

National Park Service  
U.S. Department of the Interior

Apostle Islands National Lakeshore  
Wisconsin



# Michigan 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 Michigan Island Light Station landscape is one of six light stations in Apostle Islands National Lake-shore located in Ashland County, Wisconsin. The light station cultural landscape occupies approximately two acres of the 152 acre light station reservation which is on the south shore of Michigan Island, situated at the southeast 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 fifty years. The light station consists of the Old Michigan Island Lighthouse, Keepers Quarters, Assistant Keepers Quarters/Workshop, Power House, Shed, and Privy No. 1. Their adjacent structures and various connecting pathways all largely date to the period of development of the site and illustrate the architecture and evolving technologies of lighthouse design and operation.

The Michigan 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 signifi-cance 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. According to the Cultural Landscape Report, the Michigan Island Light Station landscape represents five distinct develop-ment eras: Pre Lighthouse (1852-1855), Early Lighthouse (1856-1928), Light Tower (1929-1938), Coast Guard and Automation (1939-1969), National Park Service (1970 to present).

Overall, the Michigan Island Light Station landscape retains integrity of location, design, setting, materi-als, 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.

### Property Level and CLI Numbers

Inventory Unit Name:	Michigan Island Light Station
Property Level:	Landscape
CLI Identification Number:	500364
Parent Landscape:	Michigan 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

As of September 2006, twenty-three cultural landscapes at Apostle Islands National Lakeshore had been identified as currently eligible or potentially eligible for the National Register of Historic Places. The Michigan Island Light Station is one of those landscapes.

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. Data entry was completed by Intern Jennifer Kelliher and Landscape Historian Alesha Hauser in FY10 based on the Draft Cultural Landscape Report.

Concurrence Status:

<b>Park Superintendent Concurrence:</b>	8/25/2010
<b>National Register Concurrence:</b>	Listed to the NRHP - 3/8/1977

National Register Concurrence Narrative:

The Michigan Island Light Station was listed on the National Register of Historic Places on March, 8, 1977, as part of a multiple property listing.

<b>Site Visit Conducted:</b>	6/22/2010
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### Chapter 3: Geographic Information & Location Map

State & County:

State:	Wisconsin
County:	Ashland County

Size (Acres): 2.00

Boundary Description:

The Michigan Island Light Station cultural landscape lies in Section 28, Township 51 North, Range 1 West, Ashland County, Wisconsin.

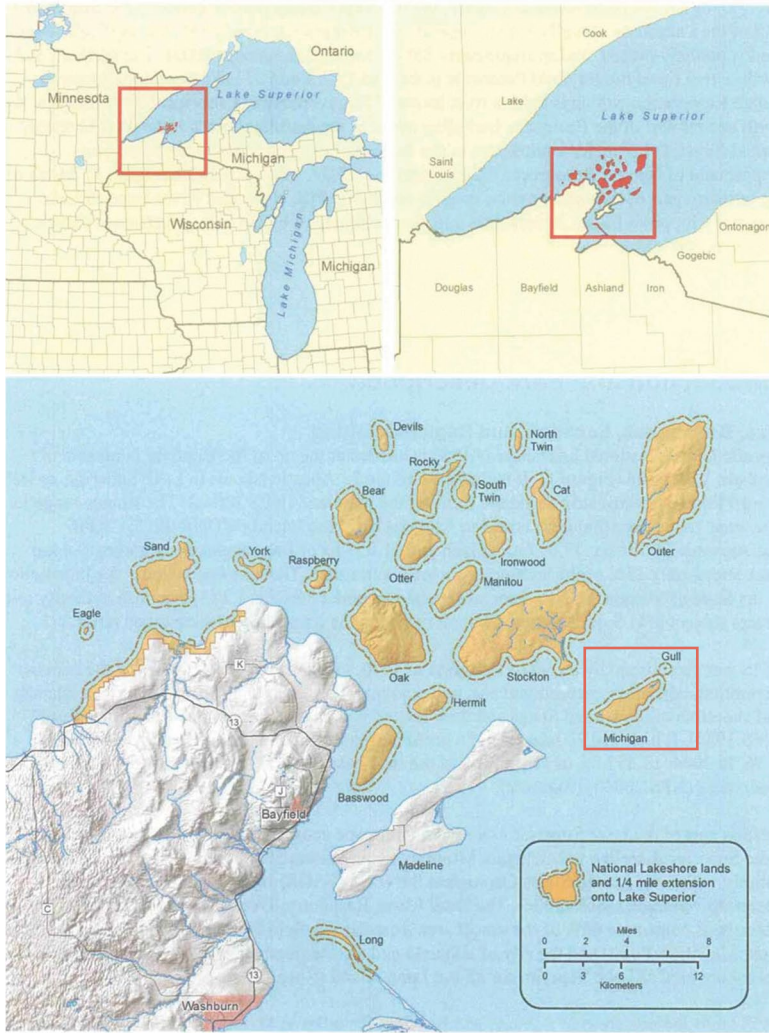
The 1977 National Register nomination states, “Site boundaries are a ridge above the lake, beginning at a point approximately 50 feet west of the edge of the newer keeper’s dwelling and ending approximately 100 feet east of the edge of the old lighthouse, and north to a depth of 225 feet from the ridge. The area involved is approximately two acres.”

An updated boundary and acreage of the cultural landscape will be determined in 2011 once the treatment plan for the landscape is finalized in the cultural landscape report.

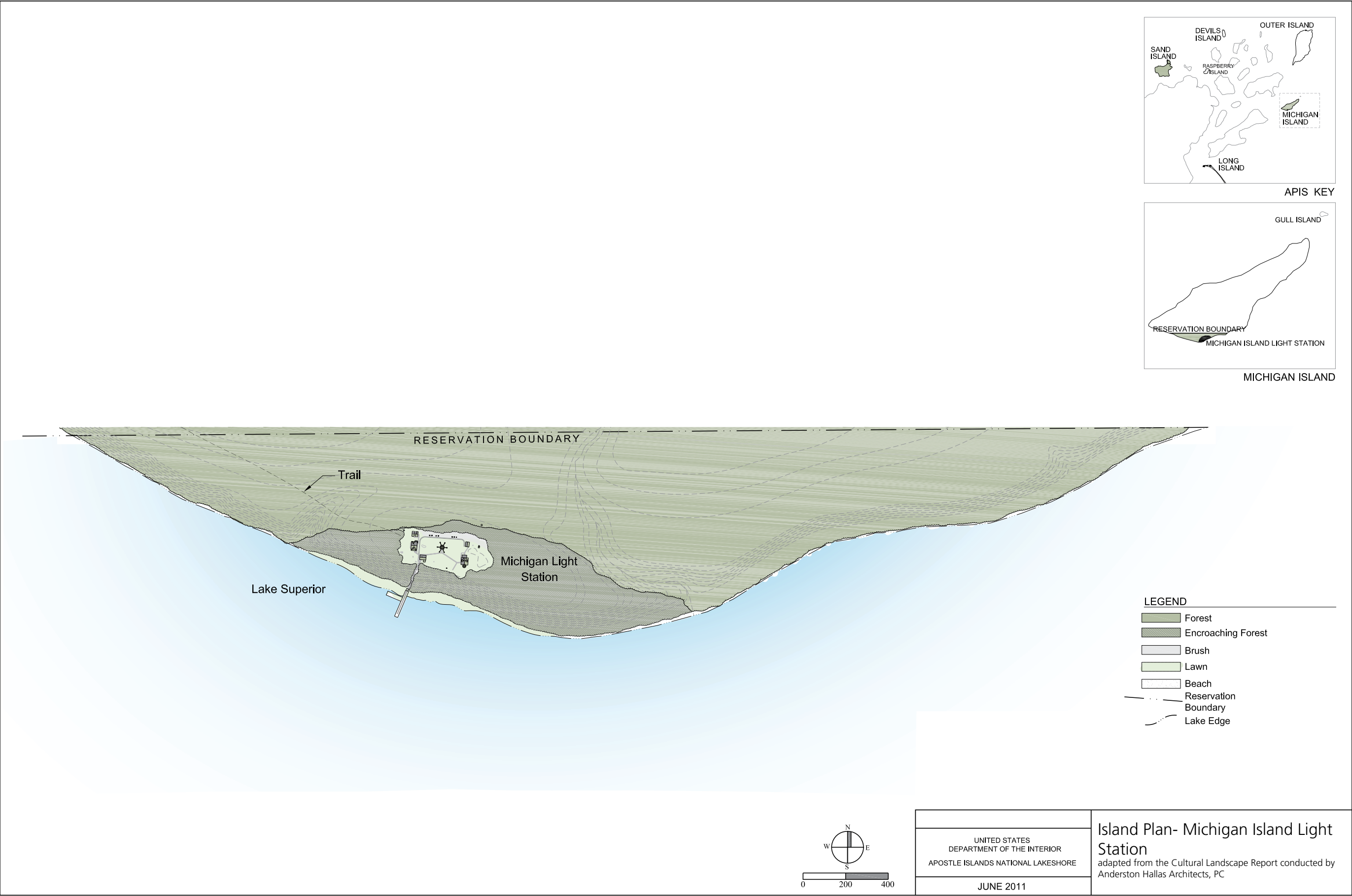
Boundary UTMs

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

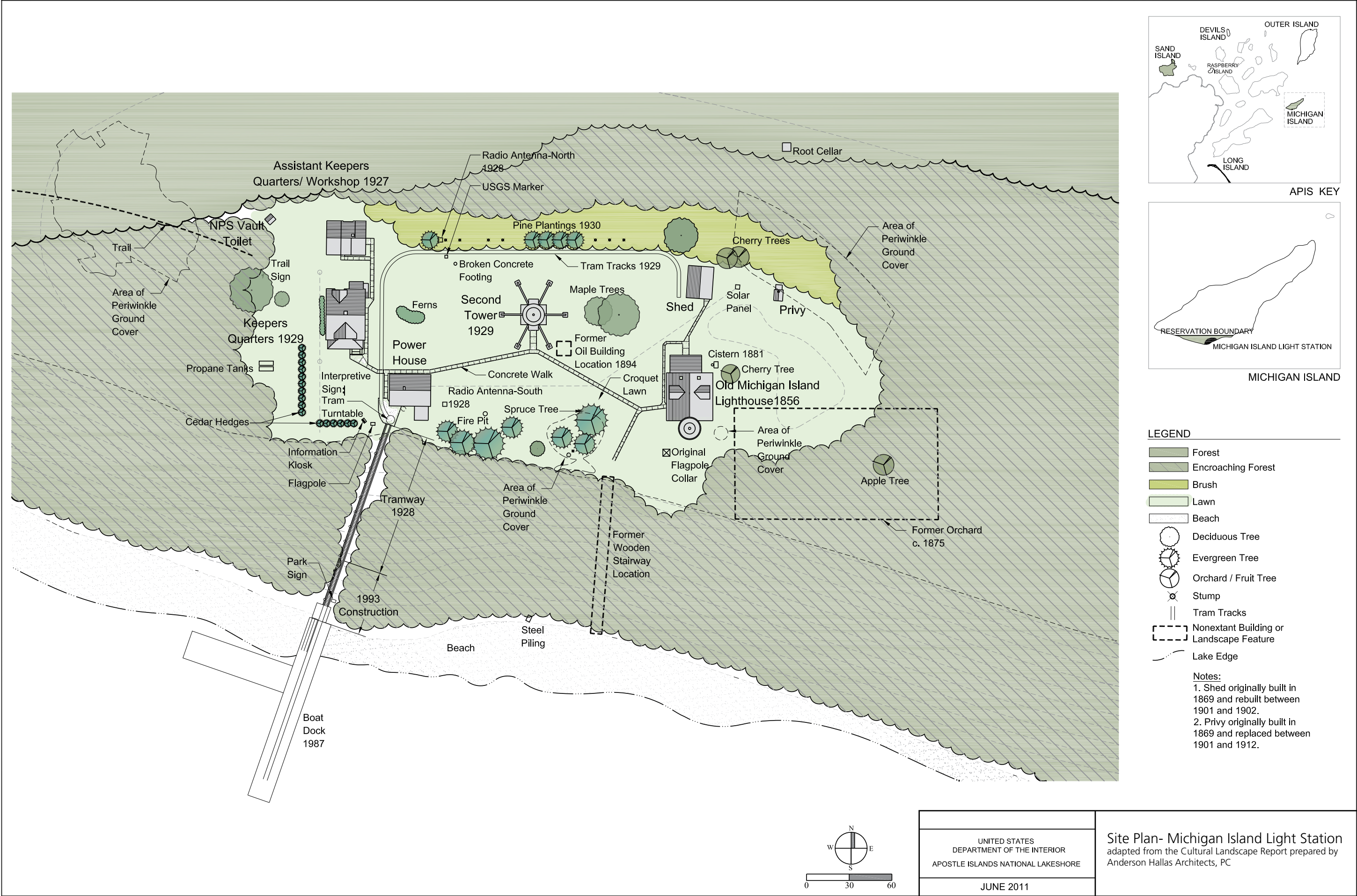
Map Point	UTM	Easting	Northing	Long/Lat
1	15	690667	5193965	-90.497986, 46.871876
2	15	690812	5193928	-90.496087, 46.871503
3	15	690792	5193855	-90.496399, 46.870852
4	15	690645	5193898	-90.498297, 46.871280



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









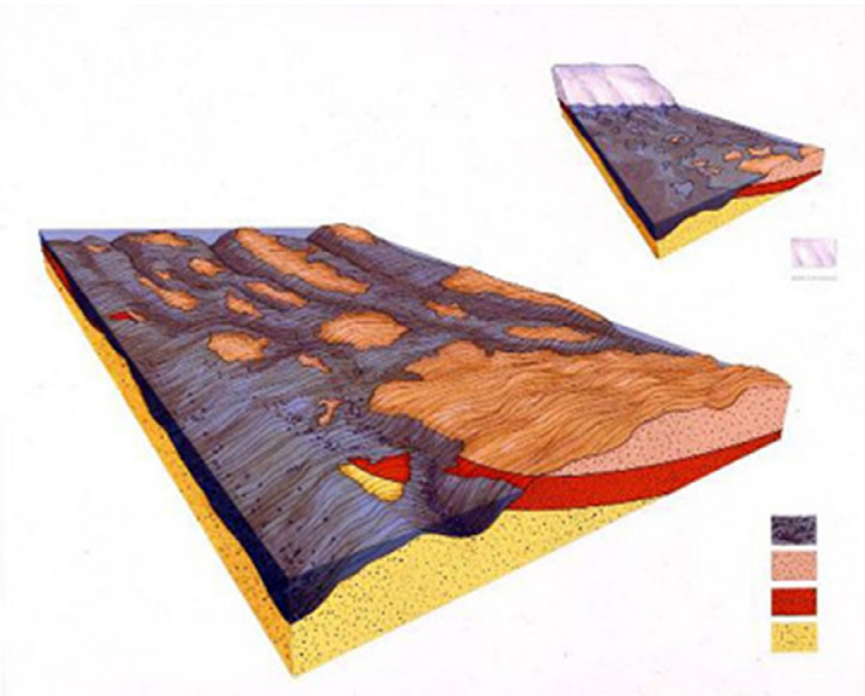
Physiographic Context: Regional Context

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 glaciations 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. 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.



Glacier in retreat 9,000 years ago, right, and present day strata, left. Yellow is Orienta Sandstone; rust is Devils Island Sandstone; gray is Glacial Drift; and beige is Chequamegon Sandstone (NPS commissioned art, Mobium Corp., Leon Bishop, 1985).

Cultural Context: Regional Context

The Michigan Island Light Station landscape reflects the culture and lifestyle of the keepers and the changing technology associated with navigational aids. The light station was continuously inhabited from 1856, when the station grounds began to develop, until 1943, when it was fully automated and the keeper position on the island was eliminated.

In 1970, the Apostle Island National Lakeshore was established. This is the beginning of the NPS Period that continues until 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.

Cultural Context: Regional Context

Michigan Island is located in LaPointe Township in Ashland County, Wisconsin. It is in Wisconsin's 7th District for the United States House of Representatives, District 25 for the Wisconsin State Senate, and District 74 for the Wisconsin State Assembly.

## Chapter 4: Management Information

### General Management Information

**Management Category:** Should be Preserved and Maintained

**Management Location Code:** 101401

**Management Category Explanatory Narrative:**

The Michigan Island Lighthouse landscape contributes to the significance of the cultural land-scape of Apostle Islands National Lakeshore. The landscape contains structures which reflect the economic history of Michigan Island.

### Agreements, Legal Interest, and Access

**Management Agreement:**

**Type of Agreement:** None

**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 essentially unrestricted. Access to the structures, such as the light tower, is contingent on park staffing.

### Adjacent Lands Information

**Do Adjacent Lands Contribute?** Yes

**Adjacent Lands Description:**

The island itself is considered as contributing to the landscape. The light station crew would have used and explored the resources of the entire island and not confined themselves to just the core lighthouse area. In addition, the light station is one of several within Apostle Islands National Lakeshore.

FMSS Location Numbers

26572	Michigan Is Light Sta First Tower and Keepers Qrts
26589	Michigan Is Light Sta Assist Keepers Apt/Workshop
347247	Michigan Island Light Station Concrete Sidewalks
26766	Michigan Island Light Station Light Keeper’s Quarters
26574	Michigan Island Light Station Power House
26577	Michigan Island Light Station Privy
26582	Michigan Island Light Station Second Tower
26585	Michigan Island Light Station Shed
347247	Michigan Island Light Station Steps/Tramway

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. The 1929-vintage buildings at Michigan Island, including the brick Power House, the brick Keepers Quarters, and the wood frame Assistant Keepers Quarters and Workshop would have been less than 50 years old at the time the nomination was prepared and were not deemed significant, probably because they had not yet met the National Register 50 year age standard. The Privy located behind and associated with the older (1857) lighthouse was described on the form but was not included in the list of significant features, perhaps as an oversight.

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.

National Register Explanatory Narrative, continued:

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 (CLR 2010).

National Register Eligibility

National Register Concurrence:	3/8/1977
Contributing/Individual:	Contributing
National Register Classification:	Multiple Property
Significance Level:	State
Period of Significance:	1852-1901
Historic Context Theme:	Changing Role of the U.S. in the World
Subtheme:	Commerce
Facet:	Commerce
Period of Significance:	1852-1901
Historic Context Theme:	Developing the American Economy
Subtheme:	Shipping and Transportation by Water
Facet:	Ships, Boats, Lighthouses, and Other Structures
Period of Significance:	1929
Historic Context Theme:	Changing Role of the U.S. in the World
Subtheme:	Commerce
Facet:	Commerce
Period of Significance:	1929
Historic Context Theme:	Developing the American Economy
Subtheme:	Shipping and Transportation by Water
Facet:	Ships, Boats, Lighthouses, and Other Structures

National Register Information (cont.)

Area of Significance:	Commerce Maritime History Transportation
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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

Statement of Significance:

The Michigan 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 Michigan Island Lighthouse is one of five included in a multiple property National Register nomination listed on March 8, 1977. The lights on Devils Island, Outer Island, Sand 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.



Statement of Significance, continued:

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 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 cultural landscape of the Apostle Islands Lighthouses remains unusually intact.

The Michigan 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.

## Chapter 6: Chronology and Physical History

### Cultural Landscape Type and Use

<b>Cultural Landscape type:</b>	Historic Site
<b>Current and Historic Use/Function:</b>	
<b>Primary Historic Function:</b>	Lighthouse
<b>Primary Current Use:</b>	Lighthouse
<b>Current and Historic Names:</b>	
<b>Name:</b>	<b>Type of Name:</b>
Michigan Island Lighthouse	Both Current and Historic

### Chronology

Year	Event	Annotation
CE 1852	Established	Congress authorized construction of first light-house in the Apostle Islands (Busch 2008).
CE 1856-1857	Built	Michigan Island Lighthouse constructed and placed into service in 1857 (Busch 2008).
CE 1869	Built	New summer kitchen and wood-shed added to the lighthouse quarters, new doors and windows were installed in the lighthouse quarters, privy and shed were constructed, and the new lantern was installed with 14’ diameter cast iron deck-plate and wood tower stair repaired (CLR 2010).
CE 1870	Planted	Orchard planted by Lighthouse Keeper Roswell Pendergast. Top of the bluff cleared of trees to increase visibility of Old Lighthouse (CLR 2010).
CE 1881	Built	Sidewalks laid from the lighthouse to the privy (CLR 2010).
CE 1894	Built	Brick oil house constructed west of the Old Lighthouse, concrete sidewalk constructed to oil house from Old Lighthouse, and area east of Old Lighthouse cleared, but not manicured (CLR 2010).

Michigan Island Light Station Apostle Islands National Lakeshore		
Chronology		
Year	Event	Annotation
CE 1894-1908	Expanded	Original manicured area adjacent to the Old Lighthouse was expanded, fences removed and replaced to include brick oil house in manicured areas (CLR 2010).
CE 1914	Built	Dormers added to the East and West Elevations of Lighthouse Quarters (1914 Michigan Island Elevations).
CE 1919	Moved	Second Light Tower moved from Pennsylvania to Michigan Island and stored (LCS, 2009).
CE 1927	Built	1 ½ story wood framed Assistant Keepers Quarters built (Busch 2008).
CE 1929	Built	Second Tower erected, Power House built, Tramway constructed up bank and through the grounds. Keepers Quarters and Assistant Keepers Quarters & Workshop completed (CLR 2010).
	Reconstructed	1869 Shed re-built (CLR 2010).
	Altered	Old Quarters altered to become the first Assistant Quarters (Busch 2008 & 1928 Drawing of Tramway Plan & Details).
CE 1930	Planted	Pine trees transplanted in a line on North Side of Tram Track by Lighthouse Keeper Edward Lane, adding to the formal enclosure & marking the manicured grounds (Michigan Island Keepers Log).
	Planted	Keeper Lane added ornamental plantings in small beds, a linear hedge in the southwest corner near the Keepers Quarters and foundation plantings along the Keepers Quarters (Historic Photos, c. 1930s, APIS Archives IID4C).
CE 1939	Military Operation	Bureau of Lighthouses eliminated, Coast Guard takes over management (Michigan Island Keepers Log).
CE 1943	Altered	Second Tower Light automated, keepers leave the island (Busch 2008).

Michigan Island Light Station Apostle Islands National Lakeshore		
Chronology		
Year	Event	Annotation
CE 1962-1970	Inhabited	Don Bliss privately occupied the Light Station. (Communication with S. Mackreth, 2010).
CE 1970	Established	Apostle Islands National Lakeshore established (Busch, 2008).
CE 1972	Altered	Second Tower’s Fresnel Lens replaced by automated light (LCS, 2009).
CE 1973	Removed	Lantern glass and brass astragals were removed (David Snyder, Project Proposal and Compliance Form 1994).
CE 1990	Altered	Bottom portion of the Tramway modified with the track, steps, and handrail extended to the new dock (NPS Drawing, Tramway Details, 1992, APIS Archives).
CE 1994	Restored	NPS re-installs lantern glass (LCS, 2009)
CE 2004	Rehabilitated	Rehabilitation of Keepers Quarters interior floors (Doug Pratt, HSPT Reports, 2009)

Cultural Landscape Physical History Narrative



Old Michigan Island Lighthouse, viewed from the west, c. 1904.  
(NPS APIS Archives)

**Old Michigan Island Lighthouse:**

A circuitous chain of events gave Michigan Island the first lighthouse in the Apostle Islands. On February 8, 1851, Wisconsin Senator Orasmus Cole requested an appropriation of \$5,000 to build a light house at La Pointe on Madeline Island. Congress approved the request, and the 1853 annual report of the Lighthouse Board noted that a survey and the related title work had been initiated for the site.

The District Inspector, Captain Lorenzo Sitgreaves, visited the site, observed the visibility limitations and nixed the La Pointe location in favor of a position on Long Island. The Long Island lighthouse (still called La Pointe) was included in a package of lighthouse buildings advertised for competitive bids.

The Milwaukee firm of Alanson Sweet, Luzerne Ransom, and Morgan E. Shinn won the contract to build eleven lighthouses at prices ranging from \$2,940 at Round Island to \$4,650

at Rock Harbor (Isle Royale). At \$4,500, the La Pointe tower was one of the more expensive (Copy of Specification Document in Apostle Islands Lakeshore Offices). The specifications for La Pointe matched those for Rock Harbor (extant), Portage River (replaced in 1870), Grand Island (replaced date unknown), and Point Iroquois (replaced in 1871).

In 1855 Shinn sold his partnership to a man named J.B. Smith and the firm’s name changed accordingly. Their construction foreman, Noel Brooks, arrived in 1856 to start construction only to find the local representative for the Lighthouse Board, Abraham Smolk, wanted the lighthouse constructed at a site on Michigan Island. The new location was about 17 miles farther out on the lake and on a construction site located more than 80 feet above the water. Although they protested the unexpected change, the contractors moved their workforce to Michigan Island and completed the project by October of 1856. The next year Smolk installed a 3.5 order Fresnel lens and hired a keeper. The light operated in 1857, but District Inspector Sitgreaves may not have been pleased with the new location and rejected the station because he ordered the contractors to build a station at the previously designated Long Island site.

The contractors reluctantly agreed to the demand for a new station and built a much less expensive wood frame facility at Long Island. Just who was in the right is not clear in the historical record, but in a complaint filed after the work was completed, the contractors noted their 38 man crew and their boats loaded with construction materials could not be paid to wait around until the matter was cleared up.

The original plans and the list of additional expenses claimed by the contractor illuminate our understanding of the construction of the Michigan Island lighthouse. The original specifications for all of the lighthouses called for a 45 foot high rubble stone tower with three feet thick base walls tapering to two feet thick at the top. The La Pointe and Rock Harbor lights were an exception. They were to be 65 feet high with walls tapering from four feet thick at the base to two feet at the top. All wall exteriors were “to be well

Cultural Landscape Physical History Narrative, continued

plastered with Roman Cement and white washed twice.” Six windows with twelve glass lights, each measuring 8 x 10 inches, and a 6 x 3 foot door would be used with dressed stone caps and sills for the doors and windows. The specifications also called for “A lightning rod of ½ inch copper, to extend four feet above the lantern and four feet into the ground”.

The contractors’ enumerated additional expenses at Michigan included the following:

- The tower ended up 7’5” taller than expected
- An additional sewer was installed to drain the cellar and the foundation of the tower.
- Additional cellar work included a cellar door, door frame with caps and sills in and outside, and walling up the cellar way.
- Another “add on” required underpinning the laundry room with stone and finishing it with lath and plaster.
- An additional 10 x 16 foot “wood house” was built beside the laundry. The “house” was “enclosed” and had a shingle roof.
- Instead of procuring stone on site, as had been anticipated for the Long Island location, “the stone had to be procured some ten miles away, loaded on a vessel and shipped” to the site.

The greatest construction challenge appeared to be the remote and exposed building site, which was located atop a bluff, far from any sources of building materials and subject to gale force winds. Freight and hoisting supplies to the site, and delays and challenges from bad weather, added to the expenses which ended up at \$12,064, almost \$7,600 more than the original estimated cost.

In spite of the twisting turn of events that twice changed the La Pointe lighthouse location, the completed building is quite similar to the Lighthouse Board’s specifications. The Michigan and Rock Harbor lighthouses are the two remaining lighthouses that represent the original specifications for the eleven lighthouses.

After one year of operation, the Michigan Light Station closed and the valuable Fresnel lens was removed. The lighthouse sat vacant for ten years until changes in shipping routes on the lake caused the Lighthouse Board to reactivate the light. On July 20, 1868, Congress approved the Board’s request for \$6,000 to refurbish the building and install a new lens. The repair crew faced a daunting task after ten years of fierce weather, no maintenance and scavengers. Lighthouse Board reports noted “All the doors and windows have since been carried off and hardly anything remains of the buildings but the bare walls.” In the 1869 restoration project, crews installed new doors and windows. The roof was “fitted with projecting eaves”, and re-shingled. A new kitchen, wood shed and privy were also constructed. In the tower the crew installed a new cast iron deck plate measuring 14 feet in diameter. The crew also repaired the original wooden stairway. (We could not locate information regarding when the wood stairway was replaced with metal, but news stories in 1889 referred to the metal stairway.) The work also included a new metal lantern manufactured by the Detroit Locomotive Works. The 3.5 order Fresnel lens, manufactured by the Henry Lepaute Company of France was installed in the tower which operated for the first time on September 15, 1869.



Fresnel Lens, in the Second Tower Lantern, 1972.  
(NPS APIS Archives)

Cultural Landscape Physical History Narrative, continued

The first lighthouse keeper, Roswell H. Pendergast, was hired on July 15 at \$560 per year. One of a small stream of hopeful settlers and homesteaders, Roswell and his wife, Helen, planted over a thousand specimens of trees and shrubs to determine what would thrive. The Pendergasts developed an orchard and raised nursery stock, specializing in apple trees. In 1872 they sold over \$3,000 of plants (trees and shrubs). Pendergast remained at Michigan Island until he resigned his post in June of 1874 and moved his family to Minneapolis. Historian Arnold Alanen noted that Pendergast’s landscape legacy remained at the light station for many decades, “. . .as evidenced by several large crabapple trees, a few cherry trees and a pear tree.” Ed Lane, the lighthouse keeper from 1902 to 1937, expanded Pendergast’s flower and vegetable gardens, and added “. . .more cherry trees, several lilac bushes, a cedar hedge and a croquet green.”

The station employed a keeper and an assistant keeper, who must have shared the living quarters. The close living arrangement might have contributed to the frequent turnover of assistant keepers until Mrs. Pendergast took over the job in 1872 and held it until the family left in 1874. The next keeper and assistant keeper were also a husband and wife team, Pliny and Matilda Rumrill, who remained until 1883. The keepers, assistant keepers and their families shared the quarters after that time with some turnover in position until Keeper Edward Lane began a term in 1902 that continued into 1937.

The keepers experienced some excitement resulting from the attached light tower. In 1889 a lightning bolt hit the tower and the electrical current flowed down the metal spiral staircase and out onto the concrete. A separate account told of the electricity flowing down the tower from a bolt of lightning and tearing the keeper’s bed to pieces.

Periodic improvements to the station were noted in the Lighthouse Board correspondence and reports. The District Engineer wrote in 1881 that sidewalks were laid that year to connect the house to the privy. A new 5 x 8 x 8 foot cistern was also installed that year. In 1889 the Lighthouse Board report recognized the need for an oil house. By 1894 an oil house had been constructed (just south of the cast iron skeletal light tower), but was torn down on August 30, 1929, as part of changes to the site when the skeletal tower was installed.

Other minor changes occurred. Leaks in the lantern roof required a new tin hood, and the barn (Shed, LCS ID 006373) was built or rebuilt in 1901 or 1902. Plans on file at Apostle Islands National Lakeshore offices show dormers added to the upstairs in 1914.

Although small in size, one of the more important buildings on the island was the privy (LCS ID 006385). A two holer, this vital feature was built in Detroit complete with a casement window and delivered by the Amaranth lighthouse tender ship some time between 1901 and 1912. Many years later the arrival of the privy was recalled with glee by the lighthouse keeper’s daughter who lived on the island between 1901 and 1912.

**Dock:**

The current dock at Michigan Island is a modern installation. The first dock was located about 45 feet to the east and had steps that climbed the slope to a point fairly close to the Old Michigan Island Lighthouse. The constant barrage of wind, water and ice required many repairs. In 1890 the 446 foot wooden walk and stairway was rebuilt, followed by two rebuilding projects of the dock in 1897 and 1902.

The current dock location was in use by 1929. The dock was rebuilt in 1987, replacing a timber crib structure. Additional work in 1993 further altered the 1987 dock and extended the stair and tram to the dock.

Cultural Landscape Physical History Narrative, continued

**Nearby Activity:**

After World War I, the increased demand and prices for lumber justified logging on remote Michigan Island. The Schroeder Lumber Company purchased much of the island, excluding the lighthouse reserve, and logged from 1919 to 1923. The operation included a railroad across the island and a lumber camp at the southwestern end. Crews worked in the summer and transferred to other islands in the winter. Schroeder moved the railroad to Outer Island when logging finished in 1923.

**The Second Tower:**

The demand for a taller light tower and for a fog station increased with the ever growing ship traffic. The 65 foot tall light tower on Michigan Island was not visible to the lake traffic to the north. The local Bayfield County Press expressed this complaint in a 1908 article, reinforced by a December 4, 1908 report from Charles Keller, the Lighthouse District Engineer, recommending a light and fog signal at a new location on the island.

The Lighthouse Board deliberated over placing a tower on nearby Gull Island, and eventually settled on a plan to build a new station with multiple buildings on Michigan Island. The estimated cost was \$100,000. The Board embarked on a twenty year campaign of annual requests of Congress to appropriate enough money for a new station. In the midst of their crusade, in 1918, the Lighthouse Board acquired a 112 foot tall cast iron skeletal tower from Schooner Ledge on the Delaware River. The tower, which had been first constructed in 1880 and came from the Phoenix Iron Company of Philadelphia, was disassembled and stored at Michigan Island in 1919.

The Lighthouse Board modified the Michigan Island plan by eliminating a proposed diaphone fog signal and installing a combination of navigational aids including the Schooner Ledge tower, a new radio beacon on Michigan Island and an unmanned acetylene powered light on Gull Island. The recycled 112 foot tall Schooner Ledge tower would be the tallest in the Apostle Islands. The revised estimated costs came to \$85,000 for the light tower, beacons and support buildings for the light station.

Congress approved the revised plan and construction began in 1928. The project included the brick two story keepers quarters (LCS ID 006389), a wood frame two story building with storage and a bathroom on the first floor and a residence on the second floor (Assistant Keepers Quarters and Workshop; LCS ID 006388), a wood frame boat house to replace the old boat house and a dock/tram installation and extension. The plans also included remodeling of the interior of the old lighthouse, and a new brick powerhouse (LCS ID 006386) to accommodate



Second Tower, 1974. Behind, the Keepers Quarters. (NPS APIS Archives)



Cultural Landscape Physical History Narrative, continued

generators, fuel and water storage, an electric hoist mechanism and machinery for the radio beacon. The estimated costs for the project came in at \$55,000. The reported actual costs were \$61,041.



Keepers Quarters screened-in front porch, c. 1939. (NPS APIS Archives)

In May and June of 1928, Light Keeper Ed Lane reported in his keeper’s logs that “Mr. Bellamy” and his crew surveyed for the tram and new tower foundation. They tested the visibility of the proposed tower site by floating helium filled balloons from the tower site and viewing them from the water.

In September, 1928, the Amaranth made multiple trips to the island, delivering construction supplies, including large quantities of bricks and sacks of cement. The tram was installed on the October 1. The concrete mixer started laying concrete. Crew members completed the foundation of the power house by October 15 and continued to lay bricks in October, until wintry weather ended the 1928 construction season and forced them off the island.

The crew returned to Michigan Island on May 11, 1929, along with more supplies from the Amaranth. The Bayfield County Press closely followed the work and reported in an article on June 27, 1929, that local mason Hans Erickson was in charge of the brick work and that Ed Lough of Detroit was the construction superintendent. The keeper’s log entries clearly showed his bias, as many of the mundane construction details were omitted, while the arrival of the new lantern for the lighthouse merited an entry in the log on August 26, 1929.

On September 23, 1929, the log noted a team of horses had landed on the island and that the keeper worked on the “new dwelling”. The keeper’s family moved into their new brick home (the Keepers Quarters, LCS ID 006389) on September 27, and the keeper kept busy varnishing the floors. The electricians arrived to wire the house on October 6.

On October 29, 1929, Keeper Lane excitedly recorded the completion of the new light tower in his log. The 3.5 order Fresnel lens in the old light tower had been removed and installed in the new tower. “Started up new tower at sunset”, he wrote. “Everything in good shape but station looked odd, the old tower being dark for the first time in navigation in 72 years. NEW TOWER IN COMMISSION TONIGHT.” The new 24,000 candlepower electric lamp (bulb), the first electric light in the Apostle Island lighthouses, placed on the much taller structure increased the light’s visibility range to 22 miles.

The Gull Island Station was lit on September 30, 1929. The Michigan Island radio beacon went into commission at 11pm on November 3. The next two years saw some adjustments to the new construction. The light keeper’s logs have numerous entries about problems and solutions for the diesel engines (a Kohler and a Cummings) in the power house. Between the mechanical break downs, life went on at the station. The keeper planted pine trees on the north side of the track on October 9, 1930. On October 24 he set up the new oil stove in the keepers quarters kitchen and was pleased with the results. The stove is still there and a similar oil stove is also in the old lighthouse and in the wood frame assistant keepers quarters/workshop.

Cultural Landscape Physical History Narrative, continued

A 1928 drawing on file at the Apostle Islands National Lakeshore offices has hand written amendments noting the radio beacon tower was moved in 1931 from a location north of the tram tracks to a location just east of the power house, and a second tower was placed near the old lighthouse. The bases of these two beacon towers are still on the site.

The Gull Island Light Station, an automated acetylene powered light with a carbon dioxide fog signal, was also under the care of the Michigan Island lighthouse keeper, who periodically checked on Gull Island and replaced the gas tanks.

Electrification and automation reduced the workload. In 1939, the United States Coast Guard took over lighthouse operations in the Apostle Islands and throughout the country and Michigan Island became a one man station. In 1943 the light was automated and the keeper left the island. A Coast Guard crew based on Devils Island monitored the Michigan Island light. Kitchen cabinets and a sink were scavenged from one of the Michigan Island residences and show up on the 1946 work plans for the second floor of the keeper’s quarters at Devils Island. The Fresnel lens was removed in 1972 and is now on display at the Apostle Islands National Lakeshore Visitors Center. A DCB 224 aerobeacon replaced the Fresnel lens. A 300mm acrylic optic with a solar powered lamp is now in use (CLR 2010).

## Chapter 7: Analysis and Evaluation of Integrity

### Summary:

The Michigan Island Light Station cultural landscape exhibits the following landscape characteristics: spatial organization, topography, vegetation, circulation networks, buildings and structures, views and vistas, and small-scale features. The site is characterized as a navigational aid illustrating the evolution of lighthouse design and construction in response to the changing requirements of Great Lakes shipping as the volume of traffic increased, routes changed, and the size and the speed of ships increased.

The spatial composition of the Light Station Reservation has significantly changed from the island’s early history as an aid to navigation. Historic changes related to the addition of buildings, structures, and other small scale features that were necessary for the continual operation of the site as a light station. Once the island no longer operated as a light station with a light keeper, the forest vegetation was not cleared regularly. The result is a cleared area of the reservation that is significantly smaller than the historic clearing. Today, the encroachment of the forest is diminishing the integrity of the cultural landscape. The organization of the landscape has integrity in the aspects of location, setting, material, workmanship, and association. Integrity is diminished in design, as the clearing begins to be encroached with vegetation.

The topography of the reservation generally remains as it has been since development of the light station with one exception. Historic drawings and photos indicate that the shoreline zone has become significantly narrower in width. Whether this is due to natural forces, man-made developments (boat dock) or a combination is unknown. The topography of the reservation and light station grounds contributes to the cultural landscape.

The extent of views and vistas to and from Michigan Island has been reduced due to the encroachment of forest vegetation resulting from a reduction in vegetation clearing on the reservation. Views from Lake Superior to the Old Lighthouse and Light Tower are greatly obscured by vegetation. Today, the Old Lighthouse is only visible from Lake Superior where recent clearing activities have opened up narrow windows. The Light Tower remains visible above the trees due to its height, reducing the navigational need for clearing of the forest. Views from the light station grounds and Old Lighthouse are also obscured due to encroaching and maturing vegetation. Views from the Light Tower over Lake Superior and the north portion of the Island remain intact due to the height of the tower. The reduction in views is diminishing the integrity of setting, feeling, and association. Views and vistas are an important contributing feature to the cultural landscape of the Michigan Island Light Station.

Circulation on Michigan Island has remained similar to the original access and basic routes that were established during the Early Lighthouse and Light Tower Periods. Primary transit to the island was historically, and continues to be, by boat, landing on the boat dock on the island’s south side. Pedestrian circulation from the shore to the Light Station was originally along a wooden stairway leading to the Old Michigan Island Lighthouse. During the Light Tower Period a new point of access was established with a new boat dock, tramway and staircase which were built west of the original wooden staircase and boat dock. This change brought a more efficient method of transporting goods up to the light station and reoriented the main pedestrian route to the new Keepers Quarters rather than the Old Michigan Island Lighthouse. The historic circulation system, consisting of the primary access at the boat dock, the inclined tramway, the tram tracks and the concrete walks on the light station grounds contribute to the island’s significance as a cultural landscape and retains integrity in aspects of location, design, and setting. The 1990s hiking trail does not detract from the cultural landscape.

The extant small-scale features that date from the station’s period of significance retain enough integrity to be contributing elements. The addition of concrete walks, radio antennae, flagpole, cistern and steel piling relate to the evolution of the light station grounds and contribute to the significance of the cultural

Summary, continued:

landscape. In addition to these features there are signs, a solar panel, and other site features that have been added to the site outside of the early historic periods, which do not detract from the island’s cultural landscape.

The relationship between the extents of cleared area to forest vegetation on the reservation has changed significantly since the early historic periods. At one time the cleared area was estimated to have covered over thirty acres of the reservation. Today the cleared area is slightly over three acres. The extensive encroachment of forest vegetation diminishes the integrity of the cultural landscape. There were ornamental plantings on the light house grounds such as, daylilies, orchards and hedges. Because of poor maintenance and the age of the plantings, they are in poor condition. The encroaching forest and poor condition of ornamental plantings diminish the integrity of design, location, materials, workmanship, association, and feeling.

The extant historic period buildings and structures retain integrity of location, design, setting, workmanship, feeling and association. The Old Michigan Island Lighthouse is in fair condition on the exterior, but its interior is deteriorating. The original interior of the Keepers Quarters are in remarkably good condition, with few instances of water infiltration. The lighthouse has maintained a good condition of its historic materials. The second tower is also in good condition. 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 (CLR 2010).

Aspects of Integrity:

- Location
- Design
- Setting
- Materials
- Workmanship
- Feeling
- Association

Landscape Characteristics:

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

Topography: Landscape Characteristics

The light station grounds on Michigan Island are located on a bluff, rising approximately 60 feet above Lake Superior. The overall island topography consists of a landscape of gently rolling, forested hills ending in steep banks that slope down to rocky or sandy beaches. The light station grounds are primarily level with several small drainages leading from the Island interior to the bluff edge and shoreline. The shoreline adjacent to the light station is primarily a narrow rocky and sandy beach fluctuating in width. The topography of the light station and reservation is in good condition.

The topography of the reservation generally remains as it has been since development of the light station with one exception. Historic drawings and photos indicate that the shoreline zone has become significantly narrower in width. Whether this is due to natural forces, man-made developments (boat dock) or a combination is unknown. The topography of the reservation and light station grounds is a contributing feature of the cultural landscape (CLR 2010).

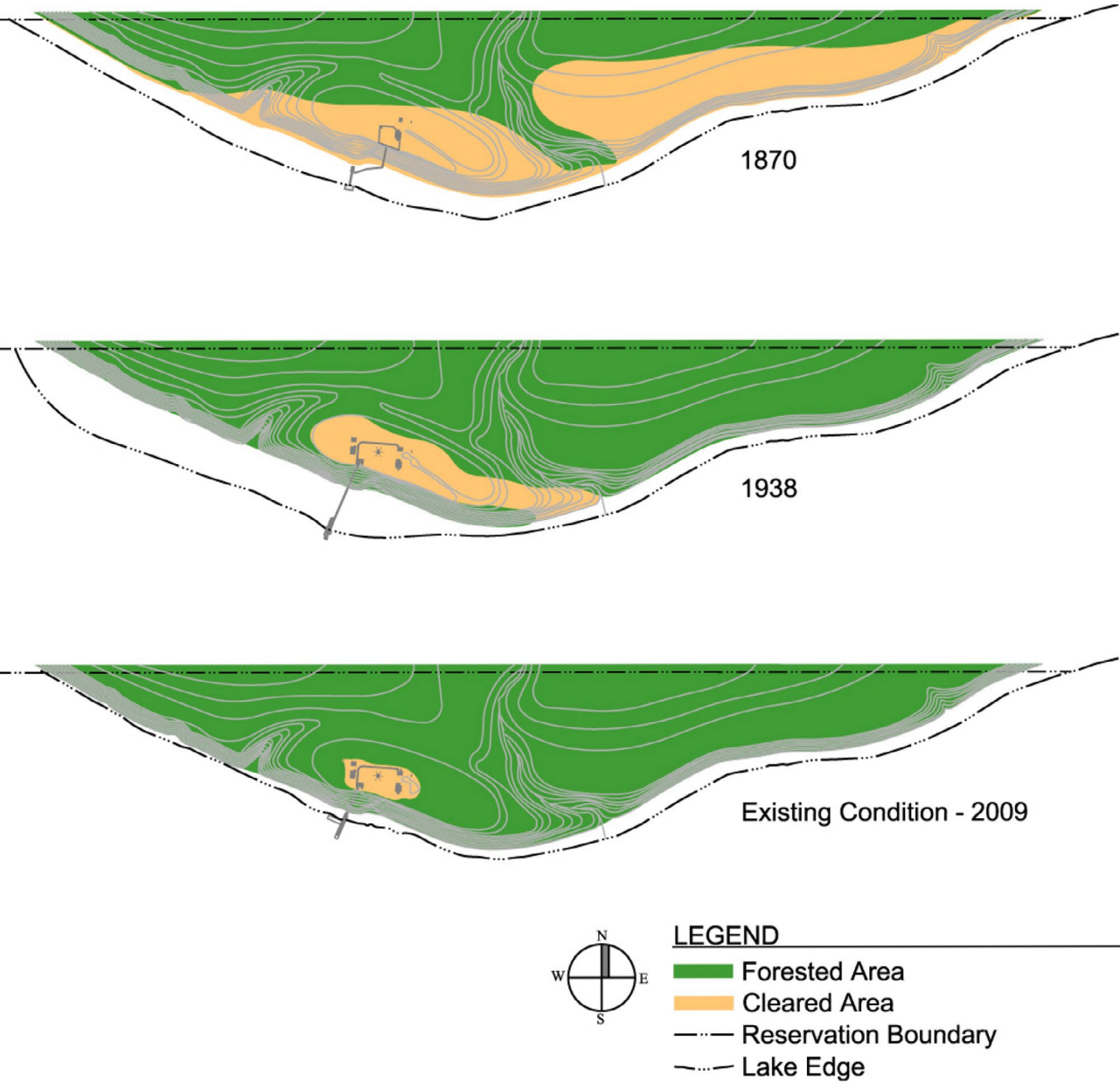
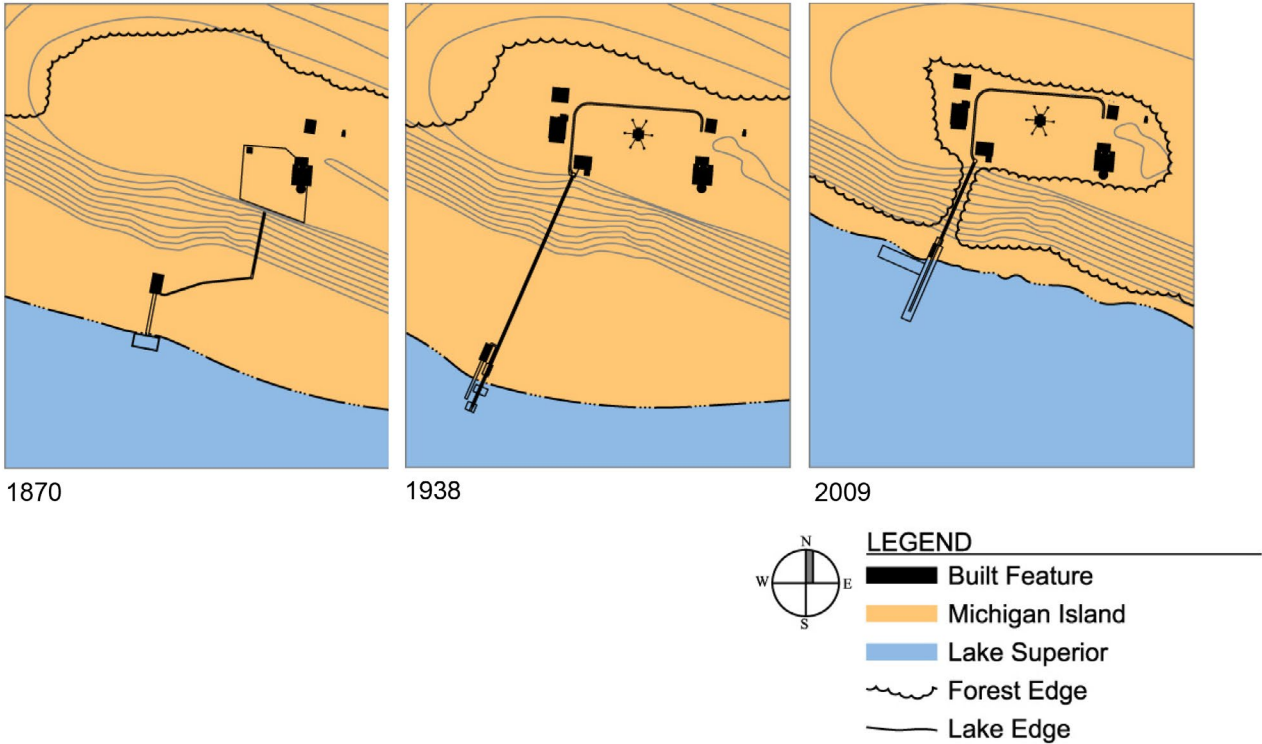




Spatial Organization: Landscape Characteristics

The light station at Michigan Island is located on the south side of the island, elevated on the bluff above the water’s edge. The light station grounds are enclosed on three sides by forest and delineated on the south side by the steep bluff slope to the water. The grounds are arranged in a fairly formal, rectangular shape, with the buildings primarily defining the interior space. The structures and tram track reinforce this space to the east of Old Michigan Island Lighthouse. Centered in the grounds is the dominant element, the tall, steel Light Tower. The overall feeling is one of enclosure, where the developed landscape is surrounded by the encroaching forest. The spatial organization of the site is in fair condition. The spatial composition of the light station grounds remains intact from the Light Tower Period (1929-1938) and is in good condition. The spatial organization of the light station is a contributing feature of the cultural landscape.

The spatial composition of the Light Station Reservation has significantly changed from the island’s early history as an aid to navigation. Historic changes related to the addition of buildings, structures, and other small scale features that were necessary for the continual operation of the site as a light station. Once the island no longer operated as a light station with a light keeper, the forest vegetation was not cleared regularly. The result is a cleared area of the reservation that is significantly smaller than the historic clearing. Today, the encroachment of the forest is diminishing the integrity of the cultural landscape (CLR 2010).







View from water to Old Michigan Island Lighthouse (and Light Tower), showing the forest growth. Top Image, ca. 1904. Bottom Image, 2010 (NPS/APIS Archives)

### Views and Vistas: Landscape Characteristics

Notable views to Michigan Island include those of the Light Tower and Old Michigan Island Lighthouse from passing and approaching ships and pleasure boats in Lake Superior. Notable views from the island include those to the south over Lake Superior from the Light Station grounds and vistas from the top of the Light Tower and Old Michigan Island Lighthouse across the island and outward over the water. Selective clearing projects have been undertaken recently to open views to and from the light station. Views and vistas are generally in fair condition.

The extent of views and vistas to and from the light station grounds has been reduced due to the encroachment of forest vegetation resulting from a reduction in vegetation clearing on the reservation. Views from Lake Superior to the Old Lighthouse and Light Tower are greatly obscured by vegetation. A review of historic photographs indicates that the Old Lighthouse was clearly visible from the water. Today, the Old Lighthouse is only visible from Lake Superior where recent clearing activities have opened up narrow windows. The Light Tower remains visible above the trees due to its height, reducing the navigational need for clearing of the forest. Views from the light station grounds and Old Lighthouse are also obscured due to encroaching and maturing vegetation. Views from the Light Tower over Lake Superior and the north portion of the Island remain intact due to the height of the tower. (CLR 2010)



View from the Lighthouse to the boat dock below. (NPS 2010)

Circulation: Landscape Characteristics

Circulation on Michigan Island is focused on the boat dock and light station grounds. Access to the island is water based and the boat dock is the only formal boat landing on the island. Pedestrian circulation on the reservation and island is solely concrete walks and foot trails originating at the light station grounds. A trail originates near the Keepers Quarters and leads west, through the forest across the reservation to a camp-site, sand spit and lagoon on the west side of the island.

Circulation consists of a boat dock, tramway, tram tracks and concrete walks. The inclined, concrete tram-way connects the boat dock to the light station grounds. The tram tracks follow and define the northern edge to the interior manicured grounds. The tramway provides pedestrian circulation as well as a means of transporting supplies to the top of the bluff from Lake Superior. Concrete walks connect the Light Tower, Old Lighthouse, buildings and small scale features.

In general, the circulation at the light station is in good condition.

Circulation on Michigan Island has remained similar to the original access and basic routes that were established during the Early Lighthouse and Light Tower Periods. Primary transit to the island was historically, and continues to be by boat, landing on the boat dock on the island’s south side. Pedestrian circulation from the shore to the Light Station was originally along a wooden stairway leading to the Old Michigan Island Lighthouse. During the Light Tower Period a new point of access was established with a new boat dock, tramway and staircase which were built west of the original wooden staircase and boat dock. This change brought a more efficient method of transporting goods up to the light station and reoriented the main pedestrian route to the new Keepers Quarters rather than the Old Michigan Island Lighthouse. The tram tracks were also laid at this time and used for moving goods and fuel on the light station grounds. Concrete walks were installed in both the Early Lighthouse Period and Light Tower Period, many of which remain today. Typical to the Apostle Islands Light Stations, the concrete walks were narrow in width; placed in straight lines connecting buildings and other site features; and were finished with a rough texture. Concrete walks linked the Old Michigan Island Lighthouse with the Shed, wooden staircase and eventually the Oil Building. The concrete walks in some cases were preceded by wooden plank walks, laid on the ground surface. Later concrete walks were built to connect the Power House, Keepers Quarters, Assistant Keepers Quarters and Light Tower. In the 1990s a hiking trail was built leading from the light station westward to the southwest corner of the island.

Today, the historic circulation system, consisting of the primary access at the boat dock, the inclined tram-way, the tram tracks and the concrete walks on the light station grounds contribute to the island’s significance as a cultural landscape. The 1990s hiking trail does not detract from the cultural landscape.

Buildings and Structures: Landscape Characteristics

The Michigan Island Light Station buildings include: the Old Michigan Island Lighthouse, Second Tower, Keepers Quarters, Assistant Keepers Quarters/Workshop, Power House, Shed, and Privy.

The first Michigan Island lighthouse (LCS 006 371) is reminiscent of the early nineteenth century light-houses of the Atlantic coast. The structure was completed in the autumn of 1856, and the lighthouse began operation at the start of the 1857 navigation season. The station was taken out of service after one year of operation, and abandoned until 1869, when the structure was refurbished and reoccupied.

The conical tower and attached 1 ½ story keeper’s dwelling are simple and unornamented. Both are built of rubble stone masonry, although the two chimneys on the house are brick. The roof originally had wood shingles but now consists of asbestos shingles circa 1929. The keeper’s dwelling is a Cape Cod single gable house with one dormer on the north and south sides. The dormers were added in 1914 to provide additional light to the second floor, described in the 1856 plans as the attic. At the north end of the dwelling is a small, shed roofed addition, described in the 1856 contractors’ plans as a laundry, and in later descriptions as a summer kitchen.

Inside the light tower is a circular metal stairway with three arched windows. At the top is a railed exterior walkway with a metal deck. In 1869, the tower was fitted with a metal lantern manufactured by the Detroit Locomotive Works. The tower stands approximately 65 feet tall and has a focal plane elevation 124 feet above Lake Superior (726 MSL).

The second light tower (LCS 006372), a metal skeletal tower with cylindrical stairway, was built in 1880 as a rear range light for Schooner’s Ledge south of Philadelphia on the Delaware River. When dredging changed the course of the river’s navigable channel in 1916 the tower was disassembled. In 1919 the pieces were brought to Michigan Island to await reassembly.

A small, neoclassical cast iron building, previously used for storing batteries for the automated light, is located within the hexagonal framework at the base of the tower. A round shaft containing a circular metal stairway with 139 steps rises out of the center of this building. There is a small watch room at the top and a walkway around the exterior of the light housing above. The tower windows have rounded arch sashes to match those in the battery building. The Coast Guard removed the glass from the helical bar lantern when the modern optic was installed in 1972. In 1994 the National Park Service replaced the glass in an effort to retard rusting in the lantern.

The original 3.5 order Fresnel lens is now on display at the Apostle Islands National Lakeshore Visitors Center in Bayfield. The focal plane of the light is 160 feet above the lake (762 MSL), making the tower the tallest in the Apostle Islands.

The Keepers Quarters (LCS 066389) has a brick foundation and walls, a gable roof, central brick chimney, and an open front porch with a 1/2 hip roof along the south (main) facade. The porch has a brick balustrade capped with sandstone. There are gabled wall dormers on the south and north elevations, a small shed roofed enclosed entry porch with lap siding and corner boards on the northeast corner, and a full basement. The interior has hardwood floors, refinished in 2004, and French doors. The main floor was repaired in 2004, removing and replacing rotten floor joists and subflooring.

The Assistant Keepers Quarters/Workshop (LCS 006388) is a wood frame, 1 ½ story building with a single gable roof and board and batten exterior. It is located directly behind the new keeper’s dwelling. The interior is beaded board placed horizontally. Historically, this building served as living quarters for an assistant keeper. The National Park Service currently uses the structure as a maintenance and storage shed.

Buildings and Structures: Landscape Characteristics, continued

The Power House (LCS 006386) was constructed in 1929 to house a fog signal, although as events transpired, an early radio beacon was installed in place of a conventional fog signal. The building has a brick foundation and walls, and an asphalt composition shingled gable roof. Windows are eight pane metal casements. The building has stone lintels and sills. Floors are concrete. There is a full basement and a brick bulkhead capped with a concrete slab. The brick fog signal building is located near the top of the stairs leading up from the dock. The building now houses the motor used to power the tram, which carries supplies up from the boat landing.

The shed (LCS 006373) is a one story wood frame building with a gable roof finished with wood shingles, vertical board and batten walls, a panel door on the right side of south facade, boxed rafter tails, a six-over-one double hung window in the south gable end, and a vertical board door in east side of north gable.

The privy (LCS 006385) is a white clapboard two holer with a green metal tile roof placed on a concrete vault and pier foundation. It has boxed rafter tails, a wooden floor and platform, and horizontal bead board on the interior. The vault extends north and provides clean out access through a wooden shed cover.

A contemporary wood frame privy and vault were placed on the property by the NPS. This privy is of modern construction and is non-contributing to the cultural landscape.

The structures on Michigan Island provide a human scale to the island and convey important history and use of the light station. The structures include the boat dock, tramway, tram turntable and tram tracks.

The concrete boat dock extends from the shore in an ‘L’ shape to the south (140 feet) and west (70 feet) of the shore. The top of the boat dock has tram tracks set into the surface, which are connected to the tramway. Due to the nature and location of the boat dock this dock and its predecessors have frequently been damaged or destroyed by the harsh wave and ice action of Lake Superior. The current boat dock location has been in place since 1929, but the actual dock has been modified, repaired and rebuilt several times.

The original boat dock was built about fifty feet to the east of the current boat dock and was connected to a wooden staircase leading up to the Old Lighthouse. Historic photographs indicate that there was a small Boathouse present on the shoreline during the Early Lighthouse Period. The general location of the existing boat dock appears to be consistent with the 1929 location but the ‘L’ shaped configuration is not consistent with the historic boat docks. The current boat dock does not contribute to the cultural landscape.

The concrete, inclined tramway (LCS 006387) is 158 feet in length and connects the boat dock to the bluff, rising approximately sixty feet above the shoreline. The tramway consists of tram tracks, steps formed into the concrete between the tracks and a steel pipe railing on one side. The tramway is built of cast in place, reinforced concrete and is supported by fifteen concrete footings spaced evenly along the length of the tramway. The bottom section (34 feet) was a modification to the original construction. The tramway is four feet wide with tracks spaced at three feet apart. The steps are 28 inches wide and centered in the structure. The steps have treads of 14” and 123 risers that vary between 4.5” and 6”. The steel pipe railing is painted and attached to the west side of the tramway. The tramway is in good condition and retains all of its original elements including: concrete footings, steel handrail, and tram tracks.

The tramway was built in 1929 and was a major component in reshaping the cultural landscape of the light station. The lower was modified in 1979, replacing the elevated wooden landing platform and stairs and connecting the tramway to the new boat dock. The tracks were extended onto the boat dock at this time. The reconstruction was done using the existing footings and compatible materials in a form similar to the original construction. The tramway presents several issues with regard to ABAAG and code compliance,

Buildings and Structures: Landscape Characteristics, continued

including: width of steps; handrail location with regard to step location; lack of handrail on the east side of the tramway. The tramway is considered a contributing feature of the historic landscape.

At the top of the tramway is a manufactured, steel turntable used to turn carts and connect them to the tracks that lead to the Light Station grounds. The turntable is approximately 6 feet in diameter and is covered with a large steel plate stamped ‘KOPPEL CO PF 79, KOPPEL, PA’. The turntable is in good condition.

The tram turntable was built in 1929 as part of the tram system. The turntable is a contributing feature to the cultural landscape.

The tram tracks on the site lead from the Power House tramway turntable north along the Keepers Quarters then turning east and connecting to the Shed behind the Old Michigan Island Lighthouse. The tracks are steel, spaced at a 36 inch width and set on timbers. The tracks as a system are intact, although portions of the track have been damaged and bent but remain in place. The wooden timbers beneath the tracks are extant but primarily in poor condition due to weathering. This has led to, in places, an encroachment of vegetation into the space between the tracks, obscuring the timbers beneath.

The tram tracks were built in 1929 at the beginning of the Light Tower Period as part of the tram system. The tracks assist in defining the northern edge of the Light Station grounds and are a feature common to other islands in the Study Area. (CLR 2010)



Buildings and Structures: Landscape Characteristics, continued

Feature:	First Light Tower and Keepers Quarters
Contributing?	Yes
LCS Structure Name:	Michigan Is Light Sta First Tower and Keepers Qtrs
LCS ID Number	6371
LCS Historic Structure Number:	23103A
Locational Data:	
Source: GPS- Uncorrected	
Point Type: Point	
Datum: WGS84	
Zone: 15	Easting: 690754      Northing: 5193893
Longitude: -90.496880	Latitude: 46.871203
Associated Image Page Numbers in CLI:	Page 45



View of Old Light Tower and Keeper's Quarters from the Light Tower. (Anderson Hallas Architects, PC/NPS 2010)

Buildings and Structures: Landscape Characteristics, continued

Feature:	Second Light Tower
Contributing?	Yes
LCS Structure Name:	Michigan Island Light Station Second Tower
LCS ID Number	6372
LCS Historic Structure Number:	23104A
Locational Data:	
Source: GPS- Uncorrected	
Point Type: Point	
Datum: WGS84	
Zone: 15	Easting: 690722      Northing: 5193912
Longitude: -90.497289	Latitude: 46.871384
Associated Image Page Numbers in CLI:	Page 46



Second Tower, west elevation. (Anderson Hallas Architects, PC/NPS 2010)



Buildings and Structures: Landscape Characteristics, continued

Feature:	Keepers Quarters
Contributing?	Yes
LCS Structure Name:	Michigan Island Light Station Keeper’s Quarters
LCS ID Number	6389
LCS Historic Structure Number:	23103G
Locational Data:	
Source:	GPS- Uncorrected
Point Type:	Point
Datum:	WGS84
Zone: 15	Easting: 690681      Northing: 5193916
Longitude: -90.497817	Latitude: 46.871430
Associated Image Page Numbers in CLI: Page 46	



Keeper’s Quarters, south elevation. (Anderson Hallas Architects, PC/NPS 2010)

Buildings and Structures: Landscape Characteristics, continued

Feature:	Assistant Keepers Quarters/Workshop
Contributing?	Yes
LCS Structure Name:	Michigan Is Light Sta Keepers Apt/Workshop
LCS ID Number	6388
LCS Historic Structure Number:	23103F
Locational Data:	
Source:	GPS- Uncorrected
Point Type:	Point
Datum:	WGS84
Zone: 15	Easting: 690683      Northing: 5193931
Longitude: -90.497791	Latitude: 46.871568
Associated Image Page Numbers in CLI: Page 47	



Assistant Keepers Quarters and Workshop, south elevation. (Anderson Hallas Architects, PC/NPS 2010)



Buildings and Structures: Landscape Characteristics, continued

Feature:	Power House
Contributing?	Yes
LCS Structure Name:	Michigan Island Light Station Power House
LCS ID Number	6386
LCS Historic Structure Number:	23103D
Locational Data:	
Source: GPS- Uncorrected	
Point Type: Point	
Datum: WGS84	
Zone: 15	Easting: 690694      Northing: 5193899
Longitude: -90.497664	Latitude: 46.871278
Associated Image Page Numbers in CLI: Page 47	



Power House, viewed from the top of the Second Tower. (Anderson Hallas Architects, PC/NPS 2010)

Buildings and Structures: Landscape Characteristics, continued

Feature:	Privy
Contributing?	Yes
LCS Structure Name:	Michigan Island Light Station Privy
LCS ID Number	6385
LCS Historic Structure Number:	23103C
Locational Data:	
Source: GPS- Uncorrected	
Point Type: Point	
Datum: WGS84	
Zone: 15	Easting: 690776      Northing: 5163912
Longitude: -90.496572	Latitude: 46.871368
Associated Image Page Numbers in CLI: Page 48	



Privy. (Anderson Hallas Architects, PC/NPS 2010)



Buildings and Structures: Landscape Characteristics, continued

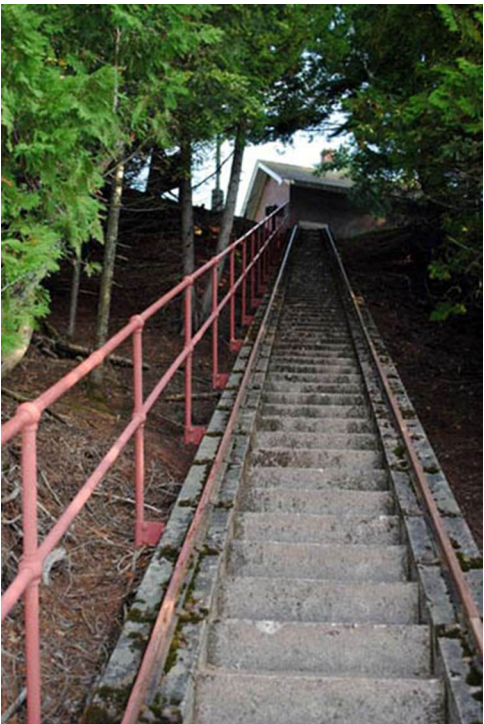
Feature:	Shed
Contributing?	Yes
LCS Structure Name:	Michigan Island Light Station Shed
LCS ID Number	6373
LCS Historic Structure Number:	23103B
Locational Data:	
Source: GPS- Uncorrected	
Point Type: Point	
Datum: WGS84	
Zone: 15	Easting: 690738      Northing: 5193915
Longitude: -90.496816	Latitude: 46.871404
Associated Image Page Numbers in CLI: Page 48	



Shed, south elevation. (Anderson Hallas Architects, PC/NPS 2010)

Buildings and Structures: Landscape Characteristics, continued

Feature:	Tramway
Contributing?	Yes
LCS Structure Name:	Michigan Island Light Station Steps/Tramway
LCS ID Number	6387
LCS Historic Structure Number:	23103E
Locational Data:	
Source: GPS- Uncorrected	
Point Type: Line	
Datum: WGS84	
Zone: 15	Easting: 690679      Northing: 5193873
Longitude: -90.497860	Latitude: 46.871042
Associated Image Page Numbers in CLI: Pages 50 and 51	



Upper and lower sections, respectively, of the tramway. (Anderson Hallas Architects, PC/NPS 2010)

Buildings and Structures: Landscape Characteristics, continued

Feature:	Tram Turntable
Contributing?	Yes
LCS Structure Name:	Not Currently Listed
LCS ID Number	
LCS Historic Structure Number:	
Locational Data:	
Source: GPS- Uncorrected	
Point Type: Point	
Datum: WGS84	
Zone: 15	Easting: 690689      Northing: 5193893
Longitude: -90.497727	Latitude: 46.871217
Associated Image Page Numbers in CLI: Page 51	



Tram turntable. (Anderson Hallas Architects, PC/NPS 2010)

Buildings and Structures: Landscape Characteristics, continued

Feature:	Tram Tracks
Contributing?	Yes
LCS Structure Name:	
LCS ID Number	
LCS Historic Structure Number:	
Locational Data:	
Source: GPS- Uncorrected	
Point Type: Line	
Datum: WGS84	
Zone: 15	Easting: 690712      Northing: 5193925
Longitude: -90.497409	Latitude: 46.871504
Associated Image Page Numbers in CLI: Page 52	

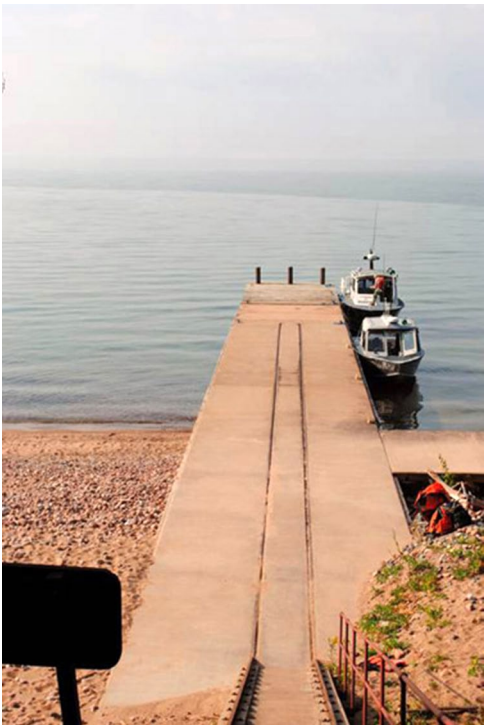


Tramway tracks. (Anderson Hallas Architects, PC/NPS 2010)



Buildings and Structures: Landscape Characteristics, continued

Feature:	Boat Dock		
Contributing?	No		
LCS Structure Name:			
LCS ID Number			
LCS Historic Structure Number:			
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Area		
Datum:	WGS84		
Zone: 15	Easting: 690653	Northing: 5193840	
Longitude: -90.498226	Latitude: 46.870753		
Associated Image Page Numbers in CLI: Page 50			



Boat Dock. (Anderson Hallas Architects, PC/NPS 2010)

Buildings and Structures: Landscape Characteristics, continued

Feature:	Outhouse		
Contributing?	No		
LCS Structure Name:			
LCS ID Number			
LCS Historic Structure Number:			
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Point		
Datum:	WGS84		
Zone: 15	Easting: 690667	Northing: 5193936	
Longitude: -90.497994	Latitude: 46.871613		
Associated Image Page Numbers in CLI: Page 49			



Outhouse in northwest corner of light station grounds. (NPS 2010)

Small Scale Features: Landscape Characteristics

The small scale features at Michigan Island Light Station include concrete walks, poles, a cistern, signs and other site furnishings. The small scale features are generally in good condition.

A concrete sidewalk (LCS 101135) system poured in slabs 30 inches wide and approximately 4 feet long connects the various structures at the light station.

There are two four-part metal radio antennae (LCS 101136) poles set into poured concrete bases. Each base is about 3 square feet with a pyramidal top. The southern pole is at the southeast corner of the power house (vertical), and the northern pole is forty feet east of workshop and leaning badly.

These features provide a human scale to the island and convey important history and use of the light station. The addition of concrete walks, radio antennae, cistern and steel piling relate to the evolution of the light station grounds and contribute to the significance of the cultural landscape. In addition to these features there are signs, a solar panel, and other site features that have been added to the site outside of the early historic periods and are non-contributing to the identified period of significance. Features that have not been determined, but may contribute include the flagpole and rubble pile (CLR 2010).

Small Scale Features: Landscape Characteristics, continued

Feature:	Concrete Walks
Contributing?	Yes
LCS Structure Name:	Michigan Island Light Station Concrete Sidewalks
LCS ID Number	101135
LCS Historic Structure Number:	23103H

Locational Data:

Source: GPS- Uncorrected					
Point Type: Line			Datum: WSG84		
Point	UTM Zone	Easting	Northing	Longitude	Latitude
1	15	690726	5193902	-90.497240	46.871295
2	15	690738	5193885	-90.497082	46.871140
3	15	690688	5193924	-90.497728	46.871497

Associated Image Page Numbers in CLI: Page 55



Concrete walks. The left one led to the former wooden staircase down bank. (Anderson Hallas Architects, PC/NPS 2010)



Small Scale Features: Landscape Characteristics, continued

Feature:	Radio Antenna Poles
Contributing?	Yes
LCS Structure Name:	Michigan Island Light Station Radio Beacons
LCS ID Number	101136
LCS Historic Structure Number:	231031
Locational Data:	
Source: GPS- Uncorrected	Datum: WGS84
Point Type: Point	
North Pole:	
Zone: 15	Easting: 690703
Longitude: -90.497536	Northing: 5193926
Latitude: 46.871515	
South Pole:	
Zone: 15	Easting: 690703
Longitude: -90.497543	Northing: 5193894
Latitude: 46.871227	
Associated Image Page Numbers in CLI:	Pages 56 and 57



Radio Antennae, south (adjacent to the Power House) and north (near the Assistant Keepers Quarters), respectively. (Anderson Hallas Architects, PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature:	USGS Marker
Contributing?	Yes
LCS Structure Name:	Not Currently Listed
LCS ID Number	
LCS Historic Structure Number:	
Locational Data:	
Source: GPS- Uncorrected	
Point Type:	
Datum: WGS84	
Zone: 15	Easting:
Longitude:	Northing:
Latitude:	
Associated Image Page Numbers in CLI:	Page 58



USGS Marker. (Anderson Hallas Architects, PC/NPS 2010)



Small Scale Features: Landscape Characteristics, continued

Feature:	Lighthouse Cistern
Contributing?	Yes
LCS Structure Name:	Not Currently Listed
LCS ID Number	
LCS Historic Structure Number:	
Locational Data:	
Source: GPS- Uncorrected	
Point Type: Point	
Datum: WGS84	
Zone: 15	Easting: 690759      Northing: 5193899
Longitude: -90.496804	Latitude: 46.871255
Associated Image Page Numbers in CLI:	Page 59



Lighthouse cistern (left) and well basin (right), adjacent to the Old Lighthouse. (Anderson Hallas Architects, PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature:	Steel Piling
Contributing?	Yes
LCS Structure Name:	Not Currently Listed
LCS ID Number	
LCS Historic Structure Number:	
Locational Data:	
Source: GPS- Uncorrected	
Point Type: Point	
Datum: WGS84	
Zone: 15	Easting: 690714      Northing: 5193851
Longitude: -90.497420	Latitude: 46.870833
Associated Image Page Numbers in CLI:	Page 59



Buried steel piling on the beach. (Anderson Hallas Architects, PC/NPS 2010)



Small Scale Features: Landscape Characteristics, continued

Feature:	Flagpole
Contributing?	Undetermined
LCS Structure Name:	
LCS ID Number	
LCS Historic Structure Number:	
Locational Data:	
Source: GPS- Uncorrected	
Point Type: Point	
Datum: WGS84	
Zone: 15	Easting: 690684      Northing: 5193893
Longitude: -90.497792	Latitude: 46.871225
Associated Image Page Numbers in CLI: Page 60	



Flagpole. (Anderson Hallas Architects, PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature:	Rubble Pile
Contributing?	Undetermined
LCS Structure Name:	
LCS ID Number	
LCS Historic Structure Number:	
Locational Data:	
Source: GPS- Uncorrected	
Point Type: Point	
Datum: WGS84	
Zone: 15	Easting: 690746      Northing: 5193880
Longitude: -90.496979	Latitude: 46.871089
Associated Image Page Numbers in CLI: Page 61	



Concrete and stone rubble, including the concrete base for the original flagpole. (Anderson Hallas Architects, PC/NPS 2010)



Small Scale Features: Landscape Characteristics, continued

Feature:	Park Sign		
Contributing?	No		
LCS Structure Name:			
LCS ID Number			
LCS Historic Structure Number:			
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Point		
Datum:	WGS84		
Zone: 15	Easting: 690677	Northing: 5193861	
Longitude: -90.497898	Latitude: 46.870938		

Associated Image Page Numbers in CLI: Page 62



Park sign, along the tramway. (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:			
Datum:	WGS84		
Zone: 15	Easting: 690681	Northing: 5193901	
Longitude: -90.497826	Latitude: 46.871296		

Associated Image Page Numbers in CLI: Page 62



Interpretive sign. (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:	GPS- Uncorrected		
Point Type:			
Datum:	WGS84		
Zone: 15	Easting:	Northing:	
Longitude:	Latitude:		
Associated Image Page Numbers in CLI: Page 63			



Trail signs. (Anderson Hallas Architects, PC/NPS 2010)

Small Scale Features: Landscape Characteristics, continued

Feature:	Information Kiosk		
Contributing?	No		
LCS Structure Name:			
LCS ID Number			
LCS Historic Structure Number:			
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Point		
Datum:	WGS84		
Zone: 15	Easting: 690680	Northing: 5193897	
Longitude: -90.497841	Latitude: 46.871256		
Associated Image Page Numbers in CLI: Page 64			



Information kiosk and donation box. (Anderson Hallas Architects, PC/NPS 2010)



Small Scale Features: Landscape Characteristics, continued

**Feature:** Propane Tanks

**Contributing?** No

**LCS Structure Name:**

**LCS ID Number**

**LCS Historic Structure Number:**

**Locational Data:**

Source: GPS- Uncorrected

Point Type: Point

Datum: WGS84

Zone: 15                      Easting: 690662                      Northing: 5193907

Longitude: -90.498073                      Latitude: 46.871351

**Associated Image Page Numbers in CLI:** Page 65



Propane tanks. (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: WGS84

Zone: 15                      Easting: 690709                      Northing: 5193893

Longitude: -90.497466                      Latitude: 46.871216

**Associated Image Page Numbers in CLI:** Page 66



Fire Pit. (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:	WGS84		
Zone: 15	Easting: 690766	Northing: 5193914	
Longitude: -90.496704	Latitude: 46.871389		

Associated Image Page Numbers in CLI: Page 66



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

Vegetation: Landscape Characteristics

Vegetation at Michigan Island includes natural forested areas, cleared and maintained areas, agricultural plantings (e.g. fruit trees), and ornamental plantings. The forest area is of mixed hardwoods and pines and is the predominant landscape of the island. The light station grounds also include historically cleared areas that have been infiltrated by the adjacent forest and are now brush landscape types. The core of the light station is a maintained lawn of mown native grasses.

Remnants of plants or gardens installed by lighthouse keepers and other personnel stationed on the island are still visible. Plantings include a formal row of pines along the north edge of the grounds, mature cedar hedge plantings near the Keepers Quarters, and a remnant orchard planting southwest of the Old Michigan Island Lighthouse. Ornamental landscape plantings also remain primarily around the Keepers Quarters. The light station grounds are cleared and maintained as mowed lawn vegetation type. The forest vegetation along the edges is occasionally cleared to maintain the open feeling of the grounds. The condition of the vegetation on the light station grounds varies from fair to poor. The cleared area of the light station is in poor condition.

Historic drawings and photographs indicate that a significantly larger cleared area on the reservation existed than that which exists today. At one time the cleared area was estimated to have covered over thirty acres of the reservation. Today the cleared area is slightly over three acres. During the Early Lighthouse and Light Tower Periods the light station grounds were maintained as lawn or other low vegetation. The field area to the east of the Old Lighthouse was maintained as an open field by seasonal burning. A large portion of this open field has been filled by encroaching forest today and the field vegetation type is missing from the landscape. The cleared area of the light station is an important contributing feature of the cultural landscape. The relationship between the extent of cleared area to forest vegetation on the reservation has changed significantly since the early historic periods. The extensive encroachment of forest vegetation diminishes the integrity of the cultural landscape.

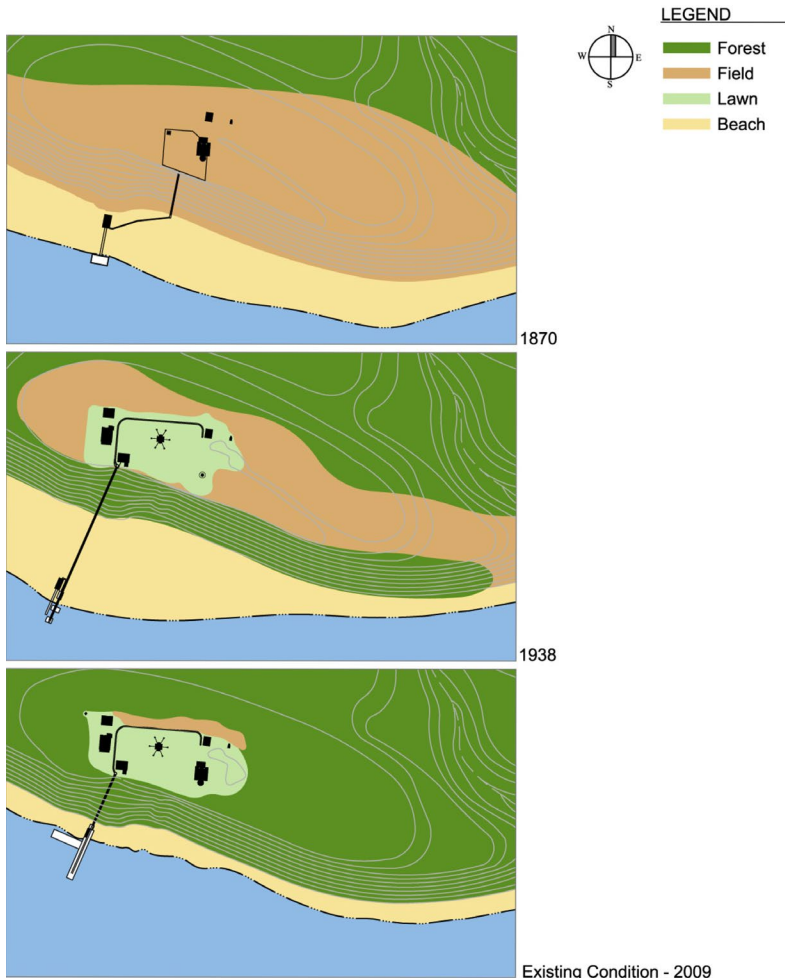
Michigan Island has a long history of landscape and garden planting installed by the lighthouse keepers and their families. The first keeper, Roswell Prendergast (1869-1874) planted many orchard trees on the light station grounds and grew nursery stock plants on the island. Historic photographs indicate fruit trees were planted around the Old Michigan Island Lighthouse as well as ornamental landscape plantings. Keeper Ed Lane (1902-1938) continued this tradition of landscape plantings on the light station grounds. Some of these plantings remain in place today, such as the daylily plantings on the west side of the house and the cedar hedge (now overgrown) planted at the west side of the Keepers Quarters. Some of the domesticated plantings, primarily ground covers, naturalized and spread to other parts of the grounds and into the adjacent forest. The plantings are in fair to poor condition due to age of the plantings and limited maintenance (CLR 2010).



Vegetation: Landscape Characteristics, continued

Feature:	Cleared Area		
Contributing?	Yes		
Locational Data:			
Source: GPS- Uncorrected			
Point Type: Area			
Datum: WGS84			
Zone: 15	Easting:690726	Northing: 5193907	
Longitude: -90.497240	Latitude: 46.871339		

Associated Image Page Numbers in CLI: Page 69

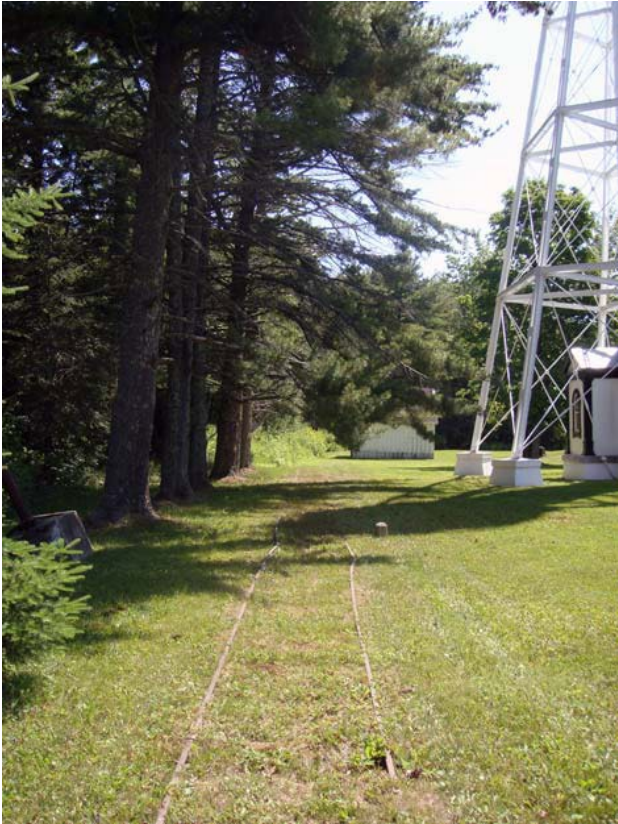


Cleared Area Diagram.  
(Anderson Hallas Architects, PC/NPS 2010)

Vegetation: Landscape Characteristics, continued

Feature:	Pine Plantings		
Contributing?	Yes		
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Line		
Datum:	WGS84		
Zone: 15	Easting: 690721	Northing: 5193928	
Longitude: -90.497292	Latitude: 46.871524		

Associated Image Page Numbers in CLI: Page 71



Pines planted along the tram track. (Anderson Hallas Architects, PC/ NPS 2010)



Vegetation: Landscape Characteristics, continued

**Feature:** Lawn Area

**Contributing?** Yes

**Locational Data:**

Source: GPS- Uncorrected

Point Type: Point

Datum: WGS84

Zone: 15                      Easting: 690724                      Northing: 5193906

Longitude: -90.497259                      Latitude: 46.871332

**Associated Image Page Numbers in CLI:** Page 70

**Feature:** Ornamental Plantings (Vinca)

**Contributing?** Yes

**Locational Data:**

Source: GPS- Uncorrected

Point Type: Area

Datum: WGS84

Zone: 15                      Easting: 690694                      Northing: 5193916

Longitude: -90.497648                      Latitude: 46.871425

**Associated Image Page Numbers in CLI:** Page 70



Lawn area and ornamental plantings (vinca). (Anderson Hallas Architects, PC/NPS 2010)

Vegetation: Landscape Characteristics, continued

Feature:	Hedge		
Contributing?	Yes		
Locational Data:			
Source: GPS- Uncorrected			
Point Type: Line			
Datum: WGS84			
Zone: 15	Easting: 690671	Northing: 5193904	
Longitude: -90.497952		Latitude: 46.871323	

Associated Image Page Numbers in CLI: Page 72



Planted hedge at the Keeper's Quarters. (NPS 2010)

Vegetation: Landscape Characteristics, continued

Feature:	Fruit Trees		
Contributing?	Yes		
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:	Point		
Datum:	WGS84		
Zone: 15	Easting: 690765	Northing: 5193895	
Longitude: -90.496734	Latitude: 46.871214		

Associated Image Page Numbers in CLI: Page 73



Cherry Tree at the Old Lighthouse. (NPS 2010)



Vegetation: Landscape Characteristics, continued

Feature:	Ornamental Plantings (Daylilies)		
Contributing?	Yes		
Locational Data:			
Source:	GPS- Uncorrected		
Point Type:			
Datum:	WGS84		
Zone: 15	Easting: 690677	Northing: 5193917	
Longitude: -90.497880	Latitude: 46.871437		

Associated Image Page Numbers in CLI: Page 74



Daylilies planted on the west side of the Keeper's Quarters. (NPS 2009)

Vegetation: Landscape Characteristics, continued

Feature:	Orchard Planting		
Contributing?	Yes		
Locational Data:			
Source: GPS- Uncorrected			
Point Type: Area			
Datum: WGS84			
Zone: 15	Easting: 690784	Northing: 5193876	
Longitude: -90.496493		Latitude: 46.871043	

Associated Image Page Numbers in CLI: Page 74



Remnant apple tree, southeast of Old Lighthouse. (Anderson Hallas Architects, PC/NPS 2010)



## Chapter 8: Condition Assessment

### Condition Assessment and Impacts

**Condition Assessment:** Good

**Assessment Date:** 6/22/2010

Although the Michigan 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.

### Impacts

**Impact Type:** Pests/Diseases

**Internal/External:** Internal

In the Old Michigan Island Lighthouse there are areas of deterioration in the 2nd floor ceiling, where the attic is visible. Some of this damage is caused by bat infestation that continues to be a problem.

**Impact Type:** Structural Deterioration

**Internal/External:** Internal

There are increased moisture levels in the 1st floor framing of the Old Michigan Island Light-house. This will lead to the deterioration of the wood.

**Impact Type:** Vegetation/Invasive Plants

**Internal/External:** Internal

Encroaching vegetation is affecting the spatial organizations and views and vistas of the island.

## Chapter 9: Treatment

### Approved Treatment Document Explanatory Narrative:

A general management philosophy of rehabilitation has been identified as the most appropriate approach for the cultural landscape. Rehabilitation will allow for repairs, alterations, and additions that will be necessary for the compatible use of the light station, and will preserve the characteristics and features that convey the light station’s historical, cultural and architectural values. These actions will enable the park to preserve the contributing resources of the cultural landscape, while allowing for specific alterations to accommodate contemporary use and interpretation of its history. (CLR 2010)

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

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