by the Park Historic Structures and Cultural Landscapes Program, WASO, and is the official source of cultural landscape information servicewide.

Implementation of the CLI is coordinated and approved at the regional level. Each region annually updates a strategic plan that prioritizes work based on a variety of park and regional needs that include planning and construction projects or associated compliance requirements that lack cultural landscape documentation. When the inventory unit record is complete and concurrence with the findings is obtained from the superintendent and the State Historic Preservation Office, the regional CLI coordinator certifies the record and transmits it to the national CLI Coordinator for approval. Only records approved by the national CLI coordinator are included in the CLI for official reporting purposes.

Relationship between the CLI and a Cultural Landscape Report (CLR)

The CLI and the CLR are related efforts in the sense that both document the history, significance, and integrity of park cultural landscapes. However, the scope of the CLI is limited by the need to achieve concurrence with the park superintendent, and resolve eligibility questions when a National Register nomination does not exist, or when an existing nomination inadequately addresses the eligibility of landscape characteristics. Ideally, a park’s CLI work (which many include multiple inventory units) precedes a CLR because the baseline information in the CLI not only assists with priority setting when more than one CLR is needed it also assists with determining more accurate scopes of work for the CLR effort.

The CLR is the primary treatment document for significant park landscapes. It therefore requires a more in depth level of research and documentation, both to evaluate the historic and the existing condition of the landscape and to recommend a preservation treatment strategy that meets the Secretary of Interior’s Standards for the treatment of historic properties.

The scope of work for a CLR, when the CLI has not been done, should include production of the CLI record. Depending on its age and scope, existing CLR’s are considered the primary source for the history, statement of significance, and descriptions of contributing resources that are necessary to complete a CLI record.

Chapter 1: Inventory Unit Summary

Inventory Unit Description

The Sand Island Light Station landscape is one of six light stations in Apostle Islands National Lakeshore located in Bayfield County, Wisconsin. The light station occupies about four acres at the northeast tip of Sand Island which is 2,949 acres in size and is situated on the western edge of the lakeshore. The cultural landscape is a collection of features that remain from its development as a light station over the last one hundred and thirty years. The light station consists of a sandstone keeper’s dwelling with attached tower, a brick privy, and a brick oil house.

The Sand Island Light Station was included in a National Register of Historic Places nomination of the Apostle Islands Lighthouses listed in the National Register on March 8, 1977. The lighthouses were listed with state level of significance in the areas of transportation and commerce and varying periods of significance spanning from 1852 to 1929. The nomination emphasizes the significance of the light stations under National Register Criterion A for their contributions to the understanding of the broad patterns of history related to navigation, shipping, and commerce both on Lake Superior and in the nation.

Overall, the Sand Island Light Station landscape retains integrity of location, design, setting, materials, workmanship, feeling, and association. Despite minor losses, the buildings and structures at the station generally retain a high degree of integrity and are integral components of the cultural landscape. Today, the island’s land use is as Apostle Islands National Lakeshore operated by the National Park Service. The island continues to serve as an aid to navigation with an automated light tower and radio beacon maintained by the United States Coast Guard (USCG).

Property Level and CLI Numbers

Inventory Unit Name:	Sand Island Light Station
Property Level:	Landscape
CLI Identification Number:	500268
Parent Landscape:	Sand Island Light Station

Park Information

Park Name and Alpha Code:	Apostle Islands National Lakeshore- APIS
Park Organization Code:	6140
Park Administrative Unit:	Apostle Islands National Lakeshore

CLI Hierarchy Description

The Sand Island Light Station is one of twenty-three individual potential cultural landscapes at Apostle Islands National Lakeshore included in the Cultural Landscapes Inventory as of November 2005. The site is listed on the National Register of Historic Places under Criterion A for its association with maritime heritage and the economic development of the upper Great Lakes.

Chapter 2: Concurrence Status

Inventory Status: Complete

Completion Status Explanatory Narrative

Initial research was conducted by seasonals Kathleen Fitzgerald and Richard Radford in FY99 to determine the number of potential landscapes for the park. Former Cultural Landscapes Program Leader Sherda Williams and Historical Landscape Architect Marla McEnaney reviewed the landscape hierarchy presented in the CLI. Architectural Historian Nancy Mannikko visited Sand Island in FY04. Data entry based on existing documentation and fieldwork was completed in FY06. Landscape Historian Alesha Hauser completed the FY11 update and added information to the record based upon the recently completed Cultural Landscape Report.

Concurrence Status:

Park Superintendent Concurrence:	7/21/2006
National Register Concurrence:	Listed to the NRHP- 3/8/1977

National Register Concurrence Narrative:

On September 26, 2006, the Wisconsin State Historic Preservation Office concurred that the Sand Island Light Station is a cultural landscape eligible for listing on the National Register of Historic Places. The light station is a historic site that is listed on the National Register under Criterion A for its association with the maritime heritage of the upper Great Lakes

Site Visit Conducted:	7/7/2011
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Chapter 3: Geographic Information & Location Map

State & County:

State:	Wisconsin
County:	Bayfield

Size (Acres): 3.60

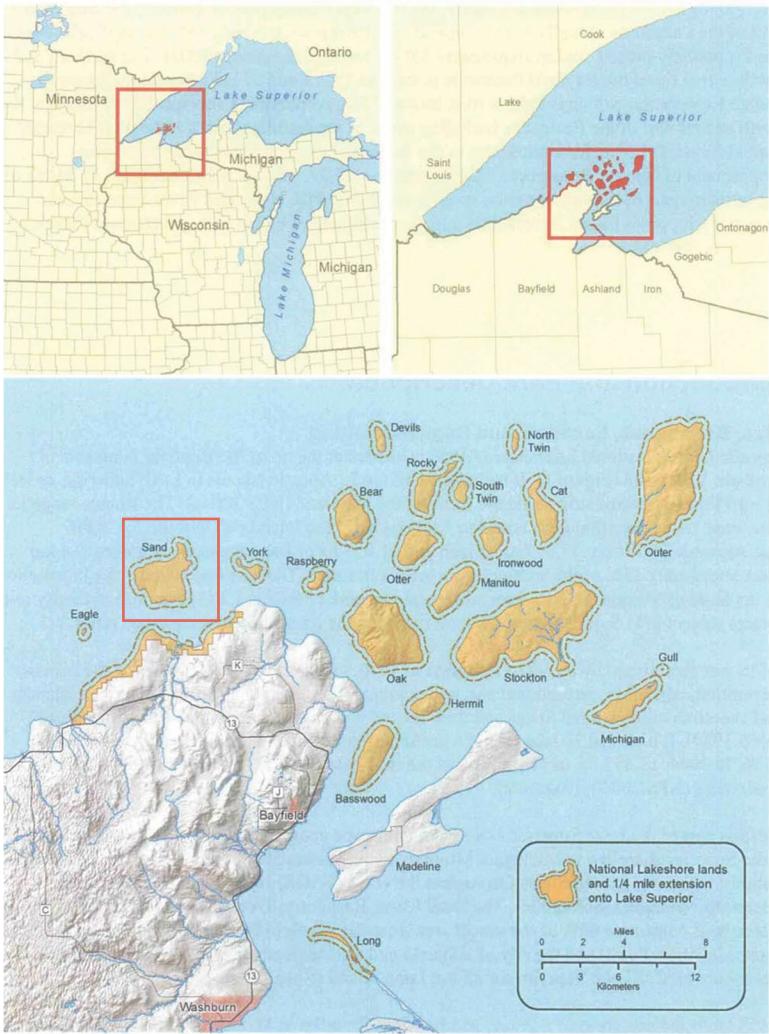
Boundary Description:

The boundary is essentially a triangle formed by proceeding south from the northeast tip of the island for 400 feet and then drawing a line across the tip from east to west. This encompasses the historic light station grounds.

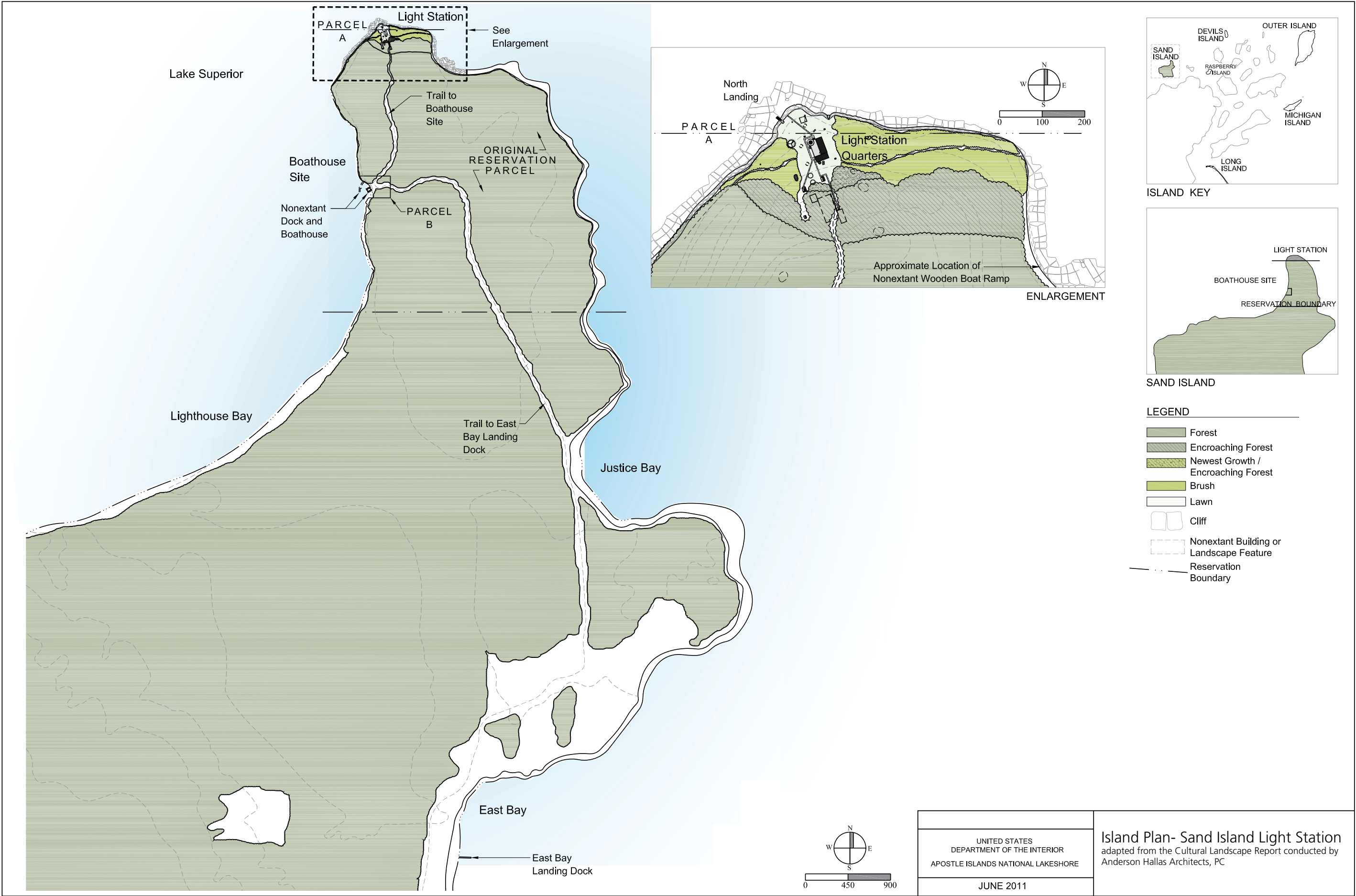
Boundary UTM's

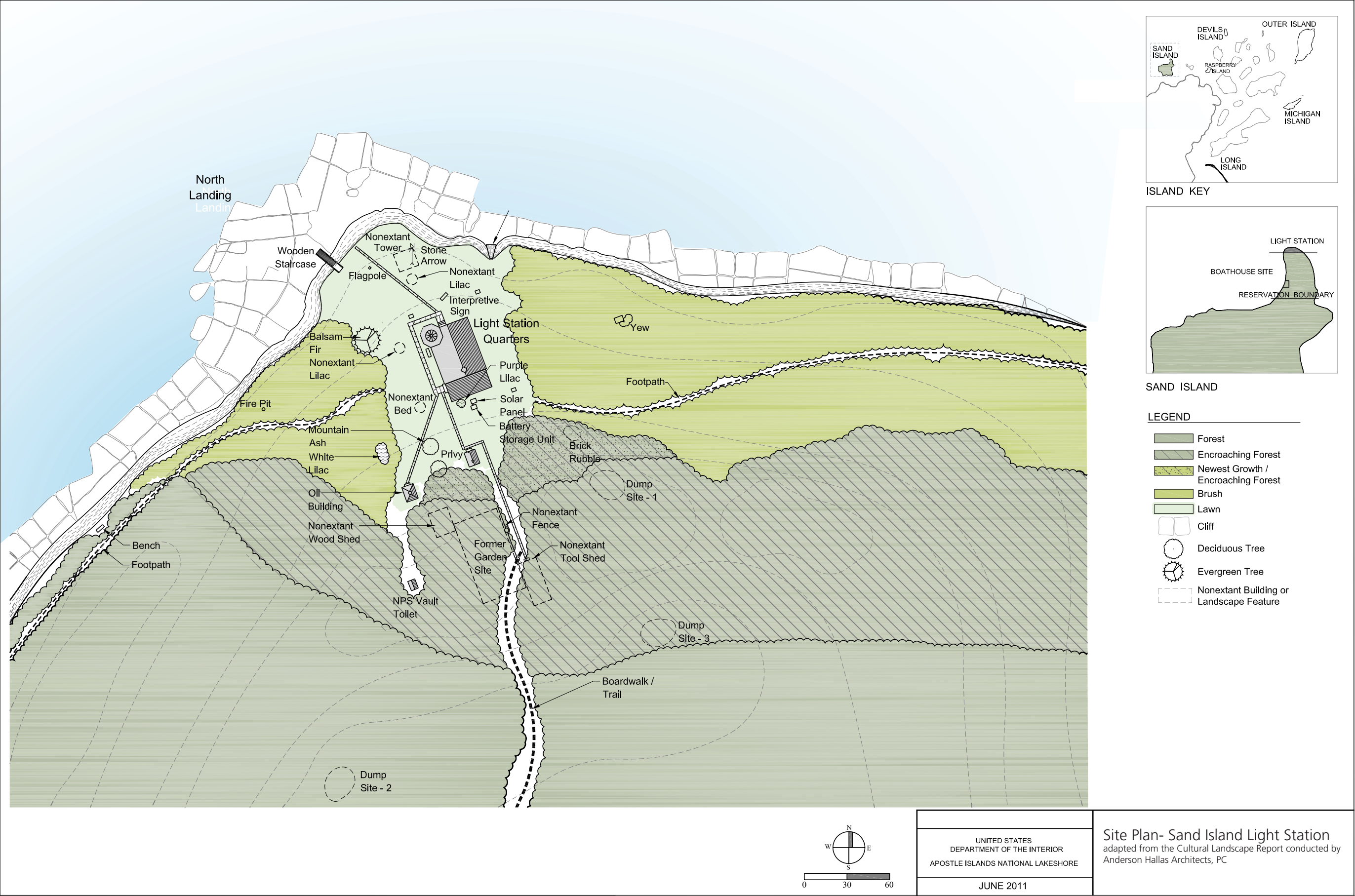
Source:	GPS- Uncorrected
Point Type:	Area
Datum:	WGS84

Map Point	UTM	Easting	Northing	Long/Lat
1	15	656767	5207615	-90.937797, 47.002488
2	15	656670	5207440	-90.939131, 47.001941
3	15	656949	5207561	-90.935416, 47.002962



Location of Apostle Islands National Lakeshore in the upper Great Lakes region of the United States, indicating the location of Sand Island on the lower image. (Kraft et al. 2007, 2).





Physiographic Context: Regional Context

Apostle Islands National Lakeshore is located in extreme northern Wisconsin at the western end of Lake Superior. The lakeshore covers 42,160 acres of land in Ashland and Bayfield counties, including twenty-one of the twenty-two Apostle Islands. The islands range in size from only a few acres in the case of Gull Island to over 10,000 acres on Stockton. Heights of the islands above lake level range from as low as 10 feet on Long Island to a high of 480 feet on Oak.

Repeated periods of glaciation during the last Ice Age resulted in deposits of glacial till with a high clay content covering most of the islands. The majority of the islands are comparatively flat with a sandstone bedrock lying close to the surface. As a result, the islands in general have poor drainage and swampy areas are common. The shorelines for the majority of the islands are characterized by either sandstone cliffs or high clay bluffs. Natural harbors are uncommon, and man-made docks are frequently swept away by wave action or the movement of ice during the winter.

In addition to twenty-one islands, Apostle Islands National Lakeshore includes a 12-mile long strip of land varying in width from one-quarter to one-half mile along the Lake Superior shoreline from just south of Saxine Creek near Cornucopia to northeast of Little Sand Bay at the tip of the Bayfield Peninsula. Shoreline conditions are similar to the islands with much of the coast being inaccessible due to high sandstone cliffs and imposing clay bluffs.

Forest types on the islands include both boreal forest and northern hardwood hemlock. White pine and red pine both highly desirable species for nineteenth century lumbering activities, are found throughout the islands. Pockets of old growth trees remain, including several hundred acres of hemlock forest on Outer Island, although most existing forest cover consists of second, third, or even fourth growth timber. With the possible exceptions of North Twin, Gull, and Eagle Islands, extensive and repeated forest harvesting has occurred on all the islands within the national lakeshore.

Political Context: Regional Context

The Sand Island Light Station is located within the boundaries of the Town of Russell, Bayfield County, Wisconsin. The Town of Russell is part of the 25th District for the Wisconsin State Senate, the 74th District for the Wisconsin State Legislature, and the Wisconsin 7th District for the United States Congress.

Chapter 4: Management Information

General Management Information

Management Category: Should be Preserved and Maintained

Agreements and Legal Interest

Management Agreement:
Type of Agreement: Unknown

NPS Legal Interest:
Type of Interest: Fee Simple

Public Access

Type of Access: Unrestricted

Explanatory Narrative:

Public access to the grounds of the light station is unrestricted. The lighthouse and keeper’s dwelling are open seasonally for tours by visitors with specific hours dependent on availability of resource education staff or volunteers.

Visitor accessibility to the light station, including its buildings and structures, is limited due to the topography of the site and limited ABAAG compliant improvements. Major barriers to universal accessibility include rocky cliffs at the boat landings near the Light Station, lack of an accessible route from the East Bay area, steps leading into and through buildings and structures, and the narrow width of existing site walks.

Adjacent Lands Information

Do Adjacent Lands Contribute? Yes

Adjacent Lands Description:

To the south of the Light Station was a boathouse area that formerly contained a boathouse, landing crib, and boat dock. These features are non-extant. A footpath connects the non-extant boathouse site, a former access point, to the Light Station Quarters. The site of the harbor is important to the history and cultural landscape of the Sand Island Light Station.

FMSS Location Numbers

25154	Sand Island Light Station and Keeper’s Quarters
36466	Sand Island Light Station Oil House
25159	Sand Island Light Station Privy

Chapter 5: National Register Information

Existing National Register Status

National Register Landscape Documentation:

Entered- Inadequately Documented

National Register Explanatory Narrative:

All of the light stations in Apostle Islands National Lakeshore are listed on the National Register of Historic Places. The five stations on Devils, Michigan, Outer, Raspberry and Sand Islands were nominated as one 33.8 acre unit (but not as a district) although they are on individual islands. They were listed on March 8, 1977 with state level of significance in the areas of transportation and commerce, and varying periods of significance spanning from 1852 to 1929.

Long Island was not a part of the National Lakeshore until 1986, so it was not included in the 1977 nomination. In 1979, the United States Coast Guard prepared a nomination entitled “Coast Guard Lighthouses and Light Stations on the Great Lakes”, including the Long Island station among a large collection of stations. This nomination was approved and placed on the National Register on August 4, 1983. The listed period of significance was 1832-1919.

Both the 1977 and the 1983 nomination forms emphasize the significance of the light stations under National Register Criterion A for their contributions to our understanding of the broad patterns of our history related to navigation, shipping and commerce both on Lake Superior and in the nation. The 1983 nomination also addresses the significance of the stations under Criterion C as examples of the trends and transitions in lighthouses related to architecture, operations and technologies between 1855 and 1929. The 1977 nomination notes the stations have excellent integrity, particularly in comparison to other surviving historic light stations in the area.

The 1977 National Register nomination form indicates that all of the structures and buildings at each light station are “considered significant,” except for certain buildings at Michigan and Devils Islands. Additional information has been gathered in the 32 years since the nomination was prepared. A related National Register of Historic Places Multiple Property Documentation Form entitled “Light Stations of the United States” was completed and approved in 2002. This comprehensive summary of the history of lighthouses in the United States includes discussions of administrative history, architecture and engineering, evolution of lighthouse optics and technology, and significant associated persons. The document includes extensive information that was not available to the 1977 and 1983 nominations.

The new information has been incorporated into the reconsideration of the significance of the contributing features and structures for the Cultural Landscape Report and is discussed in section 1.1.3 General Contributing Features and Structures.

A draft nomination for a National Historic Landmark District encompassing all of the Apostle Island light stations has been developed and is on file at the offices of Apostle Island National Lakeshore. The draft has received a preliminary review by the NPS and requires amendments.

National Register Eligibility

National Register Concurrence:	3/8/1977
Contributing/Individual:	Individual
National Register Classification:	Site
Significance Level:	State
Significance Criteria:	A - Associated with events significant to broad patterns of our history

Period of Significance:	1880-1978
Historic Context Theme:	Changing Role of the U.S. in the World
Subtheme:	Commerce
Facet:	Commerce

Historic Context Theme:	Developing the American Economy
Subtheme:	Shipping and Transportation by Water
Facet:	Ships, Boats, Lighthouses, and Other Structures

Area of Significance:	Commerce Maritime History Transportation
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National Register Information (cont.)

Existing NRIS Information:

Name in National Register:	Apostle Islands Lighthouses
NRIS Number	77000145
Primary Certification:	Listed to the National Register
Primary Certification Date:	3/8/1977
Other Certifications and Date:	Recertified, SHPO Consensus Determination 9/26/2006

Statement of Significance:

The Sand Island Light Station cultural landscape is significant under National Register Significance Criterion A: The property is associated with events that have made a significant contribution to the broad pattern of our history. The Sand Island Lighthouse is one of five included in a multiple property National Register nomination listed on March 8, 1977. The lights on Devils Island, Michigan Island, Outer Island, and Raspberry Island complete the nomination. The Apostle Islands Lighthouses are associated with the development of the U.S. Lighthouse Service and the national importance of commercial maritime traffic on the upper Great Lakes.

The period of significance begins in 1852 when Congress authorized the construction of eleven light stations on the upper Great Lakes. Completed in the mid 1850s, these lights functioned principally as navigational aids for vessels bound to and from Chequamegon Bay and La Pointe, on Madeline Island, via the North and South Channels. The first Apostle Islands lighthouse, the Michigan Island Light, built in 1856 and placed in service in 1857, marked both the North and South Channels into La Pointe and Bayfield for boats coming from the east. Before 1855, Lake Superior shipping was almost entirely local. The treacherous rapids at Sault Ste. Marie prevented all boats except those that could be portaged from entering into inter lake commerce. But with the opening of the “Soo” canals in 1855, Lake Superior became the western terminus of a one thousand mile long water highway.

La Pointe Light was established in 1858 and served primarily as a local navigational aid, marking the locations of La Pointe and Bayfield harbors. None of the previously mentioned lights provided much assistance to the ever increasing volume of shipping moving through the islands’ West Channel to the new ports of Bayfield and Ashland. In response, Congress appropriated funds for the construction of the Raspberry Island Light Station in 1859. Completed in 1862, difficulties in obtaining a lens prevented the station from entering service until the following summer. The Raspberry Island Light of 1862 guided vessels through the West Channel into the harbors.

By the late 1860s, shipping patterns had again shifted, with larger vessels passing north of (or “outside”) the Apostles. To meet the demands of these new shipping patterns, a second ring of lighthouses was developed on the outer edges of the archipelago. The Outer Island station was first lit in 1874, followed in 1881 by the Sand Island station and in 1891 by the Devil’s Island station, the last built in the archipelago.

As well as being an aid to navigation, the light stations also played a role in projecting the authority of the Federal government into a remote area, and communicating certain values of the emerging industrial society into what was essentially a frontier region. Construction of the Michigan Island Lighthouse in 1856 followed closely upon the 1854 Treaty of La Pointe with the Ojibwe (Chippewa) which opened the

Statement of Significance, continued:

region to white settlement. From that date onward, the establishment and evolution of the Apostle Islands Lighthouses provided both a tangible embodiment of Federal authority and a vehicle for dissemination of values. This process entailed both the physical form of the structure, and the presence of the light keepers as representatives of the central government (Männikkö and Mackreth 2002, 19 20).

In the book, Great American Lighthouses, F. Ross Holland, Jr. describes the Apostle Island Light Stations as the “largest and finest collection of lighthouses in the United States.” Numerous lighthouses have been preserved throughout the United States, but many of these properties exist in isolation. In many cases, the ancillary buildings such as oil houses, privies, barns, and workshops that existed at the site when the light was manned have been lost. These outbuildings, and the landscape in which they and the lighthouse exist, provide the context required to fully interpret the property’s history and significance. In contrast, the cul-tural landscape of the Apostle Islands Lighthouses remains unusually intact.

The Sand Island Light Station is significant as part of the collection of Apostle Island Light Stations. These stations are defined by two themes: 1) the development and evolution of resources directly associated with light stations’ use as navigational aids, a history strongly affected by the economic conditions that influenced shipping patterns and by the technological changes that influenced lighthouse working systems (foghorns; lights) and 2) the development and evolution of domestic resources associated with the shelter, sustenance, and recreation of the personnel charged with station operation and maintenance.

The period of significance specific to the Sand Island Light Station cultural landscape is 1880, when con-struction began, until 1978, when a Coast Guard crew left the last kept Apostles light station. Sand Island was the fifth light station established in the Apostles. The 1877 Annual Report of the Lighthouse Board noted the necessity for a light on Sand Island, saying that coming from Duluth “there being no coast light in this distance of 80 miles causes much distress and danger to the increasing commerce of the west end of Lake Superior.” Work began on the Sand Island Light Station on June 6, 1880. Keeper Charles Lederle lit the station for the first time September 25, 1881.

Sand Island became the first automated station in the archipelago in 1921. The Lighthouse Service installed an acetylene burner, regulated by a valve that opened or closed with the heat of sunlight. Responsibility for maintaining the Sand Island beacon was assigned to keepers at Raspberry Island, and a walk to a vantage point with a view of Sand Island became part of the nightly routine at Raspberry. The U.S. Coast Guard replaced the original Fresnel lens with a modern optic in 1933.

Chapter 6: Chronology and Physical History

Cultural Landscape Type and Use

Cultural Landscape type:	Historic Site
Current and Historic Use/Function:	
Primary Historic Function:	Lighthouse
Primary Current Use:	Recreation/Culture
Other Use/Function:	Type:
Lighthouse	Both Current and Historic

Current and Historic Names:	
Name:	Type of Name:
Sand Island Lighthouse	Both Current and Historic
Sand Island Light Station	Both Current and Historic

Chronology

Year	Event	Annotation
CE 1877	Planned	Lighthouse Service identified need for a light station on Sand Island.
CE 1880-1881	Built	Construction of Sand Island Light Station. Reports indicate stone for construction was quarried on site or close by.
CE 1881-1891	Inhabited	First lighthouse keeper, Charles Lederle, assumes duties and lights the station for the first time September 25, 1881.
CE 1892-1921	Inhabited	Emmanuel Luick served as lighthouse keeper.
CE 1901	Built	Oil Building built.
CE 1921	Altered	The station becomes the first automated light station in the Apostles. An acetylene gas burner was installed in the tower.

Chronology

Year	Event	Annotation
CE 1922-1924	Abandoned	After automation, the light station was left vacant until leased.
CE 1925-1942	Inhabited	Light Station quarters leased by Gertrude Wellisch.
CE 1933	Altered	The lens and automated apparatus are mounted on a 50-foot tall skeletal steel tower outside the historic lighthouse.
CE 1953-1975	Inhabited	Light Station quarters leased by A. D. Hulings.
CE 1970	Established	Apostle Islands National Lakeshore established.
CE 1975	Abandoned	Leasing of the quarters as a summer residence discontinued.
CE 1977	Stabilized	Light Station quarters and privy stabilized.
CE 1985	Altered	Coast Guard moves modern optic to historic lantern room; removes the skeletal metal tower from island.

Cultural Landscape Physical History Narrative

Pre-Lighthouse (1852-1880)

This period began in 1852 with Congress authorizing the construction of the first lighthouse in the Apostle Islands, to be built at La Pointe Harbor on Madeline Island. The location was later revised to Long Island and ultimately the lighthouse was built on Michigan Island in 1856. At the recommendation of Major Orlando Poe, the District Engineer of the Lighthouse Board, a Lighthouse Reservation was established for Sand Island in 1871. No physical improvements related to the light station were built on Sand Island during this period (CLR 2010).

Light Station (1881-1921)

Construction of the Sand Island Light Station Quarters began in June of 1881. A large area of the northern tip of the Island, approximately eight acres, was cleared of forest vegetation to build the light station grounds and its associated buildings and structures, and the Light Tower was placed into service in September 1881. The Light Station Quarters was constructed of local brownstone from stone quarried on the island. The building included a 44-foot tower and the keeper's residence. On the grounds, a Privy and Wood Shed were built in the cleared area just south of the Light Station Quarters.

A boat landing was also built at this time, located about one-half mile south of the Light Station in a sheltered bay on the west side of the island. Work in the 'harbor' began in 1880 with an 80-foot long timber and rubble crib to protect the landing site. In 1886, a Boathouse and dock were built at the landing site. In 1901, the landing crib was modified and expanded. Two other natural rock boat landings were also used to access the light station. Historic photographs indicate a wooden boat hauling ramp that was located east of the Light Station Quarters sloping down the rocky cliff to the shoreline. The rock ledge just to the north of the Light Station Quarters was also used as a boat landing and is still in use today.

A hiking trail was cleared through the thickly wooded forest to connect the boathouse area with the light station. The hiking trail was well traveled as it was used by the light keepers and other Sand Island residents.

In 1901, a brick Oil Building was added to the Light Station grounds and was connected to the Light Station Quarters with a concrete walk. Later, a brick Privy was constructed and also connected to the Light Station Quarters with a concrete walk. Initially, wooden plank walks were built as the initial circulation for the light station grounds. These were replaced by concrete walks early in the period and remain today.

Emmanuel Luick was the lighthouse keeper at Sand Island from 1892 to 1921. Emmanuel and his wife Ella annually planted and harvested crops on the light station grounds. They were known for their crops which included tomatoes, corn, lettuce, peas, and potatoes. The Luicks also raised chickens and ducks. Historic drawings indicate that by 1910 a garden was established in the clearing to the south of the Light Station



Keepers Quarters and Lighthouse, looking southeast, 1890. (NPS APIS Archives)

Cultural Landscape Physical History Narrative, continued



Lighthouse Keeper Emmanuel Luick and his family, posing on the main entry steps, c. 1905-1909. Luick was the first keeper on Sand Island, and is known today for his photographs of life on Sand Island in the early twentieth century. (NPS APIS Archives)

Quarters. The clearing included a fenced garden, Wood Shed, Tool Shed, and a walk connecting the Tool Shed to the Light Station Quarters.

The Sand Island Light Station was not as isolated as some of the other light stations in the Apostle Islands. The island had a community of year round residents who primarily farmed on the island and fished the waters of Lake Superior. During this period, the year-round population of the island reached approximately 70 people. Sand Island supported a school, post office, cooperative store, and briefly a telephone service to the mainland. A tourist resort, Camp Stella, was also opened on the island in 1886 and operated until 1915. Keeper's logs indicated that regular visitors were common at the light station.

This period ends in 1921 with the automation of the Sand Island Light Station. Sand Island was the first automated lighthouse in the Apostle Islands (CLR 2010).

Summer Home Period (1922-1975)

After automation (1921), the need for a full time lighthouse keeper on the island was eliminated and the lighthouse keeper was transferred to another light station. The light station at Sand Island was monitored and periodically serviced by the Raspberry Island light keeper. However, the light station was not left vacant. After a few years, the dwelling was annually leased as a summer residence until 1975.

During this period, the primary physical changes to the landscape were the deterioration of the boathouse site and garden area of the light station as well as the encroachment of the forest into formerly cleared areas of the light station grounds. Plan drawings from c. 1936 note that the Boathouse and breakwater were considered 'ruins' as was the garden area, Wood Shed and Tool Shed behind the light station. The garden area remained somewhat clear of forest vegetation during this period as shown in a 1938 aerial photograph, but its features were lost. Historic photographs indicate that the clearing of the light station grounds began to fill in as forest vegetation encroached.

The most notable physical change was the addition in 1933 of a 40-foot tall steel frame light tower in the front of the lighthouse. At this time the light was removed from the Light Station Quarters and a new light

Cultural Landscape Physical History Narrative, continued

was placed onto the steel frame tower. The steel frame tower was removed in 1985; the footprint of its concrete footings remains (CLR 2010).

Coast Guard (1939-1969)

In 1939, the United States Bureau of Lighthouses was eliminated and the United States Coast Guard (USCG) took over operation of the light stations. Since the Sand Island Light Station had been automated in 1921, the station remained unmanned during this period. Leasing of the Light Station Quarters as a summer residence continued through this period.

Changes to the light station grounds during this period were primarily due to deterioration of structures and features, and to the encroachment of forest vegetation into previously cleared areas. The light station grounds, which were previously open brush and mown lawn, began to infill with encroaching forest vegetation after the station was automated in 1921. Historic photographs show that in 1939, forest encroachment had occurred, but the garden area south behind the Light Station Quarters remained generally clear.

The population of Sand Island changed during this period. Farming on Sand Island became less profitable and more difficult in the 1940s. By 1944, the last year-round residents left and Sand Island was occupied only in the summer by fishermen and vacationers (CLR 2010).

National Park Service (1970 to present)

In 1970, the Apostle Islands National Lakeshore was established. This is the beginning of the NPS period that continues to present day. This period opened the island to additional visitors and brought about changes in the landscape that primarily related to island access, recreation, and visitor use. Leasing of the Light Station Quarters as a summer residence was discontinued in 1975.

Changes to the landscape that occurred during this period included the construction of the wooden staircase from the light station grounds down to the rocky ledge of the North Landing area. The NPS cleared the areas west and east of the Light Station Quarters in 1992, removing the trees that obscured the vistas into the station grounds. The clearing was repeated to a lesser extent in 2005. Also during the NPS period, the lawn adjacent to the Light Station Quarters was re-graded to prevent flooding. Other additions included hiking trails, park signage, a solar panel, an NPS privy and minor maintenance on the buildings and structures (CLR 2010).



The 40-foot tall steel frame light tower, erected in 1933, seen here in 1984. It was removed in 1985. (NPS APIS Archive)

Chapter 7: Analysis and Evaluation of Integrity

Summary:

The Sand Island Light Station retains high integrity of location, setting, feeling, association, workmanship, design, and materials. The light station evidences little change from its original appearance. The few modern intrusions on the scene -- a picnic table, bulk propane tank, privy, and solar panel -- are either sufficiently small scale or sited in such a way as to be unobtrusive. None detract from the overall historic integrity of the cultural landscape.

Aspects of Integrity:

- Location
- Design
- Detting
- Materials
- Feeling
- Workmanship
- Association

Landscape Characteristics:

- Natural Systems and Features
- Topography
- Buildings and Structures
- Small Scale Features
- Circulation
- Vegetation
- Spatial Organization
- Views and Vistas

Natural Systems and Features: Landscape Characteristics

Sand Island is one of the twenty-two islands in the Apostle Islands archipelago. The islands range in size from only a few acres in the case of Gull Island to over 10,000 acres on Stockton. Repeated periods of glaciation during the last Ice Age resulted in deposits of glacial till with a high clay content covering most of the islands. The majority of the islands are comparatively flat with sandstone bedrock lying close to the surface. As a result, the islands in general have poor drainage and swampy areas are common. The shorelines for the majority of the islands are characterized by either sandstone cliffs or high clay bluffs. Sand Island is relatively unusual in having several long sand beaches. The shoreline at the point where the light is located, however, is exposed sandstone.

The Apostle Island archipelago’s sandstones were deposited during the late Precambrian era, about 600 million years ago, and form the basement rock for all the islands. The upper and lower most layers (Chequamegon and Orienta formations) are in the Precambrian Bayfield Group and were deposited by northeastward-flowing braided streams. The Devils Island Formation, between the sandstones, represents deposition across sand-flats that were intermittently covered by shallow ponded water. The Pleistocene ice advances provided an abundance of till, with lesser amounts of glacial outwash, which covers most of the islands. Some glacial drift was streamlined by overriding ice. Terraces, wave-cut benches, and elevated beaches show evidence of higher levels of Lake Superior. High bluffs and glacial drift erode to provide sand for today’s sandspits and beaches.

The islands are heavily forested, with stands of timber tending to be of the mixed hardwood hemlock forest type. The natural stands of trees south of the Sand Island Light Station include conifers such as white pine and white spruce and deciduous species such as yellow birch, quaking aspen, and willow. Shrubs include low bush blueberries, speckled alder and red osier dogwood. Grasses and forbs include goldenrod, clovers, and timothy. Some grasses and forbs are considered exotics, and were most likely transported to the islands as seeds in mixed hay brought in for horses or cattle when farming began in the 19th century.



Rocky cliff to the east of the light station grounds (Anderson Hallas Architects, PC/NPS 2010).

Topography: Landscape Characteristics

The topography of Sand Island is gently rolling, forested hills with steep rocky cliffs at the water’s edge. The highest point of the island sits approximately 58-feet above Lake Superior. The light station grounds are generally level, sloping gently toward the steep rocky cliffs (20 to 30- feet high) of Lake Superior.

The topography of the light station generally remains as it was since development of the light station. A subtle change occurred after the NPS re-sloped the lawn adjacent to the Light Station Quarters. Overall, the topography of the reservation and light station contributes to the cultural landscape (CLR 2010).

Buildings and Structures: Landscape Characteristics

Buildings and structures at the Sand Island Light Station include the station quarters, oil building, privy, and a wooden stairway. The dwelling and tower, constructed in 1881, provide an interesting example of transitional Victorian architecture. The building is one-and-a-half story and is constructed of finely cut ashlar masonry using brown sandstone quarried locally. It has a gable roof with carved brackets, decorative gable drop and finial, and exposed rafter tails with decorative carvings. The wooden trim work (purlins, braces, and kingpost) and exposed rafter tails convey an initial impression that the structure is a variation on carpenter Gothic, a style popular in the mid-nineteenth century, but a closer examination reveals that the fenestration and roof line are more typical of Romanesque: the windows have rounded arch sashes rather than the pointed windows associated with Gothic. The roofline, although steeply pitched, is also considerably flatter than usual for Gothic and has the flared eaves associated with the Romanesque style popular in the 1870’s. A one-story shed-roofed kitchen extends to the rear of the building with a wood frame vestibule extending to the southwest. The main rectangular plan of the quarters contains three rooms at cellar level, four rooms on the first floor, and two rooms on the second floor. The main quarters, kitchen shed, and tower are all per the original construction. The kitchen’s vestibule shed was a very early addition, by 1890 as seen in historic images.

The octagonal light tower is attached to the northwest corner of the keeper’s dwelling at a 45 degree angle. It is square at the base with buttress like supports at the corners. At the second floor level, the tower makes a smooth transition to an octagon. The focal plane of the light was 52 feet above lake level (654 MSL). In 1921, an acetylene gas burner was installed, making Sand Island Light Station the first automated light in the Apostle Islands. In 1933 the light was moved from the lighthouse to a metal tower, where it remained for five decades. Following the creation of Apostle Islands National Lakeshore, the National Park Service persuaded the Coast Guard to return the optic to the lighthouse tower. The skeletal tower was removed in 1984. The current light is a 300mm plastic lens exhibiting a flashing white light.

The oil house, built in 1901, is a typical small square magazine type utilitarian building made of brick on a concrete foundation. The standing seam metal hip roof has a circular metal vent at the center of the ridge, and the metal door located on the north side of the structure has a stone lintel and threshold.

The brick privy, constructed in 1881, has three holes (two adult, one child) with a metal panel gable roof with carved brackets and rafter tails. The walls are brick, sitting on a brownstone foundation. There is a four pane casement window in an arched opening on the east side, while the wooden panel door is set in an arched opening in the north. There is a square wooden vent stack with ornamental cutouts at the south end of the roof ridge. The interior is finished with beaded board wainscoting and a wooden floor.

A wooden stairway leads from the light station grounds down approximately 18-feet to a natural rock out-crop used for a boat landing. The stairway is constructed of dimension lumber and railings on both sides. The stairway is used to access the North Landing rock ledge and is believed to be from the NPS Period and is a non-contributing structure, but compatible with the cultural landscape (CLR 2010).

Buildings and Structures: Landscape Characteristics, continued

Feature:	Sand Island Light Station and Keeper’s Quarters
Contributing?	Yes
LCS Structure Name:	Sand Island Light Station and Keeper’s Quarters
LCS ID Number	6381
LCS Historic Structure Number:	06142A

Locational Data:

Source: GPS- Uncorrected		
Point Type: Area		
Datum: WSG84		
Zone: 15	Easting: 656792	Northing: 5207569
Longitude: -90.937488		Latitude: 47.003072

Associated Image Page Numbers in CLI: Page 34



Sand Island Lighthouse and Keeper’s Quarters (NPS 2008)

Buildings and Structures: Landscape Characteristics, continued

Feature:	Sand Island Light Station Oil House		
Contributing?	Yes		
LCS Structure Name:	Sand Island Light Station Oil House		
LCS ID Number	6382		
LCS Historic Structure Number:	06142B		
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Area		
Datum:	WSG84		
Zone: 15	Easting: 656783	Northing: 5207542	
Longitude: -90.937613	Latitude: 47.002830		
Associated Image Page Numbers in CLI: Page 35			



Sand Island Light Station Oil House (Anderson Hallas Architects PC/NPS 2010)

Buildings and Structures: Landscape Characteristics, continued

Feature:	Sand Island Light Station Privy		
Contributing?	Yes		
LCS Structure Name:	Sand Island Light Station Privy		
LCS ID Number	6383		
LCS Historic Structure Number:	06142C		
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Area		
Datum:	WSG84		
Zone: 15	Easting: 656798	Northing: 5207548	
Longitude: -90.937420	Latitude: 47.002879		
Associated Image Page Numbers in CLI: Page 36			



Sand Island Light Station Privy
(Anderson Hallas Architects PC/NPS 2010)

Buildings and Structures: Landscape Characteristics, continued

Feature:	Sand Island Light Station Stairway		
Contributing?	No		
LCS Structure Name:			
LCS ID Number			
LCS Historic Structure Number:			
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Area		
Datum:	WSG84		
Zone: 15	Easting: 656767	Northing: 5207586	
Longitude: -90.937815	Latitude: 47.003230		
Associated Image Page Numbers in CLI: Pages 36 and 37			



Stairway at the North Landing, see from on the bluff (left) and from the rock landing below (right). (Anderson Hallas Architects PC/NPS 2010)

Small Scale Features: Landscape Characteristics

The small scale features at Sand Island Light Station include concrete walks, a flagpole, park signs, a fiber-glass battery storage unit, solar panel, foundations, dump sites and other site features. The walks are built of precast concrete slabs laid end to end, connecting buildings and structures in straight lines.

These features provide a human scale to the island and convey important history and use of the light station. The features relate to the evolution of the light station grounds and are evidence of physical change on the site. Many of the small scale features, including the concrete walks, stone foundation, and dump sites contribute to the significance of the cultural landscape. In addition to these features there are signs, a solar panel, and other features that have been added to the site outside of the period of significance.

Historic photographs indicate that the concrete walks are precast concrete slabs placed directly on the ground. This method of construction was also found at Michigan, Outer, Devils, and Long Island Light Stations.

The former garden site, including the non-extant tool and wood sheds, is an important part of the history of the Sand Island Light Station. Today, the only evidence of this area is the encroaching vegetation, which is less mature than the adjacent forest. Historic documents and photographs show several structures and fencing (non-extant) enclosing the garden.

Three dump sites, containing material including household items, bottles, tins, etc., are located in the forest near the light station grounds. Little is known about these sites and they may contain potential archeological features.

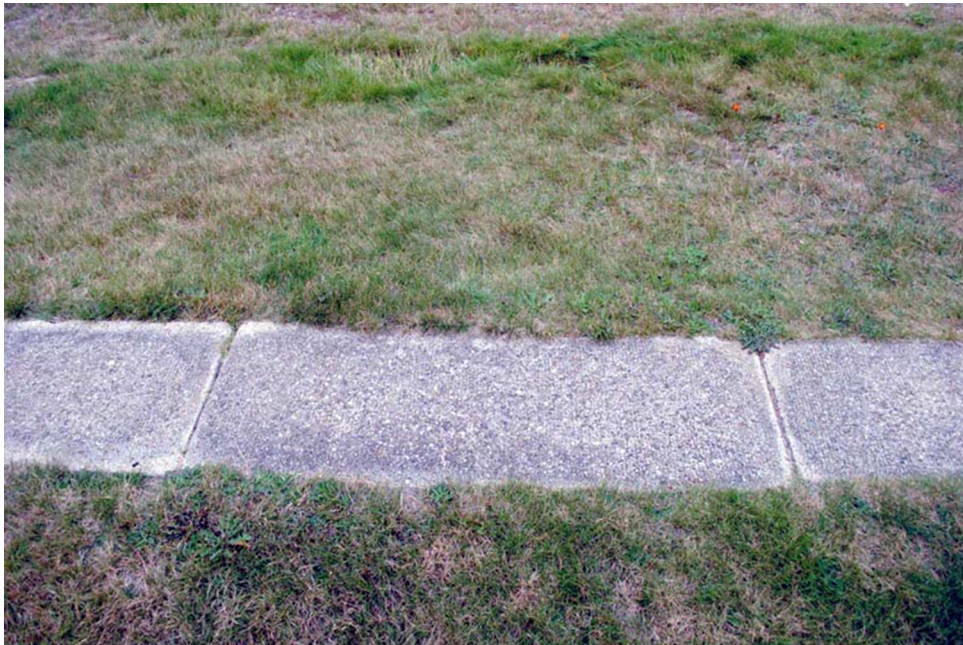
The small scale features present today (walks, stone foundation, and dump sites) from the period of significance contribute to the cultural landscape. Features that are non-contributing, but compatible, are the NPS wooden interpretive sign and trail sign, steel fire pit, battery storage unit, bench, and the steel frame tower footprint. Features that are non-contributing and non-compatible are the concrete pad with steel plate, flagpole, wood headwall, stone north arrow, solar panel, and the propane tank (CLR 2010).

Small Scale Features: Landscape Characteristics, continued

Feature:	Sand Island Light Station Concrete Walkways
Contributing?	Yes
LCS Structure Name:	Sand Island Light Station Concrete Walkways
LCS ID Number	101558
LCS Historic Structure Number:	06142D
Locational Data:	
Source:	GPS- Uncorrected
Point Type:	Line
Datum:	WSG84

Point	UTM Zone	Easting	Northing	Longitude	Latitude
1	15	656790	5207561	-90.937518	47.002996
2	15	656787	5207551	-90.937560	47.00909

Associated Image Page Numbers in CLI: Page 40



Typical concrete walk of precast slabs. (Anderson Hallas Architects PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature:	Dump Site - 1
Contributing?	Yes
LCS Structure Name:	Not Currently Listed
LCS ID Number	
LCS Historic Structure Number:	
Locational Data:	
Source:	GPS- Uncorrected
Point Type:	Point
Datum:	WSG84

Zone: 15 Easting: 656824 Northing: 5207549
Longitude: -90.937070 Latitude: 47.002878

Associated Image Page Numbers in CLI: Page 41



Dump Site No. 1. (Anderson Hallas Architects PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature:	Dump Site - 2		
Contributing?	Yes		
LCS Structure Name:	Not Currently Listed		
LCS ID Number			
LCS Historic Structure Number:			
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Point		
Datum:	WSG84		
Zone: 15	Easting: 656775	Northing: 5207479	
Longitude: -90.937739	Latitude: 47.002266		
Associated Image Page Numbers in CLI: Page 42			



Dump Site No. 2. (Anderson Hallas Architects PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature:	Dump Site - 3		
Contributing?	Yes		
LCS Structure Name:	Not Currently Listed		
LCS ID Number			
LCS Historic Structure Number:			
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Point		
Datum:	WSG84		
Zone: 15	Easting: 656836	Northing: 5207520	
Longitude: -90.936927	Latitude: 47.002619		
Associated Image Page Numbers in CLI: Page 42			



Dump Site No. 3. (Anderson Hallas Architects PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature:	Stone Foundation
Contributing?	Yes
LCS Structure Name:	Not Currently Listed
LCS ID Number	
LCS Historic Structure Number:	
Locational Data:	
Source: GPS- Uncorrected	
Point Type: Point	
Datum: WSG84	
Zone: 15	Easting: 656833 Northing: 5207587
Longitude: -90.936941	Latitude: 47.003223
Associated Image Page Numbers in CLI: Page 41	



Stone Foundation east of Light Station Quarters. (Anderson Hallas Architects PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature:	Concrete Pad w/ Steel Plate
Contributing?	No
LCS Structure Name:	
LCS ID Number	
LCS Historic Structure Number:	
Locational Data:	
Source: GPS- Uncorrected	
Point Type: Point	
Datum: WSG84	
Zone: 15	Easting: 656782 Northing: 5207577
Longitude: -90.937610	Latitude: 47.003139
Associated Image Page Numbers in CLI: Page 43	



Concrete Pad with steel plate. (Anderson Hallas Architects PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature:	Interpretive Sign		
Contributing?	No		
LCS Structure Name:			
LCS ID Number			
LCS Historic Structure Number:			
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Point		
Datum:	WSG84		
Zone: 15	Easting: 656789	Northing: 5207581	
Longitude: -90.937517	Latitude: 47.003180		
Associated Image Page Numbers in CLI: Page 43			



Park Interpretive Sign. (Anderson Hallas Architects PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature:	Fire Pit		
Contributing?	No		
LCS Structure Name:			
LCS ID Number			
LCS Historic Structure Number:			
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Point		
Datum:	WSG84		
Zone: 15	Easting: 656755	Northing: 5207550	
Longitude: -90.937975	Latitude: 47.002909		
Associated Image Page Numbers in CLI: Page 44			



Fire Pit. (Anderson Hallas Architects PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature: Flagpole

Contributing? No

LCS Structure Name:

LCS ID Number

LCS Historic Structure Number:

Locational Data:

Source: GPS- Uncorrected

Point Type: Point

Datum: WSG84

Zone: 15 Easting: 656775 Northing: 5207583

Longitude: -90.937698 Latitude: 47.003198

Associated Image Page Numbers in CLI: Page 44



Flagpole. (Anderson Hallas Architects PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature: Bench

Contributing? No

LCS Structure Name:

LCS ID Number

LCS Historic Structure Number:

Locational Data:

Source: GPS- Uncorrected

Point Type: Point

Datum: WSG84

Zone: 15 Easting: 656725 Northing: 5207524

Longitude: -90.938382 Latitude: 47.002682

Associated Image Page Numbers in CLI: Page 45



Bench. (Anderson Hallas Architects PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature:	Wood Headwall		
Contributing?	No		
LCS Structure Name:			
LCS ID Number			
LCS Historic Structure Number:			
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Point		
Datum:	WSG84		
Zone: 15	Easting: 656798	Northing: 5207594	
Longitude: -90.937397	Latitude: 47.003288		
Associated Image Page Numbers in CLI: Page 45			



Wood headwall for drainage pip. (Anderson Hallas Architects PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature:	Stone North Arrow		
Contributing?	No		
LCS Structure Name:			
LCS ID Number			
LCS Historic Structure Number:			
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Point		
Datum:	WSG84		
Zone: 15	Easting: 656781	Northing: 5207590	
Longitude: -90.937624	Latitude: 47.003255		
Associated Image Page Numbers in CLI: Page 46			



Stone north arrow located on the site of the non-extant steel tower. (Anderson Hallas Architects PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature: Solar Panel

Contributing? No

LCS Structure Name:

LCS ID Number

LCS Historic Structure Number:

Locational Data:

Source: GPS- Uncorrected

Point Type: Point

Datum: WSG84

Zone: 15 Easting: 656796 Northing: 5207560

Longitude: -90.937431 Latitude: 47.002981

Associated Image Page Numbers in CLI: Page 46



Solar Panel. (Anderson Hallas Architects PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature: Modern Fiberglass Battery Storage Unit

Contributing? No

LCS Structure Name:

LCS ID Number

LCS Historic Structure Number:

Locational Data:

Source: GPS- Uncorrected

Point Type: Point

Datum: WSG84

Zone: 15 Easting: 656797 Northing: 5207561

Longitude: -90.937424 Latitude: 47.002995

Associated Image Page Numbers in CLI: Page 47



Fiberglass battery storage unit at rear of Light Station Quarters. (Anderson Hallas Architects PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature:	Footprint of Steel Frame Tower Fdtns		
Contributing?	No		
LCS Structure Name:			
LCS ID Number			
LCS Historic Structure Number:			
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Line		
Datum:	WSG84		
Zone:	15	Easting:	656784 Northing: 5207588
Longitude:	-90.937588	Latitude:	47.003237
Associated Image Page Numbers in CLI:	Page 47		



Footprint of the Steel Frame Tower Foundation, indicated by the arrows, around the stone north arrow.
(Anderson Hallas Architects PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature:	Trail Sign		
Contributing?	No		
LCS Structure Name:			
LCS ID Number			
LCS Historic Structure Number:			
Locational Data:			
Source:			
Point Type:			
Datum:			
Zone:		Easting:	Northing:
Longitude:		Latitude:	
Associated Image Page Numbers in CLI:	No Image		

Feature:	Propane Tank		
Contributing?	No		
LCS Structure Name:			
LCS ID Number			
LCS Historic Structure Number:			
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Point		
Datum:	WSG84		
Zone:	15	Easting:	656799 Northing: 5207543
Longitude:	-90.937408	Latitude:	47.002832
Associated Image Page Numbers in CLI:	No Image		

Circulation: Landscape Characteristics

Circulation at the Sand Island Light Station is composed of boat access points, trails and concrete walks. Access by boat is primarily from the North Landing, a rock ledge directly adjacent to the Light Station Quarters and from access points south of the Light Station Reservation. The North Landing is a natural rock ledge with a wooden staircase leading up the cliff to the light station grounds. Access from the south is via a cleared footpath through the forest. This footpath connects the non extant Boathouse site, a former access point, to the Light Station Quarters. This footpath is primarily a soil surface, but there are also areas of wooden boardwalks and wood plank walks that lead directly to the Light Station Quarters. Circulation within the light station grounds is along concrete walks, soft surface footpaths and a wooden staircase down to the shoreline.



Trail corridor between the Light Station and the Boathouse, looking south toward the Boathouse site.
(Anderson Hallas Architects PC/NPS 2010)

Circulation on Sand Island has remained similar to the original access and basic routes that were established during its early historic periods with the exception of the primary boat landing access. The boat-house area is no longer used for access nor does it have extant features. Pedestrian circulation remains much as it was historically. Footpaths and concrete walks remain in place from early historic periods and contribute to the cultural landscape (CLR 2010).



Boardwalk section of trail corridor between the Ligth Station and the East Bay Landing Dock.
(Anderson Hallas Architects PC/NPS 2010)

Vegetation: Landscape Characteristics

Vegetation at Sand Island includes natural forested areas, cleared and maintained areas, and areas of forest or brush encroachment. The forest area is of mixed hardwoods and pines and is the predominant landscape on the island. The light station grounds include cleared areas that are maintained as mown lawn, cleared areas that have been naturalized by the adjacent forest and are now forest landscape, and cleared areas that have filled in with naturalized brush.

Very few remnants of landscape and garden plantings were found on the site. Purple and white lilacs (*Syringa* sp.) exist at the southwest corner of the Light Station Quarters and northwest of the Oil Buildings, respectively. There is a small Mountain Ash (*Sorbus* sp.) growing between the Oil Building and Privy and an evergreen tree west of the Light Station Quarters. Periwinkle (*Vinca* sp.) grows along the path south of the Light Station Quarters, and Sweet William (*Dianthus* sp.) is found between the Quarters and Privy.

Historic drawings and photographs indicate that a significantly larger cleared area once existed than that which exists today. In places, the edge of this formerly cleared area can be seen in the age and size of the forest trees. During the period of significance, a large clearing for a garden area was located directly south of the Light Station Quarters. This clearing has since been filled in by encroaching and maturing forest vegetation. Forest vegetation has also encroached into other formerly cleared areas of the light station grounds southeast and west of the Light Station Quarters. Clearing work done by the NPS has reduced the amount of forest encroachment from its peak in the 1960s.

Sand Island has a history of agriculture and crop production. The light station contained a garden area and Keeper Luick was known for growing vegetables. No physical evidence of this was found on site. Common vegetables grown at the light stations included onion, lettuce, cucumber, beans, squash, peas, rutabaga, pumpkin, asparagus, tomato, cabbage, beets, and potatoes.

Historic photographs indicate lilacs were a prevalent landscape planting. The purple and white lilacs that exist today are contributing features (CLR 2010).

Vegetation: Landscape Characteristics, continued

Feature:	Light Station Cleared Area
Contributing?	Yes
LCS Structure Name:	Not Currently Listed

LCS ID Number

LCS Historic Structure Number:

Locational Data:

Source: GPS- Uncorrected		
Point Type: Area		
Datum: WSG84		
Zone: 15	Easting: 656811	Northing: 5207566
Longitude: -90.937236		Latitude: 47.003038

Associated Image Page Numbers in CLI: Page 56



Older trees at historic clearing line.
(Anderson Hallas Architects PC/NPS 2010)

Vegetation: Landscape Characteristics, continued

Feature:	Lawn Area
Contributing?	Yes
LCS Structure Name:	Not Currently Listed
LCS ID Number	
LCS Historic Structure Number:	
Locational Data:	
Source: GPS- Uncorrected	
Point Type: Area	
Datum: WSG84	
Zone: 15	Easting: 656789 Northing: 520756
Longitude: -90.937523	Latitude: 47.003046
Associated Image Page Numbers in CLI: Page 53	

Feature:	Evergreen	
Contributing?	No	
LCS Structure Name:		
LCS ID Number		
LCS Historic Structure Number:		
Locational Data:		
Source: GPS- Uncorrected		
Point Type: Area		
Datum: WSG84		
Zone: 15	Easting: 656774	Northing: 5207562
Longitude: -90.937725	Latitude: 47.003013	
Associated Image Page Numbers in CLI: Page 53		

Vegetation: Landscape Characteristics, continued



Lawn area; evergreen tree at right. (Anderson Hallas Architects PC/NPS 2010)

Vegetation: Landscape Characteristics, continued

Feature:	White Lilac
Contributing?	Yes
LCS Structure Name:	Not Currently Listed
LCS ID Number	
LCS Historic Structure Number:	
Locational Data:	
Source: GPS- Uncorrected	
Point Type: Point	
Datum: WSG84	
Zone: 15	Easting: 656779 Northing: 5207548
Longitude: -90.937659	Latitude: 47.002881
Associated Image Page Numbers in CLI: Page 55	



White Lilac hedge, northwest of Oil Building. (Susan Mackreth/NPS 2005)

Vegetation: Landscape Characteristics, continued

Feature:	Purple Lilacs
Contributing?	Yes
LCS Structure Name:	Not Currently Listed
LCS ID Number	
LCS Historic Structure Number:	
Locational Data:	
Source: GPS- Uncorrected	
Point Type: Point	
Datum: WSG84	
Zone: 15	Easting: 656794 Northing: 5207559
Longitude: -90.937469	Latitude: 47.002974
Associated Image Page Numbers in CLI: Page 54	



Purple Lilac at the southwest corner of the Light Station Quarters (Susan Mackreth/NPS 2005)

Vegetation: Landscape Characteristics, continued

Feature:	Deciduous Tree		
Contributing?	No		
LCS Structure Name:			
LCS ID Number			
LCS Historic Structure Number:			
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Point		
Datum:	WSG84		
Zone: 15	Easting: 656791	Northing: 5207546	
Longitude: -90.937514	Latitude: 47.002861		
Associated Image Page Numbers in CLI: Page 55			



Deciduous tree, indicated by the red arrow, viewed from the Light Station Quarters, looking southwest.
(Anderson Hallas Architects PC/NPS 2010)

Vegetation: Landscape Characteristics, continued

Feature:	Mountain Ash		
Contributing?	Yes		
LCS Structure Name:	Not Currently Listed		
LCS ID Number			
LCS Historic Structure Number:			
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Point		
Datum:	WSG84		
Zone: 15	Easting: 656789	Northing: 5207552	
Longitude: -90.937534	Latitude: 47.002917		
Associated Image Page Numbers in CLI: Page 55			



Mountain Ash, indicated by the red arrow, viewed from the Light Station Quarters, looking southwest.
(Anderson Hallas Architects PC/NPS 2010)



Arrangement of Privy (left) and Oil Building (right) to the south of the Light Station Quarters. The path to the left of the privy leads to the former garden area.
(Anderson Hallas Architects PC/NPS 2010)

Spatial Organization: Landscape Characteristics

The light station grounds are located on the northern most peninsula of Sand Island on a rocky plateau, approximately twenty feet above Lake Superior. The grounds are delineated by forested rolling hills to the south, and open to the cliff edges on the north, east and west. The light station grounds are partially cleared of forest vegetation. The 44-foot tall Light Station Quarters is centered in this area and is the dominant element with walks, buildings and structures radiating out from it in an organized, asymmetrical arrangement.

The spatial organization of the reservation has been impacted by the loss of buildings and structures. At the boathouse site, all of the structures (Boathouse, Landing Crib) have been lost and the cleared area has grown in with forest vegetation.

At the light station, most of the building and structures that help to define the spatial organization remain from the early historic periods. The Light Station Quarters, Oil Building and Privy, with their connecting walks all remain. The loss of the garden area behind the Light Station Quarters, including the sheds and fenced area has diminished the integrity of the cultural landscape at the light station grounds.

The spatial organization of the light station grounds has changed from its early historic periods due to the encroachment of the forest vegetation into the original cleared area. This cleared area has been substantially reduced in size as the adjacent forest vegetation has regenerated, growing into the light station grounds. The former cleared garden area to the south of the Light Station Quarters, which was cleared and fenced during the early historic periods, is completely forested today (CLR 2010).

Overall, the spatial organization of the light station contributes to the cultural landscape despite the encroachment of forest vegetation into the original cleared area of the light station grounds.



View of the Light station from the East -- note the reduction in the cleared area to the left and the height of the trees in the forest.
above: NPS APIS Archives, c. 1913. below: Anderson Hallas Architects PC/NPS 2010

Views and Vistas: Landscape Characteristics

Notable views to Sand Island include those of the Light Station Quarters and rocky cliffs from passing and approaching ships and pleasure boats in Lake Superior. Notable views from the island include those to the north across Lake Superior from the light station grounds and vistas from the top of the Light Tower. The view of the Light Station Quarters on the southern trail approach is seen by many visitors to the light station and is a prominent view.

The extent of views and vistas to the light station grounds have been reduced from the early historic periods due to the encroachment of forest vegetation across the entire north peninsula. Views from Lake Superior to the Light Station Quarters are historically important as the light station is an aid to navigation. The views have been obscured by vegetation not present during early historic periods, but remain fairly clear. Views from the southern approach trail to the Light Station Quarters have been impacted by the encroachment of forest vegetation into the formerly cleared area and the placement of contemporary small scale features (CLR 2010).



View of the Light Station Quarters from Lake Superior.
above: NPS APIS Archives, c. 1891. below: Anderson Hallas Architects PC/NPS 2010



View from Light Station, looking southwest towards Lighthouse Bay (NPS 2008).

Chapter 8: Condition Assessment

Condition Assessment and Impacts

Condition Assessment:	Good
Assessment Date:	11/10/2005

The historic light station clearing remains open in close approximation of its original configuration, and the structures at the site retain integrity. Species such as balsam fir threatening to obstruct historic views and vistas or create an unacceptable fuel load close to a historic resource are periodically removed through prescribed burns or other treatment methods.

Condition Assessment:	Good
Assessment Date:	7/7/2011

Although the Sand Island Light Station does exhibit some problems with vegetation encroaching on the historic cleared areas, the site retains high levels of integrity. The primary views and vistas are unimpaired, circulation patterns are clearly discernible, and the general appearance of the light station reflects its period of significance. In addition, historic plantings such as lilac bushes are still extant. Thus, the landscape over-all can be considered to be in good condition.

Impacts

Impact Type:	Vegetation/Invasive Plants
Internal/External:	Both Internal and External
Explanatory Narrative:	A number of shrubs and trees which grow fairly quickly, such as balsam fir, are present at the site and could overrun the historic clearing if not managed aggressively.
Impact Type:	Visitation
Internal/External:	External
Explanatory Narrative:	The Sand Island Light Station is one of the most popular visitor destinations at Apostle Islands National Lakeshore.

Chapter 9: Treatment

Approved Treatment Document Explanatory Narrative:

The intent of the preferred treatment is to rehabilitate the cultural landscape of the Sand Island Light Station to portray the period of navigational history that the light station best represents within the Apostle Island system. The period of significance for the Sand Island Light Station (1881 –1921) begins with the establishment of the Light Station Quarters, and ends with automation of its Light Tower. The treatment approach for extant contributing features emphasizes this period when the light station was in its most active state. Recommendations also include the restoration of landscape features lost since the period of significance. (CLR 2010)

Approved Treatment:	Preservation
Approved Treatment Document:	Cultural Landscape Report
Document Date:	7/22/2011
Approved Treatment Completed:	No

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