National Park Service Cultural Landscapes Inventory 1999



Raspberry Island Light Station Apostle Islands National Lakeshore

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### **Inventory Unit Summary & Site Plan**

#### **Inventory Summary**

#### The Cultural Landscapes Inventory Overview:

#### **CLI General Information:**

#### Purpose and Goals of the CLI

The Cultural Landscapes Inventory (CLI), a comprehensive inventory of all cultural landscapes in the national park system, is one of the most ambitious initiatives of the National Park Service (NPS) Park Cultural Landscapes Program. The CLI is an evaluated inventory of all landscapes having historical significance that are listed on or eligible for listing on the National Register of Historic Places, or are otherwise managed as cultural resources through a public planning process and in which the NPS has or plans to acquire any legal interest. The CLI identifies and documents each landscape's location, size, physical development, condition, landscape characteristics, character-defining features, as well as other valuable information useful to park management. Cultural landscapes become approved CLIs when concurrence with the findings is obtained from the park superintendent and all required data fields are entered into a national database. In addition, for landscapes that are not currently listed on the National Register and/or do not have adequate documentation, concurrence is required from the State Historic Preservation Officer or the Keeper of the National Register.

The CLI, like the List of Classified Structures, assists the 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 (2006), 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 respond to NPS strategic plan accomplishments. Two GPRA goals are associated with the CLI: bringing certified cultural landscapes into good condition (Goal 1a7) and increasing the number of CLI records that have complete, accurate, and reliable information (Goal 1b2B).

#### Scope of the CLI

The information contained within the CLI is gathered from existing secondary sources found in park libraries and archives and at NPS regional offices and centers, as well as through on-site reconnaissance of the existing landscape. The baseline information collected provides a comprehensive look at the historical development and significance of the landscape, placing it in context of the site's overall significance. Documentation and analysis of the existing landscape identifies character-defining characteristics and features, and allows for an evaluation of the landscape's overall integrity and an assessment of the landscape's overall condition. The CLI also provides an illustrative site plan that indicates major features within the inventory unit. Unlike cultural landscape reports, the CLI does not provide management recommendations or

treatment guidelines for the cultural landscape.

#### Inventory Unit Description:

The Raspberry Island Light Station landscape is located at the northeast point of the Bayfield Peninsula in Bayfield County, Wisconsin, within Apostle Islands National Lakeshore which encompasses most of Lake Superior's Apostle Islands Archipelago. Raspberry Island, approximately 296 acres, is one of the smaller islands in the archipelago. It is one mile long and a half mile wide. The light station is situated on the southwest end of the island on a 6 acre site. The light guided vessels through the West Channel into the harbors.

The Raspberry 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 (CLR 2004, 19). The current built environment at the Raspberry Island Station, including the buildings and structures, principal circulation routes, and garden plots, largely dates from the second period of development at the station which began with construction of the fog signal building in 1902 and extended through the end of Coast Guard management in 1947.

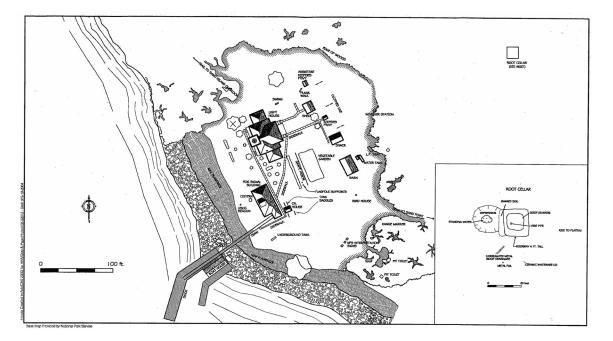
A draft National Historic Landmark (NHL) nomination was written for the Apostle Islands Lighthouses in 2002. The period of significance for this document spans from 1856 with the construction of the Michigan Island Light until the end of U.S. Coast Guard management and operation in 1978. Both the National Register and NHL nomination establish that eight buildings and seven structures retain integrity and contribute to the significance of the Raspberry Island Light Station.

The Raspberry 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 period of significance in the nomination is from 1852 when the first Apostle Islands lighthouse, La Pointe, was established to 1901 when the present tower was erected at Devil's Island. The year 1929, when a new keeper's house was built as part of the Michigan Island Lighthouse complex, is also tacked onto this period.

According to the Cultural Landscape Report, The Raspberry Island Light Station landscape represents two distinct development eras: 1862 to 1901 and 1902 to 1947. For the first forty years, the light station experienced little change to its physical plant, with the exception of a few small-scale improvements added to the site. In 1902, planning for the addition of a fog signal at Raspberry Island caused a flutter of new activity. New structures were built to accommodate the technology and a third keeper was hired. To hold another employee, the lighthouse was rebuilt to the current configuration in 1906. In 1947, the light and fog signal were fully automated. This eliminated the need for keepers and the station lay vacant for the first time in eighty years. In 1975, the National Park Service (NPS) took possession of Raspberry Island, as part of the Apostle Islands National Lakeshore. The existing landscape of the light station features a cluster arrangement of structures and reflects the historical functions of a manned light station.

The Coast Guard continues to maintain an automated light beacon at the edge of the bluff on Raspberry Island. The historical building cluster located in the lighthouse yard has been maintained by the NPS as an interpretive site. While the exterior of the lighthouse has a high degree of integrity, the interior has experienced some loss of integrity due to alterations completed during the 1960s. The clearing surrounding the lighthouse also has lost some integrity. Second growth forest and invasive species have encroached into the clearing, which has not been actively maintained since at least 1957. This encroachment obscures the boundary between the island forest and the fenced lighthouse yard which were historically two different and clearly delineated zones. In addition, the unmanaged landscape would serve as an obstruction to the visibility of a light that once acted as a beacon on Lake Superior.

#### Site Plan



Map illustrating existing conditions at Raspberry Island Light Station (CLR 2004, 11).

#### **Property Level and CLI Numbers**

Inventory Unit Name:	Raspberry Island Light Station
Property Level:	Landscape
CLI Identification Number:	500366
Parent Landscape:	500366
Park Information	
Park Name and Alpha Code:	Apostle Islands National Lakeshore - APIS
Park Organization Code:	6140
Park Administrative Unit:	Apostle Islands National Lakeshore

#### **CLI Hierarchy Description**

The Raspberry Island Light Station has been identified as a landscape situated on Raspberry Island which is located off the northeast point of a peninsula on the western side of Apostle Islands National Lakeshore. This area is part of the West Channel leading into the harbors.



Park map. (NPS, 1999)

### **Concurrence Status**

#### Inventory Status: Complete

#### **Completion Status Explanatory Narrative:**

Initial research was conducted by seasonals Kathleen Fitzgerald and Richard Radford during FY99 and determined that based on initial research the number of landscapes for the park which were presented in the CLI would form a baseline from which to conduct further inventory work. 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 Alesha Hauser in 2008-2009 based on the completed Cultural Landscape Report/EA

#### **Concurrence Status:**

Park Superintendent Concurrence:	Yes
Park Superintendent Date of Concurrence:	07/22/2009
National Register Concurrence:	Eligible SHPO Consensus Determination
Date of Concurrence Determination:	09/28/2009

#### National Register Concurrence Narrative:

The 2004 CLR/EA which evaluates and treats 6 acres came after the 1977 NR nomination and was reviewed by the SHPO as part of the 2005 FONSI process, with the correspondence on the project being part of the admin record held at the park.

#### **Concurrence Graphic Information:**



#### United States Department of the Interior

NATIONAL PARK SERVICE Apostle Islands National Lakeshore 415 Washington Avenue Bayfield, Wisconsin 54814-4809

July 22, 2009

H3023

Memorandum

To: Regional Director, Midwest Region

From: Acting Superintendent, Apostle Islands

Subject: CLI Review for Rocky Island Fishing/Summer Community and Raspberry Island Light Station

Apostle Islands National Lakeshore Cultural Resource Specialist, Christy Baker has reviewed the Cultural Landscape Inventory for Raspberry Island Light Station and Rocky Island Fishing/Summer Community. I concur and approve the content of the reports.

If there are any questions regarding our approval of the document's content please contact Christy at 715-779-3398 X 221.

07/22/2009 Superintendent Concurrence



September 28, 2009

Bill Harlow Chief, Historic Architecture and Landscapes US Dept of the Interior National Park Service Midwest Region 601 Riverfront Dr Omaha NE 68102-4226

Dear Mr. Harlow:

Thank you for the opportunity to comment on the CLI data for the **Raspberry Island** Light Station in the Apostle Island National Lakeshore, Bayfield, Wisconsin. We concur that the elements identified in the inventory help to further define the setting of the lighthouse and its associated resources, and that these landscape features should be taken into consideration in future projects at the site.

Page 10 notes that the entire island is considered a contributing landscape. This area is outside the boundaries of the original nomination. While the area outside of the nominated compound was used by the island's population, it is not demonstrated that this additional acreage is related to the area of significance of the light station. The clearing between the yard and the forest, while having an important function related to the sweep of the are of the light, also appears to be outside of the original nomination boundary.

If you have any questions regarding our comments or require more information, please contact me at 608-264-6501 or daina.penkiunas@wisconsinhistory.org.

Sincerely, Nauna Lendecures Daina Penkiunas National Register Coordinator Wisconsin Historical Society

Collecting, Preserving and Sharing Stories Since 1846
816 State Street Madison, Wisconsin 53706
wisconsinhistory.org

09/28/2009 SHPO Concurrence - acrerage was taken from CLR/EA for the site for which there is a 2005 FONSI. Admin record for project and SHPO consultation is required to be held at park.

# Cultural Landscape Report and Environmental Assessment Raspberry Island Light Station

Apostle Islands National Lakeshore Bayfield County, Wisconsin

Prepared by

National Park Service

Research and Treatment Recommendations by Apostle Islands National Editing by Midwest Regional Office, Cultural Resources Division, Graphics Editing and Project Management by the Denver Service (

and HRA Gray & Pape LLC Woolpert LLP Analysis and Evaluation, Treatment Recommendations, and Document | 2004

Cover of 2004 CLR/EA from which CLI was derived.

Treatment recommendations contained within Part 2 are based upon the results of th and evaluation in Part 1, and address the cultural landscape features that contribute significance of the site. In addition, recommendations in the CLR support the recomincluded in earlier planning documents, such as the Raspberry Island Historic Struc completed in 2000.

## Study Boundaries

Previous documentation of the Raspberry Island Light Station has focused on the libuilding cluster – principally upon the lighthouse itself. For example, the National I boundary for the property incorporates only the two acres containing the lighthouse associated buildings – the area described in the following chapters as the lighthouse

During initial review of the station history, it became clear that the landscape bound include the entire island. Unlike other Apostle Island light stations, the Lighthouse I reserved the whole of Raspberry Island. Consequently, land use on the island during historical period was legally restricted to activities associated with the mission of th Board and the domestic needs of the station keepers and their families.

Although the CLR establishes the island as the cultural landscape, the focus of anal CLR is the area within the historic light station clearing – a roughly six-acre space t both the two-acre lighthouse yard, with its associated buildings (Figure 3), and four surrounding the yard. This area was cleared historically to permit the unobstructed light, and is presently in the process of being reclaimed by the surrounding forest. I of the historic period, a fence separated the lighthouse yard from the remainder of t The lighthouse yard contained buildings, structures, and formal and informal landsc elements used on a daily basis by the keepers and their families. The remainder of t beyond the fence, was primarily intended to provide a clear arc for the light. A variate that did not interfere with this primary goal occurred within the clearing, including Information regarding the use of the remainder of the island beyond the clearing is since land use in these areas is important to understanding the functioning of the sta whole. Treatment alternatives discussed in Part 2 address the entire six-acre station including the two-acre lighthouse yard.

Raspberry Island Light Station was listed in the National Register of Historic Place Both the Apostle Islands Lighthouses National Register nomination and a draft Apo Light Stations National Historic Landmark (NHL) nomination establish that eight t seven structures retain integrity and contribute to the significance of the Raspberry Station (Table 1). The station's period of significance is defined as 1862 to 1947, w and 1902-1947 detailed as distinct development eras.

Several of the resources identified in the draft NHL nomination as structures are dia CLR as "small scale features." These resources are small in scale and simply constr

9

2004 CLR/EA/FONSI Page 9 Study Boundaries "hote 4th paragraph regarding sizerealtive to the 1977 NR nomination. SHPO is a reviewing party within the FONSI process with the correspondence being part of the admin record at the park.

<sup>&</sup>lt;sup>7</sup> For the purpose of clarity the area west of (inside) the fence will be identified throughout this lighthouse yard, while the area east of (outside) the fence will be identified as the station clearing.

## **Finding of No Significant Impact**

## For Proposal For

## Cultural Landscape Report, Raspberry Island Light Stat

### Apostle Islands National Lakeshore Bayfield County, Wisconsin

## Background

The National Environmental Policy Act (NEPA), the Council on Environmental Quality ( regulations implementing NEPA (40 CFR 1500-1508); and National Park Service (NPS) I Order-12 and Handbook (Conservation Planning, Environmental Impact Analysis, and De require the National Park Service (NPS) to consider the environmental consequences of m actions. The National Park Service (NPS) proposes to develop a landscape treatment plan Raspberry Island Light Station that is consistent with current and planned restoration and r efforts of the existing historic structures and which maximizes the overall historic interpret light station. Development and implementation of the Cultural Landscape Report (CLR) w the Raspberry Island Light Station Management Philosophy as developed by the National 1 (NPS, 1989).

The need to develop the CLR is based on a requirement to maintain light station structures landscape in perpetuity in as historically accurate a context as possible for the benefit of cu future generations as required by the enabling legislation establishing Apostle Islands Nati (Public Law 91-424). Without an agreed-upon approach to this long-term requirement, NP and potentially incompatible decisions being made over time, which would eventually lead degradation of the historical integrity of the light station. In addition, the NPS agreed to de Raspberry Island Light Station CLR as a stipulation of a March 30, 2001 Memorandum of with the State Historical Society of Wisconsin allowing implementation of erosion control the bluff in front of the light station. The NPS has addressed the preferred alternative in the Landscape Report and Environmental Assessment, Raspberry Island Light Station, Bayfield Wisconsin.

## Preferred Alternative

The preferred alternative is Alternative II. Alternative II would rehabilitate the light station yard immediately surrounding the light station, and a portion of the historically cleared area compatible with the period of interpretation (1902-1947). Elements of the landscape that ha removed in the past would be reconstructed. The gardens would be rehabilitated or restored pedestrian circulation would be restored to historic parameters. Small-scale features of the landscape that ha yard that do not date from the period of interpretation would be removed, while missing ite flagstaffs, birdbath, and range markers would be restored. In addition to clearing a 100-foot fire perimeter around the light station building cluster, the historic arc of the lighthouse bea also be restored by clearing. Restoration of this area would entail clearing all six-inch diam height (dbh) or greater trees and all brush taller than four feet west of a compass bearing 340 degrees e

Finding of No Significant Impact Cultural Landscape Report, Raspberry Island Light Station Apostle Islands National Lakeshore, Wisconsin

2004 CLR/EA - FOSI page1- signed 2005

## Mitigation

Mitigation measures have been integrated into project planning, and will be implemented as Alternative II implementation activities as well as facility operations.

## **Public Involvement and Coordination**

Scoping is the effort to involve agencies and the general public in determining the scope addressed in the environmental document. Among other tasks, scoping determines import eliminates issues not important; allocates assignments among the interdisciplinary team other participating agencies; identifies related projects and associated documents; identifies surveys, consultations required by other agencies; and creates a schedule which allows ad prepare and distribute the environmental document for public review and comment before a is made. Scoping includes any interested agency or any agency with jurisdiction by lay (including the US Fish and Wildlife Service, Advisory Council on Historic Preservat Historic Preservation Officer, and Indian tribes) to obtain early input.

The Draft Cultural Landscape Report and Environmental Assessment, Raspberry Island a Bayfield County, Wisconsin, was made available for the 30-day mandatory public review January 24, 2005 to February 24, 2005. Copies of the EA were mailed to surrounding cit officials, county and state governmental agencies, the SHPO, the USFWS, NPS agencies, le of commerce and other interested civic organizations, and local Indian tribes. Local med received a press release on January 24, 2005 regarding availability of the EA for review.

## Conclusion

Based on my review of the facts and analysis contained in this environmental assessment, wi incorporated herein, I conclude that implementing the preferred alternative (Alternative II, R and Restore Targeted Landscape Elements to the Period of Interpretation) would not have a impact either by itself or cumulatively with any other known past or future actions. Accordin requirements of the National Environmental Policy Act, regulations promulgated by the Pres Council on Environmental Quality, and provisions of National Park Service (NPS) Director' and Handbook (Conservation Planning and Environmental Impact Analysis and Decision-Mi been fulfilled. Furthermore, the preferred alternative selected for implementation would not i resources or values and would not violate the NPS Organic Act. The preferred alternative suj enabling legislation through which the Apostle Islands National Lakeshore was established a the National Park Service September 26, 1970, by Public Law 91-424. Furthermore, based c comments on the draft environmental assessment, the NPS has determined that no changes to document are necessary. The draft environmental assessment will serve as the final environm assessment. An environmental impact statement is not required and will not be prepared for implementation of the preferred alternative.

2 Recommended: Superintendent Da Approved: Midwest Regional Director

Finding of No Significant Impact Cultural Landscape Report, Raspberry Island Light Station Apostle Islands National Lakeshore, Wisconsin

2004 CLR/EA - FONSI signed 2005 - page 7

#### **Revisions Impacting Change in Concurrence:**

Other

#### **Revision Narrative:**

2013 - A-123 -CLI was reviewed by the SHPO in 2009 - letter uploaded. The SHPO response on Page 10 of the CLI was not followed up on since the CLI indicates 6 acres which is identical to the 2004 CLR/EA for which there is an approved FONSI (2005). The Page 10 reference is to the "Adjacent Landscape Contributing?" narrative that acknowledges that the entire island would have been used historically from the CLI--- "The island itself is considered a contributing landscape to the 6 acre site. 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." The CLI, as prepared from the CLR/EA, does not in any way designate the entire island a CL. The SHPO did not understand the CLI adjacent landscape contributing narrative in the report. The original NR nomination for the site focused on the primary buildings and indicated only 2 acres - which is the reference the Wisconsin National Register Coordinator was making without the CLR/EA and FONSI at her immediate disposal. The CLR/EA which evaluates and treats 6 acres came after the 1977 NR nomination and was reviewed by the SHPO as part of the FONSI process, with the correspondence being part of the admin record at the park. CLR cover and FONSI cover/signature page has been uploaded to the concurrence graphics section of the CLI. The NR explanatory narrative has been updated to note the 2004 CLR/EA/FONSI.

### **Geographic Information & Location Map**

#### Inventory Unit Boundary Description:

The landscape is located within tract 08-102 situate in Government Lot 2, Section 24, Township 52 North, Range 4 West 4th Principal Meridian, Bayfield County, Wisconsin.

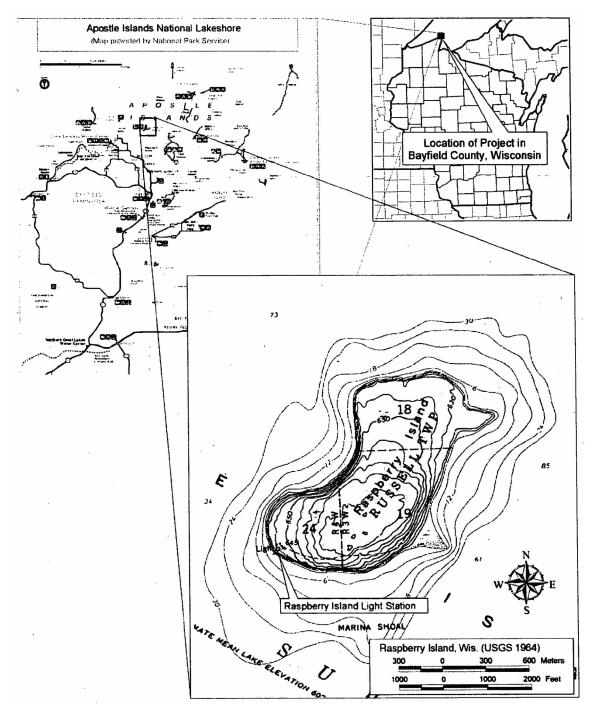
More specifically, the lighthouse is tract 08-103 situate in Government Lot 2, Section, 24, Township 52 North, Range 4 West 4th Principal Meridian, Bayfield County, Wisconsin described as follows:

Beginning at a point 15 feet North of the center of the light tower; thence, East, 15 feet; thence, South, 30 feet, thence, West, 30 feet; thence, North, 30 feet; thence, East, 15 feet to the point of beginning. Said tract contains 0.02 of an acre, more or less.

#### State and County:

State:	WI
County:	Bayfield County
Size (Acres):	6.00

#### Location Map:



The Raspberry Island Light Station is situated on the southwest end of Raspberry Island which is located northeast of Bayfield Peninsula (CLR 2004, 2).

#### **Regional Context:**

#### Type of Context:Cultural

#### **Description:**

The Raspberry 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 its completion in 1863 until 1947 when it was fully automated. Although the island was never logged commercially, for over eighty years station keepers cut wood for both domestic and industrial use. The area surrounding the lighthouse was kept clear and included a lawn as well as cobble-lined flowerbeds. Gardens and landscaping reflected the personal preference of the keepers. Vegetable gardens were a tradition and provided sustenance for the family.

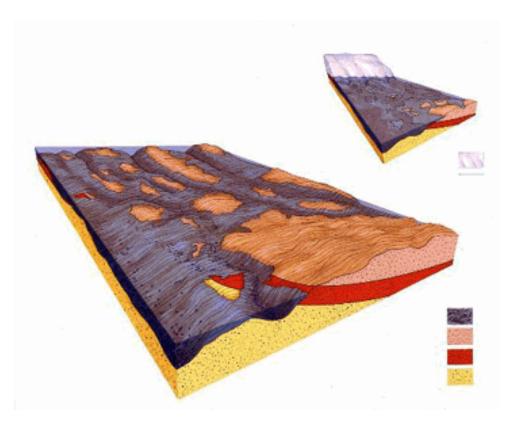
Since 1975, the National Park Service has managed the Raspberry Island Light Station as an interpretive site. The lighthouse has been the subject of several stabilization projects with a recent renovation completed in 2006. This latest renovation included the keeper's quarters and assistant keeper's quarters to an adaptive furnished exhibit and seasonal employee housing, respectively.

#### Type of Context: Physiographic

#### **Description:**

Raspberry Island is located off the northeast end of Bayfield Peninsula. The island is part of the Mid-Continental Rift Geologic Province. The area was primarily formed from glacial till overlying the sandstone bedrock. The geology and soils of the island are typical of the 22 islands in the archipelago, consisting of Precambrian sandstone cliffs. The area has highly erodible red clay soils. The soils in the immediate vicinity of the lighthouse formed in clayey till and in the underlying loamy and sandy stratified lacustrine deposits. Bluff erosion on the island is a result of the combined undercutting by wave and ice action, followed by slumping through sheet and rill erosion on the bluff face, and through gravity induced slope processes (CLR 2004, 4-1).

The Raspberry Island Light Station landscape is situated on the southwest end of Raspberry Island. The light guided vessels through the west channel into the harbors. The light station sits in a clearing on an otherwise wooded bluff.



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)

#### Type of Context: Political

#### **Description:**

The Raspberry Island Light Station landscape is located in Bayfield County, Wisconsin, within Apostle Islands National Lakeshore which encompasses most of Lake Superior's Apostle Islands Archipelago. The Lakeshore was established in 1970 with the National Park Service taking direct control in 1975.

**Tract Numbers:** 08-102 and 08-103

### **Management Information**

#### **General Management Information**

Management Category Date:	12/01/2004
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#### Management Category Explanatory Narrative:

The Management Category date is based on the date of the Cultural Landscape Report

25775
26776
26778
26779
26780
26781
36431
36436

#### Agreements, Legal Interest, and Access

#### Management Agreement:

Type of Agreement: Co	oncession Contract/Permit
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#### Management Agreement Explanatory Narrative:

The park has a concession contract with a cruise boat to take visitors out to see Raspberry Island.

#### **NPS Legal Interest:**

Type of Interest:	Fee Simple
Public Access:	

Type of Access:

Unrestricted

#### **Explanatory Narrative:**

Access is open to park visitors who can access the site by personal boat or concessioner boat.

#### Adjacent Lands Information

#### Do Adjacent Lands Contribute? Yes

Adjacent Lands Description:

The island itself is considered a contributing landsape to the 6 acre site. The light station crew would have used and explored the resources of the entire island and not confined themsleves to just the core lighthouse area.

### **National Register Information**

#### **Existing National Register Status**

#### National Register Landscape Documentation:

Entered Inadequately Documented

#### **National Register Explanatory Narrative:**

The cultural landscape of the light station is not adequately described or documented in the 1977 nomination which focused on 2 acres and specifically names the lighthouse, fog signal building, boathouse, and dock. Other buildings and structures fall under the mention of outbuildings. The 2004 CLR/EA/FONSI of which the SHPO was a reviewing party expanded the area to 6 acres.

#### **Existing NRIS Information:**

Name in National Register:	Apostle Islands Lighthouses
NRIS Number:	77000145
Primary Certification Date:	03/08/1977
National Register Eligibility	
National Register Concurrence:	Eligible SHPO Consensus Determination
Contributing/Individual:	Contributing
National Register Classification:	Multiple Property
Significance Level:	State
Significance Criteria:	A - Associated with events significant to broad patterns of our history

#### Period of Significance:

Time Period:	AD 1852 - 1901
Historic Context Theme:	Changing Role of the U.S. in the World
Subtheme:	Commerce
Facet:	Commerce
Time Period:	AD 1852 - 1901
Historic Context Theme:	Developing the American Economy
Subtheme:	Shipping and Transportation by Water
Facet:	Ships, Boats, Lighthouses, And Other Structures
Time Period:	AD 1929
Historic Context Theme:	Changing Role of the U.S. in the World
Subtheme:	Commerce
Facet:	Commerce
Time Period:	AD 1929
Historic Context Theme:	Developing the American Economy
Subtheme:	Shipping and Transportation by Water
Facet:	Ships, Boats, Lighthouses, And Other Structures

Area of Significance:

Area of Significance Category:	Commerce
Area of Significance Category:	Maritime History
Area of Significance Category:	Transportation

#### Statement of Significance:

The Raspberry 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 Raspberry Island Lighthouse is one of five included in a multiple property National Register nomination listed on March 8, 1977. The lights on Michigan Island, Outer Island, Sand Island, and Devil's 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, which has since been demolished, was established in 1858 and served primarily as a local navigational aid, marking the locations of La Pointe and Bayfield harbors. None of the previously mentioned lights provided much assistance to the ever increasing volume of shipping moving through the islands' West Channel to the new ports of Bayfield and Ashland. In response, Congress appropriated funds for the construction of the Raspberry Island Light Station in 1859. Completed in 1862, difficulties in obtaining a lens prevented the station from entering service until the following summer. The Raspberry Island Light of 1862 guided vessels through the West Channel into the harbors.

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

As well as being an aid to navigation, the light stations also played a role in projecting the authority of the Federal government into a remote area, and communicating certain values of the emerging industrial society into what was essentially a frontier region. Construction of the Michigan Island Lighthouse in 1856 followed closely upon the 1854 Treaty of La Pointe with the Ojibwe (Chippewa) which opened the 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 Raspberry 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 (CLR 2004, 19). The current built environment at the Raspberry Island Station, including the buildings and structures, principal circulation routes, and garden plots, largely dates from the second period of development at the station which began with construction of the fog signal building in 1902 and extended through the end of Coast Guard management in 1947.

### **Chronology & Physical History**

#### Cultural Landscape Type and Use

Cultural Landscape Typ	e:	Vernacular Historic Site
Current and Historic Us	e/Function:	
Primary Historio	c Function:	Lighthouse
Primary Curren Ethnographic Study Co Chronology:		Interpretive Landscape No Survey Conducted
Year	Event	Annotation
AD 1862 - 1863	Built	Raspberry Island Light Station completed and Keeper's Privy and station dock constructed.
AD 1901	Built	Oil building constructed.
AD 1903	Built	Fog signal and tramway constructed at Raspberry Island.
AD 1904	Built	Shed #2 constructed.
AD 1906	Altered	Raspberry Island Lighthouse remodeled to house three keepers and their families.

	Built	Barn and Assistant Keepers' Privy constructed.
AD 1931	Altered	Raspberry Island fog signal converted to a diaphone system. Old tramway replaced with more permanent, concrete structure.
AD 1941	Altered	Raspberry Island Light Station electrified by generator and battery system. Station also receives radiophone.
AD 1947	Altered	Raspberry Island Light Station automated.
AD 1948 - 1958	Abandoned	Buildings stood largely uninhabited due to automation.
AD 1957	Built	U.S. Coast Guard installed an automated light beacon at the edge of the bluff, west of the fog signal building.
AD 1958 - 1975	Inhabited	Raspberry Island Light Station leased to Minneapolis architectural firm to be used as corporate retreat.
AD 1963	Rehabilitated	Barn converted to residential use.
AD 1970	Established	Apostle Islands National Lakeshore established.
AD 1975	Preserved	Raspberry Island under direct NPS control.
AD 1977	Stabilized	NPS began to stabilize buildings.
AD 2006	Restored	NPS began restorative work to the exterior.

#### **Physical History:**

The following is excerpted from the CLR, pages 15-19:

The western end of Lake Superior was one of the last areas east of the Mississippi River settled by Euroamericans. The fur trade brought Euroamericans into the region in the seventeenth century, but the decline of that trade in the 1830s and 1840s stifled development and population growth, and it was not until the 1850s that mining, fishing, and lumbering sparked sizeable permanent settlement in the region.

As settlers pushed into the Lake Superior region in search of timber and minerals, the United States government bought land from the resident Ojibwe through cessation treaties. These treaties effectively opened the region to permanent settlement by Americans.

The region's fishing industry emerged from ashes of the fur trade. In 1835, the American Fur Company began commercial fishing operations out of its former fur trading headquarters at La Pointe, employing former company boatmen. Salted fish from Lake Superior were shipped to company warehouses in Detroit for distribution to eastern and southern markets. This market failed during the Panic of 1837 and the company ceased its fishing operations in 1841. Nevertheless, commercial fishing continued to be conducted in the region.

Until the 1850s the Great Lakes region had little influence upon the industrial economy of the United States. The region's later role, as a major supplier of industrial raw materials, was only faintly suggested prior to the Civil War. Not until the federal government completed the Sault Sainte Marie locks and canal in 1855 was Lake Superior connected by a direct water route to the east. That year 1445 tons of iron ore passed through the locks. By 1860, that amount had reached 117,000 tons, as the Marquette, Menominee, Gogebic, Vermillion, and Mesabi "ranges" were developed. Copper had been mined in the Upper Peninsula of Michigan for a decade prior to the opening of the locks, with production totaling approximately 3100 tons in 1855. By 1860, production had risen to approximately 8000 tons.

It took years of experimentation with these ores, and enormous investments in shipping facilities, as well as successive enlargements of the Sault Sainte Marie Canal ("Soo") in 1876 and 1896, before these resources could be put to maximum use. Annual shipments of iron ore did not reach one million tons until 1872, but with a surge of investment in the 1880s, by 1900 Great Lake ores represented 75 percent of the nation's total iron ore production. The production of copper ore reached 20,000 tons per year in 1874. These mines were immensely profitable, producing copper for less than ten cents a pound and selling it for approximately twice that amount.

Following the initial discoveries of iron ore and the platting of the area for non-Indian settlement by the General Land Office, new settlers moved into the region. In 1854, Asaph Whittlesey established the town of Whittlesey, later the city of Ashland, near the head of Chequamegon Bay, a large, sheltered body of water on the south shore of Lake Superior, sheltered from the lake's frequent storms by the Apostle Islands Archipelago. That same year W.W. Corcoran and other organized the town of Superior, selling over 2000 lots between 1854 and 1857. Bayfield was platted in 1856, and in 1857, despite the onset of a nationwide financial panic, Duluth was platted and incorporated.

Surveyors with the General Land Office mapped the Apostle Islands between 1850 and 1857. They found significant non-Indian settlement only on Madeline Island where the French had established a mission in La Pointe, and where "clearings, pastures, farms, dwellings, and churches" extended along the western shore. More isolated island outposts were limited to Benjamin Armstrong's house and clearing on the southern tip of Oak Island, William Wilson's house and clearing on Hermit Island, and an American Fur Company fish house on Stockton Island.

Prior to the completion of the "Soo" Canal at Sault Sainte Marie in 1855, cargo shipped up or down Lake Superior had to be laboriously transported around the rapids of the St. Mary's River. Completion of the canal transformed Lake Superior into a water highway allowing continuous waterborne transport from Duluth to Lake Ontario, and on to the Atlantic via the St. Lawrence or Erie Canals. As economic activity increased at the head of Lake Superior so did the volume of maritime traffic passing through or north of the Apostles.

Maritime traffic on Lake Superior increased further with the rapid expansion of the region's agricultural, logging, mining, and fishing industries in the 1870s. Duluth and Superior became important transfer points for shipment of grain headed east. In 1885, Duluth boasted eleven grain elevators, while Superior was building its first. By 1891, Duluth had thirteen elevators and Superior ten. Lake vessel capacities increased significantly during this period from 80,000 bushels in 1880 to 120,000 bushels by 1890, and 400,000 bushels by 1900.

The lumber industry in the west end of Lake Superior contributed in a substantial way to the regional economy beginning in the 1870s. Logging on a significant commercial scale in the region began in the 1850s, with the construction of sawmills in Bayfield, Ashfield, and La Pointe. The growth of Great Lakes port cities after the Civil War, and particularly the reconstruction of Chicago following the fire of 1871, produced a significant demand for lumber. The completion of the Wisconsin Central Railway between Milwaukee and Ashland in 1877 spurred the growth of the industry, which continued to play a major role in the regional economy into the 1920s.

The completion of the Wisconsin Central Railway also facilitated exploitation of the enormous copper and iron ore reserves along Lake Superior's shores and on Michigan's Keweenaw Peninsula. Also developed during this period were the lake's brown sandstone ("brownstone") quarries, which supplied the Midwest's construction industry and a burgeoning fishing industry. Commercial fishing prospered in the west end of Lake Superior from the mid-1880s. The industry peaked in 1915 and entered its final decline in the 1920s and 1930s.

By the 1890s, 80 percent of all maritime freight tonnage moved in the United States passed through the "Soo" Canal. Much of this traffic also passed by the Apostle Islands, either bound for Bayfield, Ashland, and the other small cities sheltered in the lee of the archipelago, or skirting north of the islands enroute to and from Duluth and Superior.

The islands served as a source of raw materials for the south-lake communities. By the 1870s, Oak, Manitou, Stockton, Sand, Rocky, and Otter Islands all had fishnet settings near their shores. The local press described the Apostle Islands' fishing industry as a significant contributor to the local economy. Stone quarries operated roughly between 1865 and 1900, first on Basswood Island where, in 1870, Strong, French, & Co. of Milwaukee were "working forty men and . . . getting out large quantities of probably the finest building material in the West," and, later, on Hermit and Stockton Islands. Beginning in the 1870s and continuing through the 1910s, Oak, Stockton, Michigan, Outer, Sand, and Basswood Islands (and possibly other) all sustained substantial logging operations, supplying local mills with valuable white pine and oak, and also providing fuel for steamships and hemlock bark for the tanning industry. Logs were harvested during the winter and floated (softwood) or barged (hardwood) to mainland mills after ice break-up in the spring. Island ships also carried passengers, both settlers and, by the 1880s, vacationers traveling on Apostle Island excursions arranged by the railroads and inter-lake boat lines.

The local press carefully reported the shipping news – the ships and their cargo testifying to the region's glowing economic prospects: "Capt. Pike is shipping considerable stone from his quarry to Ashland"; "Holston & Boutin's camp at Sand Island is rushing in the logs at a lively rate"; "Henry Murphy, of La Pointe, has bought the scow Emma Maria . . . and will said her in the lumber, wood, and tanbark trade between Bayfield, Ashland and the Apostle Islands and Duluth"; The Belle Steven and Emma Maria loaded with hemlock bark out at Bass Island on Monday"; "the neat little tug J.C. Keyes . . . will undoubtedly be extensively patronized both by people having business at Ashland and the pleasure seekers who yearly congregate at Bayfield." The owners and captains of these vessels demanded navigational aids to assure safe passage through the islands where "reefs, submerged rock pinnacles and tortuous channels were a navigator's nightmare." Built both in response to mariners' demands and also as a means of enticing additional trade, the Apostle light stations were closely associated with the region's industrial and economic development.

The Apostle Island light stations were part of a long maritime tradition. On August 7, 1789, Congress transferred the jurisdiction and administration of lighthouses built and maintained by the former colonial governments to the Department of the Treasury under the auspices of the newly created United States Lighthouse Service. By 1852, when Congress created the Lighthouse Board to alleviate corruption and maximize efficiency within the Lighthouse Service, the number of light stations in the United States had grown from nine to over 400.

Headed by scientist Joseph Henry and including representatives from the Navy and the Army Corps of Engineers, the Lighthouse Board established twelve Lighthouse Service Districts, with District 11, headquartered in Detroit, administering Lake Superior stations. A lighthouse inspector, most-often a naval officer, headed each district and was responsible for administration, personnel, and station inspection. The inspector was assisted by the district engineer – always an officer with the Army Corps of Engineers – who was responsible for station design, construction, and repair. Lighthouse Service District work crews built the lighthouses. In 1852, Congress authorized 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. These lights provided little 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 construction of the Raspberry Island Light Station.

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.

The following is excerpted from the CLR, pages 3-4:

The six light stations located on the Apostle Islands in Lake Superior have been called "the largest and finest collection of lighthouses" in the United States. The nine extant lights, and the ruins of a tenth, exemplify the evolution of American lighthouse design during the second half of the nineteenth century. They are also closely associated with the nationally significant development of maritime commerce on the Great Lakes. In 1885, just prior to construction of the first of the Apostle Island light stations, Great Lakes commercial shipping was valued at \$600 million, more than the entire foreign trade of the nation. By the 1890s, 80 percent of all maritime freight tonnage moved in the United States passed through the navigation locks at Sault Sainte Marie, and much of that traffic traveled past the Apostle Island lights on its way to and from the ports of Duluth and Superior at the western end of Lake Superior. The Apostle Island lights were essential navigational aids for this traffic.

In 1859, President James Buchanan reserved all of Raspberry Island for the exclusive use of the United States Lighthouse Board, the federal entity charged with providing navigational aids to enhance shipping commerce. The Raspberry Island Light Station was completed and ready for occupancy in 1862, but did not actually begin operating until 1863. Initial development consisted of cutting trees from a six-acre clearing atop a bluff on the southwest edge of the island and construction of a dock and boat house at "the sand point", a sheltered landing site at the southeastern corner of the island, about three-quarters of a mile from the station clearing. Construction materials were hauled from the landing to the clearing along a path cut through the woods. By 1868, the Lighthouse Board had built a boat landing directly below the lighthouse yard. A wood stairway connecting the dock to the top of the bluff, facilitating movement of people and some supplies, was authorized in 1868, but not built until 1873. Even after completion of the stairs, heavy supplies and livestock continued to be loaded and off-loaded at the landing at the sand point. For nearly the next forty years, the Raspberry Island Light Station experienced little change in its physical plant, with the exception of a few small-scale improvements added to the site.

Throughout this initial period of development and use, the keepers stationed at Raspberry Island

maintained the clearing and the trail to the sand point. Keepers were free to utilize the clearing for purposes that did not interfere with operation of the navigational aids and several apparently harvested hay from the clearing for their own use or for sale. In addition, keepers established flower and vegetable gardens and kept small quantities of livestock, including chickens, cows, and horses.

In 1902, planning for the addition of a fog signal at Raspberry Island engendered a flurry of new development. Rather than haul building materials for the fog signal from the sand point, the Lighthouse Board constructed a wooden tramway and hoist extending from the dock below the light station to the top of the bluff. These improvements greatly simplified the movement of construction materials and equipment for the fog signal to the top of the bluff. In addition to the building that housed the signal equipment, the fog signal required a cistern and pump. The fog signal was completed and placed in operation in 1903. The addition of the fog signal increased the operation and maintenance chores for the keeper and his assistant to such an extent that a third keeper was approved for Raspberry Island. To accommodate this third employee, in 1906, the lighthouse itself was completely rebuilt, resulting in the current building configuration. Within the next few years new domestic infrastructure was added to the site, including a barn, a second privy, a new woodshed, and a "shack" or shed. By 1915, the site included all the currently extant historic buildings.

Raspberry Island experienced another period of relatively little physical change from 1915 to 1939. Employees kept the station clearing free of high brush and trees and maintained the trail to the sand point, which continued to serve as a landing site when conditions precluded landing at the main dock. The dock and boathouse at the sand point gradually deteriorated and were not replaced, as the dock at the station was favored due to its convenience. Keepers and their wives continued to fill their off-duty hours with gardening – both vegetable and flower beds flourished according to the individual tastes of the site's residents. The ornamental flowerbeds achieved their most elaborate expression during the tenure of Keeper Lee Benton and his wife Anna, from 1914 to 1924. The Bentons constructed a variety of circular and rectangular beds in proximity to the lighthouse, filled them with hardy perennials and annuals, and bordered the beds with white painted cobbles. The reconstructed flowerbeds currently extant at Raspberry Island are loosely based upon the Bentons' flower gardens.

In 1939, Congress moved the authority for operation of the nation's light stations to the United States Coast Guard. Although the Coast Guard continued to man Raspberry Island until 1947, it instituted personnel changes that affected the character of the station. Most importantly, the Coast Guard discouraged families from living at the site during the navigation season. In 1947, the Raspberry Island light and fog signal were fully automated, eliminating the need for keepers. For the first time in eighty years, the Raspberry Island Light Station lay vacant, except for periodic patrols by Coast Guard personnel. Abandonment resulted in cessation of maintenance within the station clearing.

In 1957, the Coast Guard removed the light from the lighthouse tower and replaced it with a freestanding beacon at the edge of the bluff in front of the fog signal building. The Coast Guard leased the vacant station buildings to Ellerbee Architects, a Minneapolis-based architectural

firm, for use as a corporate retreat. Over the next seventeen years, company employees and clients vacationed at the site. Local caretakers, employed by the firm, maintained the buildings. During this period, modifications were made to some interior finishes in the lighthouse, and the interior of the barn was rehabilitated for use as a caretaker's apartment.

Although Apostle Islands National Lakeshore was established in 1970, Raspberry Island did not come under direct National Park Service Control until 1975. By the time the Lakeshore was established, Raspberry Island had been transferred from the Coast Guard to the Bureau of Land Management (BLM), with the agreement that the Coast Guard could continue to maintain a navigation light on the island. The BLM continued the lease agreement with Ellerbee Architects, and the Lakeshore managers grew concerned that a private entity was altering the appearance of the historic light station. The National Park Service regional office and the Lakeshore personnel negotiated with the BLM for transfer of the property to the National Park Service, which was achieved in 1975.

### Analysis & Evaluation of Integrity

#### Analysis and Evaluation of Integrity Narrative Summary:

The Raspberry Island Light Station cultural landscape exhibits the following landscape characteristics: natural systems and features, spatial organization, land use and activities, topography, vegetation, circulation networks, buildings and structures, views and vistas, small-scale features, and archaeological features. Raspberry Island's large-scale landforms remain intact and contribute to the historical significance in regards to location, design, and setting. Historic maps indicate that the topography of the island has experienced little change since establishment of the station. The bluff has suffered from erosion, but stabilization efforts have arrested further deterioration of the feature. The island continues to support a diverse forest of native trees, similar to its condition in the mid-1850s. Aspects of materials, workmanship, and association remain intact, while integrity is diminished in the area of feeling due to the regeneration of second growth forest in the clearing. The current view from the lighthouse tower is much less expansive than during the period of manned operation.

The site's organization of yard, clearing, and forest remains readily apparent and reflects historic patterns and contributes to the significance and integrity of the site. 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 no longer reflects elements of form, plan, or space that were integral to the historic function of the station. The primary features associated with historical land use are the lighthouse yard, historically defined by a fence and containing the station's buildings, and its surrounding clearing, an area totaling approximately six acres. This pattern was maintained throughout the period of manned operation. The clearing has diminished integrity in feeling, materials, and design while the lighthouse yard, which includes the historic building cluster, retains a high level of integrity in regard to land use in terms of location, feeling, and association.

Ornamental vegetation within the lighthouse yard was an important historical feature at the station. The reconstructed flowerbeds and vegetable plots do not meet current NPS documentation standards for reconstructions. Neither the clearing nor the lighthouse yard are accurate depictions of the period. Therefore, the vegetation at Raspberry Island has diminished historic integrity in terms of its location, design, materials, workmanship, association, and feeling.

The circulation system of Raspberry Island remains largely intact and retains integrity in aspects of location, design, and setting. Elements of workmanship, feeling, and association are also retained. Although the loss of historic plank walk ways and the cinder path somewhat diminishes the integrity of the pathway system within the lighthouse yard. Overall, the island's circulation system may be considered a contributing element.

The extant historic period buildings and structures retain integrity of location, design, setting, workmanship, feeling and association. Five buildings have experienced some loss of integrity in terms of historic materials. The lighthouse and barn interiors have been remodeled while shed #1 and the keeper's privy have non-historic roofing material. Despite these minor losses, the buildings and

structures at the station generally retain a high degree of integrity and are integral components of the cultural landscape.

The extant small-scale features that date from the station's period of significance retain enough integrity to be contributing elements. They speak to the operation of the station as part of Lighthouse Service and to the daily lives of the Keepers'. Significant non-extant small-scale features include the light station fence, the flagstaffs, and the birdbath. Their absence diminishes the level of landscape integrity.

The integrity of archaeological features has not been fully investigated and is currently undetermined.

Location
Design
Setting
Materials
Workmanship
Feeling
Association

#### Landscape Characteristic:

Aspects of Integrity:

#### **Natural Systems and Features**

The following descriptions are excerpted from the 2004 Cultural Landscape Report and Environmental Assessment.

The natural systems and features that influenced development at Raspberry Island included the topography of the island and its location adjacent to an important shipping lane, the West Channel.

The level, elevated bluff that rises forty feet above the water's edge at the west end of the island—directly adjacent to the navigation channel, provided a perfect site for the lighthouse and its supporting infrastructure. The only natural feature that limited the utility of the site was the native forest, which extended to the edge of the bluff. Once the native vegetation was cleared, the new lighthouse atop the bluff could cast its beam northward into Lake Superior proper and west and southwest into the West Channel. The native forest also made Raspberry Island attractive for use as a light station because it provided a wood reserve for the use of the station's occupants. The island offered both hard and soft woods, differentially harvested for use in kitchen stoves, and after 1903, as reserve fuel for the fog signal boilers.

The bluff also constituted an obstacle as well as an opportunity, since its height hampered the transfer of equipment, supplies, and personnel from the water's edge to the top of the bluff. Consequently, throughout the early history of the station, the sand spit at the southwest corner

of the island served as an alternative landing site for material that proved difficult to move up or down the bluff. Construction of stairs at the bluff, later replaced by wood, and still later a concrete tramway, made the bluff a less significant obstacle to the movement of people and material, although the sand spit landing remained a valuable alternative during heavy weather because of its sheltered location.

Erosion of the bluff, as a result of both natural and human forces and human efforts to stem this erosion, has significantly altered the bluff face. Erosion has significantly altered spatial relationships in the lighthouse yard by eliminating a strip of level ground twenty to forty feet in width from the area immediately west of the lighthouse and fog signal building.

Human activities contributed to the erosion of the bluff face. Construction of the stairs and tramways that extended from the dock to the bluff top affected the appearance and stability of the bluff. Drains from the lighthouse yard emptied onto the bluff face, promoting erosion. Keepers periodically cleared brush from the slope to preserve the unobstructed sweep of the light. In the 1930s the Keeper's logs contain numerous references to erosion control efforts on the bluff. These efforts included planting grass seed, laying sod, adding soil, planting trees, and construction of flower beds. Historic photographs depict a bluff with a steep slope; somewhat lined with erosion channels, and partly covered with low vegetation.

A 1910 map of the site indicates that measures were taken at an early stage to address the erosion of the bluff. The map highlights 'loose stone shore protection' placed to the north and south of the dock. Since the island has been under NPS management, the Lakeshore has consistently taken measure to curb bluff erosion, especially immediately west of the historic building cluster. In the 1980s the Lakeshore built a low riprap wall that proved unsuccessful. Most recent changes, completed in 2003, include the addition of nearly forty feet of material to the base of the bluff and construction of a stable slope planted with native vegetation.

The large-scale landforms that led to the selection of Raspberry Island as the site of a light station remain intact today, and contribute to the historical significance of the property in regards to location, design, and setting. The steep bank upon which the lighthouse is located has been affected by erosion, and while recent stabilization efforts have somewhat altered the historic appearance of the bluff they will arrest further deterioration of the landform and prevent further degradation of this landscape feature. The island continues to support a diverse forest of native trees, similar to its condition in the mid-1850s. Aspects of materials, workmanship, and association remain intact while integrity is diminshed in the area of feeling due to the regeneration of second growth forest in the clearing.

## **Spatial Organization**

Historically the Raspberry Island Lighthouse Station was organized into three primary landscape areas: the main building cluster defined by a fence and generally known as the lighthouse yard, the larger station clearing that surrounded the yard, and the island's remaining approximately 280 forested acres. The lighthouse yard was the heart of the station and included nearly all of the station's buildings and structures, as well as associated paths, walkways, lawns, gardens, and other landscape elements. The clearing, created to provide the required arc for the

light, was cultivated as hay fields and strawberry patches at various points in the station's history. Any use of the clearing had to accommodate the need to provide a clear arc for the sweep of the light. The remainder of the island was largely left undeveloped. The forest provided timber for construction and firewood for island stoves and boilers. Island residents established paths that led to woodlots and berry patches, as well as to the sand spit landing and the Sand Island observation point.

The organization of yard, clearing, and forest remains readily apparent. The lighthouse yard retains integrity from the station's second period of development (1902 to 1947). The fence that historically separated the yard from the clearing is no longer extant, which somewhat obscures the boundary between the two areas.

The clearing has not been maintained as it was during manned operation of the light station since at least 1957 and is presently being encroached upon by second growth forest and invasive species. A fire perimeter does not exist between the building cluster and the forest and thus presents safety issues that should be immediately addressed. The outer edge of the clearing, historically a clear demarcation with the surrounding forest, is not readily apparent to an untrained eye. The encroachment of second growth forest into the clearing, which was carefully maintained during the historic period to prohibit any vegetation that might obstruct the clear sweep of the light, represents significant diminishing historic integrity.

The forested portions of the island remain largely intact. The forest has encroached into the clearing, as noted above. It retains integrity, although it is presumably somewhat denser than during the period of manned operation of the station as a result of the cessation of cutting for firewood and building timber.

The overall organization of the cultural landscape reflects historic patterns and contributes to the significance and integrity of the site. The organization of the landscape holds integrity in aspects of location, setting, material, workmanship, and association. Integrity is diminished in design, as the clearing no longer reflects elements of form, plan, or space that were integral to the historic function of the station.

## Land Use

Land use patterns at the Raspberry Island Light Station are historically related to activities associated with maritime navigation and the daily life of the island residents, including subsistence agriculture and recreation. Throughout the historical period, the island and its natural resources were reserved for the lighthouse keepers and their families. Although the keepers' logs include numerous references to public use, and visitors were welcomed to the island, the keepers also held the option to question and restrict public use of the island's resources.

The level of development varied in intensity across the island. The primary features associated with historical land use are the lighthouse yard, historically defined by a fence and containing the station's buildings, and its surrounding clearing, an area totaling approximately six acres. As noted above, the yard served as the primary focus for activities associated with both work and

daily life. It incorporated all the station's buildings, the vegetable and flower gardens, a lawn, and various items and spaces for recreation. The clearing's primary purpose was to provide a clear area for the sweep of the light; however some keepers seeded the area with forage crops and harvested native and exotic grasses for livestock feed. The forest provided timber, firewood, berries, and other resources, but was subject to the least intensive development.

These land use patterns were maintained throughout the period of manned operation of the lighthouse, and were marginally expanded to meet individual tastes and needs. For example, the size and number of gardens expanded to accommodate not only the needs of island residents, but at one time included garden space for a keeper from a neighboring island.

Relatively early in the development of the station, keepers enclosed the lighthouse yard with a fence. The area inside the fence developed a distinctive appearance, with flowerbeds, vegetable gardens, and a large expanse of lawn. Referred to by keepers as the "station grounds" or "station yard," the area inside the fence sometimes had a manicured appearance that mimicked the appearance of residential yards, at other periods the yard was less neat and tidy in appearance. Mention of garden plots date to 1897, though due to the minimal annual supplies delivered to the island gardens likely existed as early as 1863.

Although the exact configuration of the fence and the materials used in its construction changed over the years, from the early 1890s until the cessation of manned operations in 1947 the lighthouse yard was separated from the remainder of the clearing. Beyond the yard the clearing was kept free of brush and trees that could affect the function of the light. The resulting lesser intensity of maintenance and manipulation lent the clearing a wilder appearance than the yard.

The physical complexity of the site grew with the addition of various buildings and trails into the woods. These additions occurred within the framework of the historic land use patterns and functions, and these broad patterns remain evident in the landscape today.

Current land use includes the continued function of a navigation beacon, as well as interpretation, maintenance, and administration conducted by the NPS. The public uses the entire island for recreational purposes.

The principal landscape feature associated with the historical use of the site, the light station clearing, has integrity in feeling, materials, and design. Secondary forest has encroached to the edge of the lighthouse yard, which is no longer bounded by a fence, as it was during the entire period of interpretation (1902-1947). In contrast to the clearing, the lighthouse yard, which includes the historic building cluster, retains integrity in regard to land use in terms of location, feeling, and association relative to the period of significance.

## Circulation

The circulation system of Raspberry Island remains largely intact. The two historic access points and trails receive continued use. Both island access points, at the sand point and at the dock below the lighthouse, were established by 1868. The sand point trail, which linked the landing at the sand point with the station clearing, was the most important of the trails and dates

to the earliest period of station development. A popular hiking trail, it continues to convey the feeling and spatial associations of the island's past. It remains in its approximate historical alignment and, though improved with design elements such as bridges and water bars by the NPS, it retains its historical integrity.

The circulation features extant in the lighthouse yard represent improvements built between roughly 1906 and 1932. The system of pedestrian paths that link the station dock with the yard and connect the buildings within the yard dates from the station's initial period of development. Historically, these paths were upgraded and improved through substitution of more permanent materials. Once atop the bluff, a series of "plank ways," which were laid down each spring and taken up at the end of the season, linked the various buildings. Gradually, the plank walks were replaced with more permanent concrete walks, with the majority of this work completed by ca. 1906. Remnants of the plank walks remain in front of the assistant keepers' privy and in front of the entry to the barn. The fragmentary surviving portions of the wood plank walkways are analyzed and evaluated under Archaeological Features.

Three types of walkways existed during the historic period: cinder, wood plank, and cement. Only the cement walkways installed ca. 1906, and repaired on numerous occasions, remain extant. Some of these walks form a continual path while others are arranged in a stepping stone manner. The cement walkways are historically accurate if not complete and help illustrate the daily patterns of circulation on the site. The cinder path is no longer extant.

These features retain high integrity, although lack of maintenance has affected some elements of the system. Grass has been allowed to grow over the sides of the concrete sidewalks and between the segments of the walks. This obscures the width of the walkways and contributes to their deterioration. Overall the circulation systems of the island retain integrity in aspects of location, design, and setting. Elements of workmanship, feeling, and association are also retained. Although the loss of historic plank walk ways and the cinder path somewhat diminishes the integrity of the pathway system within the lighthouse yard, in total the island's circulation system may be considered a contributing element within the cultural landscape.

## **Character-defining Features:**

Feature: Raspberry Island I	Light Station S	idewalks			
Feature Identification Number:	13330	6			
Type of Feature Contribution:	Contr	ibuting			
Feature UTM <u>Source</u>	<u>Type of</u> <u>Point</u>	<u>Datum</u>	<u>UTM</u> Zone	<u>UTM</u> Easting	<u>UTM</u> Northing
GPS-Differentially Corrected	Point	NAD 83	15	666,968	5,204,200
IDLCS Number:	10163	30			
LCS Structure Name:	Raspl	perry Island Li	ght Station S	Sidewalks	

LCS Structure Number: 08104A

# Landscape Characteristic Graphics:



Cement walks and cobble-bordered flowerbeds. (Curran for NPS, 2008)

# Topography

The topography of Raspberry Island played a major role in the selection of the island as the site for a lighthouse. The level, elevated bluff that rises forty feet above the water's edge at the west end of the island – directly adjacent to the navigation channel, offered an ideal site for a lighthouse and the associated infrastructure needed to support the lighthouse keepers.

Historic maps from 1877 and 1910 indicate that the topography of the island has experienced little change since establishment of the station, with the exception of erosion of the bluff immediately west of the lighthouse as a result of wave action. The highest point of the island is centrally located between the lighthouse yard and the sand point, well within the forest canopy. Within the station clearing the land slopes from east to west (from the historic edge of the clearing towards the bluff) at an approximate rate of 1:10.

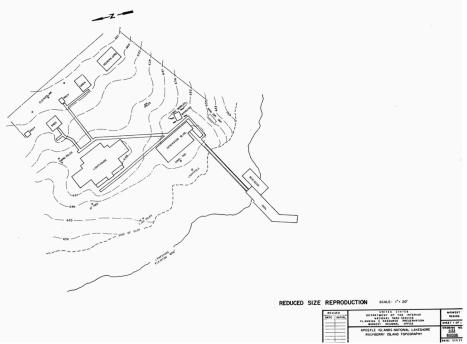
Natural erosion and human efforts to stem this erosion have significantly altered the bluff. Erosion of the bluff has altered spatial relationships in the lighthouse yard by eliminating a strip of level ground between twenty and forty feet in width from the area immediately west of the lighthouse and fog signal building.

The existing condition of the bluff reflects a major stabilization project, completed in 2003, which added nearly forty feet of material to the base of the bluff. This engineered revetment consists of a French drain installed at the top of the bluff to aid drainage, stone riprap placed along the bottom third of the bluff, and replanted native species on the upper two-thirds of the slope. This planting design is intended to encourage revegetation of native species while

protecting the bluff face and allowing the view from the top of the bluff to the west to remain unimpaired.

The other principal topographic feature at the site is a vegetated swale, created by the NPS, dug around the perimeter of the lighthouse yard. This swale aids in the drainage of the heavy clay soil.

#### Landscape Characteristic Graphics:



Topography of light station, 1977.

## **Buildings and Structures**

Most of the extant historic buildings and structures at Raspberry Island Light Station date from the period 1902 to 1906, early in the station's period of development. Many of these resources have been altered, to a greater or lesser extent, since their original construction. The majority of the buildings may be described as utilitarian in style, with simple vernacular details. The architectural embellishments reflect architectural styles popular at the time of construction. Most buildings are of wood frame construction, with clapboard or board and batten siding. The latter type of siding is limited to outbuildings, such as the shed and the barn. The fog signal building and the oil building are brick construction from standardized Lighthouse Service plans.

The lighthouse and the fog signal building are the most significant buildings in terms of conveying an understanding of the work of the station. Originally constructed in 1862, the station lighthouse and keeper's quarters was extensively enlarged and remodeled in 1906. The building is two stories in height with a square light tower centered on the front (west) façade. It has a brick foundation, clapboard wood siding, and hipped roofs covered with embossed metal

shingles. Constructed in 1903 from standardized Lighthouse Service plans, the fog signal building is a single story brick building with a hipped metal roof. A gable roofed dormer on the west façade dates from the 1932 conversion of the fog signal from a steam whistle to an air-powered diaphone. The I-beam reinforcements visible on the west façade date from 1925. The historic chimney was removed after 1944. The alterations experienced by this building all occurred during the period of significance and do not detract from the building's integrity.

The remainder of the historic buildings served as support facilities for these two primary buildings, or reflect the domestic and "off-duty" needs of the island residents. Constructed in 1901 as a storage building for the kerosene used in the lighthouse light, the oil building is based upon Lighthouse Service standardized plans of the period. The one and one-half story wood frame barn dates from ca. 1906. Used variously as a barn, warehouse, shop building, and living quarters over the years, the building was converted to residential use in 1963. Shed #1 served a variety of functions over time. It appears to date from the station's first period of development and may have served as a shed during this period. Possibly constructed ca. 1862 as part of the initial period of development, the keeper's privy may be the oldest building at the station. Shed #2 appears to have been built in 1904 to replace an earlier woodshed. The assistant keeper's privy was probably constructed ca. 1906.

A water tank and solar shower was constructed by the NPS ca. 1982. It provides water to the ranger residence located in the barn and provides shower facilities for the ranger assigned to the station during the summer. The building is designed to reflect the historic architectural forms of the station buildings and is not visually intrusive. The present boathouse appears to represent a major 1940s reconstruction of an earlier structure. Significant portions of the walls and foundation are identified as belonging to older versions of the structure. The station dock is a non-historic structure constructed by the NPS ca. 1978. However, this structure resembles historic period docks in terms of construction methods (crib construction) and general configuration. The dock is essential for site access and important for interpretation of the station of a wood tram and hoist to ease the movement of construction materials from the dock to the top of the bluff. The existing concrete stairs and tramway date from 1932. The tramway and steps continue to be used to move people and material between the dock and the top of the bluff.

Some small support buildings known to have existed, including a pole horse stable, chicken coop, and smoke house are no longer extant. Historic documents do not permit establishment of the precise location of these non-extant buildings. Archaeological investigations might locate evidence of these buildings although their relatively impermanent nature may not have produced archaeological remains.

The extant historic period buildings and structures retain integrity of location, design, setting, workmanship, feeling and association. Five buildings (the lighthouse, barn, sheds #1 and 2, and assistant keeper's privy) have experienced some diminished integrity in terms of historic

materials. The lighthouse and barn interiors have been remodeled to include modern living quarters, while shed #1 and the keeper's privy have non-historic roofing material. The exterior siding of shed #2 is deteriorating as a result of moisture damage. Despite these minor losses of integrity, in general the buildings and structures at the station retain an exceptional degree of integrity and are integral components of the cultural landscape.

## **Character-defining Features:**

Feature: Station Lighthouse	and Keeper`s Q	Juarters			
Feature Identification Number:	133446				
Type of Feature Contribution:	Contrib	outing			
Feature UTM Source	<u>Type of</u> <u>Point</u>	<u>Datum</u>	<u>UTM</u> Zone	<u>UTM</u> Easting	<u>UTM</u> Northing
GPS-Differentially Corrected	Point	NAD 83	15	666,969	5,204,232
IDLCS Number:	6390				
LCS Structure Name:	Raspbe	rry Is Light S	tat Lighthse a	and Keeper's Q	trs
LCS Structure Number:	08103A	A			
Feature: Fog Signal Building	5				
Feature Identification Number:	133448				
Type of Feature Contribution:	Contrib	outing			
Feature UTM <u>Source</u>	<u>Type of</u> <u>Point</u>	<u>Datum</u>	<u>UTM</u> Zone	<u>UTM</u> Easting	<u>UTM</u> Northing
GPS-Differentially Corrected	Point	NAD 83	15	666,968	5,204,200
IDLCS Number:	6392				
LCS Structure Name:	Raspbe	rry Island Lig	tht Station Fo	g Signal Build	ing
LCS Structure Number:	08102E	3			
Feature: Oil Building					
Feature Identification Number:	133450				
Type of Feature Contribution:	Contrib	outing			
Feature UTM <u>Source</u>	<u>Type of</u> <u>Point</u>	<u>Datum</u>	<u>UTM</u> Zone	<u>UTM</u> Easting	<u>UTM</u> Northing

# Raspberry Island Light Station Apostle Islands National Lakeshore

GPS-Differentially Corrected	Point	NAD 83	15	666,980	5,204,199
IDLCS Number:	6375				
LCS Structure Name:	Raspb	erry Island Lig	ght Station C	il Building	
LCS Structure Number:	08102	Н			
Feature: Barn					
Feature Identification Number:	133452	2			
Type of Feature Contribution:	Contri	ibuting			
Feature UTM <u>Source</u>	<u>Type of</u> <u>Point</u>	<u>Datum</u>	<u>UTM</u> Zone	<u>UTM</u> Easting	<u>UTM</u> Northing
GPS-Differentially Corrected	Point	NAD 83	15	667,002	5,204,218
IDLCS Number:	6393				
LCS Structure Name:	Raspb	erry Island Lig	ght Station B	arn	
LCS Structure Number:	08102	С			
Feature: Shed #1					
Feature Identification Number:	133454	ł			
Type of Feature Contribution:	Contri	ibuting			
Feature UTM <u>Source</u>	<u>Type of</u> <u>Point</u>	<u>Datum</u>	<u>UTM</u> Zone	<u>UTM</u> Easting	<u>UTM</u> Northing
GPS-Differentially Corrected	Point	NAD 83	15	666,990	5,204,243
IDLCS Number:	6374				
LCS Structure Name:	Raspb	erry Island Lig	ght Station S	hed #1	
LCS Structure Number:	08102	G			
Feature: Keeper's Privy					
Feature Identification Number:	133456	5			
Type of Feature Contribution:	Contri	ibuting			
Feature UTM <u>Source</u>	<u>Type of</u> <u>Point</u>	<u>Datum</u>	<u>UTM</u> Zone	<u>UTM</u> Easting	<u>UTM</u> Northing
GPS-Differentially	Point	NAD 83	15	666,997	5,204,229

Corrected					
IDLCS Number:	6395				
LCS Structure Name:	Raspb	erry Island Lig	ght Station Ke	eper's Privy	
LCS Structure Number:	08102	E			
Feature: Shed #2					
Feature Identification Number:	133458				
Type of Feature Contribution:	Contri	buting			
Feature UTM <u>Source</u>	<u>Type of</u> <u>Point</u>	<u>Datum</u>	<u>UTM</u> Zone	<u>UTM</u> Easting	<u>UTM</u> Northing
GPS-Differentially Corrected	Point	NAD 83	15	666,998	5,204,229
IDLCS Number:	6396				
LCS Structure Name:	Raspb	erry Island Lig	ght Station Sh	ed #2	
LCS Structure Number:	08102	F			
Feature: Assistant Keeper's F	Privy				
Feature Identification Number:	133460	)			
Type of Feature Contribution:	Contri	buting			
Feature UTM Source	<u>Type of</u> <u>Point</u>	<u>Datum</u>	<u>UTM</u> Zone	<u>UTM</u> Easting	<u>UTM</u> Northing
GPS-Differentially Corrected	Point	NAD 83	15	666,984	5,204,252
IDLCS Number:	6394				
LCS Structure Name:	Raspb	erry Island Lig	ght Stat Asst F	Keeper's Privy	
LCS Structure Number:	08102	D			
Feature: Water Tank and Sola	r Shower				
Feature Identification Number:	133462				
Type of Feature Contribution:	Non C	ontributing			
Feature: Boathouse					
Feature Identification Number:	133464				
Type of Feature Contribution:	Contri	buting			

# Raspberry Island Light Station Apostle Islands National Lakeshore

Feature UTM <u>Source</u>	<u>Type of</u> <u>Point</u>	<u>Datum</u>	<u>UTM</u> Zone	<u>UTM</u> Easting	<u>UTM</u> Northing
GPS-Differentially Corrected	Point	NAD 83	15	666,949	5,204,178
IDLCS Number:	10162	3			
LCS Structure Name:	Raspb	erry Island Li	ght Station E	Boat House	
LCS Structure Number:	08102	K			
Feature: Dock					
Feature Identification Number:	133472	2			
Type of Feature Contribution:	Non C	Contributing			
Feature UTM <u>Source</u>	<u>Type of</u> <u>Point</u>	<u>Datum</u>	<u>UTM</u> Zone	<u>UTM</u> Easting	<u>UTM</u> Northing
GPS-Differentially Corrected	Point	NAD 83	15	666,994	5,204,178
IDLCS Number:	6391				
LCS Structure Name:	Raspb	erry Island Li	ght Station I	Dock	
LCS Structure Number:	08102	A			
Feature: Steps and Tramway					
Feature Identification Number:	133474	Ļ			
Type of Feature Contribution:	Contri	buting			
Feature UTM Source	<u>Type of</u> <u>Point</u>	<u>Datum</u>	<u>UTM</u> Zone	<u>UTM</u> Easting	<u>UTM</u> Northing
GPS-Differentially Corrected	Point	NAD 83	15	666,957	5,204,178
IDLCS Number:	10162	4			
LCS Structure Name:	Raspb	erry Island Lig	ght Station S	steps/Tramway	
LCS Structure Number:	08104	В			

Landscape Characteristic Graphics:



Front of station lighthouse and keeper's quarters. (Curran for NPS, 2008)



Rear view of the station lighthouse and keeper's quarters. (Curran for NPS, 2008)



Front view of fog signal building. (Curran for NPS, 2008)



*Oil building with flanking oil cradles, fog signal building is in the background. (Curran for NPS, 2008)* 



Barn was previously used as a ranger residence. (Curran for NPS, 2008)



View of shed #1 (shack) and barn from lighthouse. (Curran for NPS, 2008)



Shed #2, keeper's privy, shed #2 (shack), and barn. (Curran for NPS, 2008)



Boathouse and dock. View to southwest. (Curran for NPS, 2008)

## Vegetation

Flower and vegetable gardening was an important pastime for Raspberry Island residents throughout the historical period. Vegetable gardening was a necessity, as the Lighthouse Service only allotted and delivered supplies once each year. The degree of elaboration for both types of gardens appears to have depended upon the tastes of the individual keepers. In addition, the location and size of the gardens changed over time.

The majority of the extant gardens are reconstructions, created by the NPS in the early 1980s. Gardens that were not reconstructed and which appear to be historic in terms of their location and size, include the circular bed north of the swing, the day lily bed south of the shed, and the tiger lily (Lilium columbianum) bed between the steps on the west side of the lighthouse.

The long cobbled bed, centrally located in the yard south of the lighthouse, once included iris (Iris sp.) and was anchored on either end by roses (Rosa sp.). Astilbe (Astilbe sp.), nasturtium (Tropaeolum sp.) and dahlias (Dahlia sp.) occupied the circular beds and foundation plantings near the southwest corner of the lighthouse. Day lilies can be identified in the circular bed near the privies. Also mentioned in the Keepers' logs are Sweet William Dianthus (Dianthus barbatus), Peony (Paeonia officinalis), Zinnia (Zinnia sp.), Pansy (Viola sp.), and Petunia (Petunia sp.).

Based on the period in which they were planted, historic plants were heirloom varieties and not hybrids. Keepers' logs reference some of the species grown in the gardens. These include onion (Allium cepa), lettuce (Lactuca sativa), cucumber (Citruilus sativa), an unidentified type of bean, squash (Cucurbitae), pea (Pisum sativum), rutabaga (Brassica napus), pumpkin (Cucurbita pepo), asparagus (Asparagus officinalis), tomato (Solanum lycopersicum), cabbage (Brassica oleracea), potato (Solanum tuberosum), and beet (Beta vulgaris). The garden plant community, currently tended by volunteers and park staff, rotates and changes seasonally.

Non-historic ornamental vegetation currently present at the site includes Chamomile (Anthemis tinctoria), Clove (Syzgium aromaticum), Columbine (Aquilegia), Gaillardia (Gallardia pulchella), Hosta (Hosta sieboldiana), Lupine (Lupinus), Marigold (Calendula officinalis), Phlox (Phlox), Rudbeckia (Echinacea), Shasta Daisy (Leucanthemum), Snap Dragon (Antirrhinum), Sweet Alyssum (Lobularia), Sweet Pea (Lathyrus).

The logs record the planting of ornamental trees, including mountain ash (Sorbus americana) and spruce (Picea sp.), and shrubs such as lilac (Syringa sp.). The lilac was reported to have been a white variety with the scent of Saffron.

A lawn existed in the lighthouse yard as early as 1894. It appears to have been confined to the fenced lighthouse yard and is depicted as considerably more unkempt than at present in historic photographs. The present lawn also extends farther to the south than the historic lawn.

Edible perennials were abundant on the island and the keepers made regular use of this resource. Perennials available from the island landscape mentioned by the keepers include cranberries (Vaccinium oxycoccos and V. macrocarpon), strawberries (Fragaria vesca and F. virginiana), raspberries (Rubus pubescens and R. strigosus), currants (Ribes sp.), and gooseberries (Ribes sp.). Both sand cherries (Prunus pumila) and pin cherries (Prunus pensylvanica) were also harvested. Mention is also made of harvesting caraway (Carum carvi) seed growing wild on the island. Perennials currently raised within the yard that are not mentioned in historic documents include grapes (Vitus sp.) and American highbush cranberry

(Viburnum trilobum).

Several edibles currently grow on the island, outside the station clearing, that are not mentioned in the Keepers' logs. These include velvet-leaved blueberry (Vaccinium myrtilloides), low-bush blueberry (Vaccinium angustifolium), red elderberry (Sambucus racemosa), common blackberry (Rubus allegheniensis), smooth blackberry (Rubus canadensis), Thimbleberry (Rubus parviforus), wild plum (Prunus Americana), American hazelnut (Corylus Americana), and beaked hazelnut (Corylus cornuta).

Japanese knotweed (Polygonum cuspidatum) is present in the park flora list as the main invasive plant requiring regular treatment with herbicide spray.

The clearing was covered to the edge of the bluff by the pre-settlement island forest. The forest was cleared during the initial stages of development of the light station to provide a space for the lighthouse and its support facilities and to provide an unobstructed arc for the sweep of the light. The forest has encroached into the clearing, which has not been actively maintained since ca. 1957.

Ornamental vegetation within the lighthouse yard was an important historical feature of the Raspberry Island Light Station. Similarly, vegetable gardens appear to have been a constant feature during the period of significance. The reconstructed flowerbeds and vegetable plots currently present at the light station do not meet current NPS documentation standards for reconstructions. Current vegetation within the clearing is intended to suggest the period 1915-1924; however, only the cobbled flowerbeds reflect this period. Neither the clearing nor the rest of the lighthouse yard are accurate depictions of the period. In some cases, such as the vegetable garden, the location, size, or content of plots is historically inaccurate, while the field crops that existed during the period are now absent. In general, the vegetation at Raspberry has diminished historic integrity in terms of its location, design, materials, workmanship, association, and feeling.

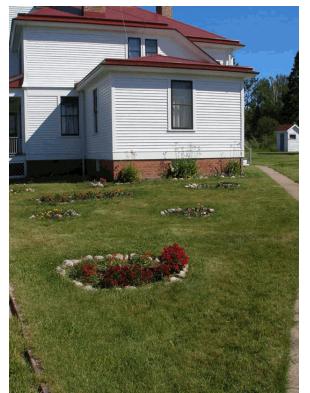
## **Character-defining Features:**

Feature:	Gardens and Plantings	
Feature Iden	tification Number:	133744
Type of Feat	ure Contribution:	Non Contributing
Feature:	Lawn	
Feature Iden	tification Number:	133746
Type of Feat	ure Contribution:	Contributing
Feature:	Clearing	
Feature Iden	tification Number:	133748
Type of Feat	ure Contribution:	Contributing

# Landscape Characteristic Graphics:



*Vegetable garden with oil building and fog signal building in the background. (Curran for NPS, 2008)* 



*Cobble-bordered flower beds in between concrete walkways to side of lighthouse. (Curran for NPS, 2008)* 

#### **Views and Vistas**

The most significant views at Raspberry Island are those from the lighthouse tower and those from the water as one approaches the station dock. The current view from the lighthouse tower is significantly less expansive than during the period of manned operation, largely as a result of secondary forest encroachment into the historic light station clearing. The historic arc of the light covered 195 degrees between roughly 145 and 340 degrees. This arc was established by creation of the clearing, which was faithfully maintained until the 1950s. The present unobstructed view from the tower covers only about a 30-degree arc towards the lake, between 235 and 265 degrees.

Existing views from the tower and the yard to the north, east, and south – in essence all views not directly oriented towards the lake – are constrained by the secondary succession forest encroaching into the station clearing. The 'clearing' is cluttered with scrub and invasive species whose height constrains views.

As noted above, one of the most important views of the station is from the water. This view remains, although erosion of the bluff has changed the relationship between the lighthouse and the fog signal building and the face of the bluff. The fog signal building and lighthouse are now located much closer to the edge of the bluff than at any point in the history of the station. Indeed, the historic location of the station's principal flagstaff appears to have eroded into the lake on more than one occasion. The recent stabilization of the bluff has created a feature characterized by riprap and a planted slope. Its appearance differs somewhat from the natural bluffs visible from the water to the north and south of the station clearing.

The initial views of the lighthouse yard experienced by visitors are from either the head of the tramway stairs or the end of the trail leading to the sand point. Both these locations offer views that emphasize the working nature of the site. The view from the top of the tramway is framed by the oil building and fog signal building and offers a side view of the lighthouse and a perspective of the outbuildings. The view from the end of the sand spit trail is even more utilitarian, since the trail enters the yard area south of the barn and offers a foreground view of ancillary buildings with the rear (east) façade of the lighthouse in the middle distance.

Other significant views from within the yard include those from the top of the bluff, which have been affected by erosion. The space in front (west) of the fog signal building and lighthouse is much reduced in area, limiting views of the front facades of these buildings. Views of the lighthouse yard from the lighthouse tower include the extant historic buildings and structure and the reconstructed garden plots. Modern elements, such as the water tank/solar shower and pit toilets are hidden from view by vegetation or historic buildings. Interpretive efforts at the light station emphasize the historical sweep of the light as an important aid to navigation and, necessarily, discuss the views from the lighthouse.

## Small Scale Features

All historic small-scale features at Raspberry Island Light Station are located within the light station clearing and lighthouse yard. Small-scale features include elements that provide detail

and diversity, combined with function and aesthetics. They include items associated with the operation of the light station and the domestic life of the station's inhabitants. The extant small-scale features include historic elements, largely dating from the station's primary period of interpretation (1902-1947) and reconstructions erected by the NPS in the 1970s and 1980s. The location and appearance of the reconstructions are largely based upon photographic evidence from the period of interpretation.

In 1957 the U.S. Coast Guard installed an automated light beacon located at the edge of the bluff, immediately west of the fog signal building. The feature postdates the period of significance within the cultural landscape. Nevertheless, it is required for navigation, is included in site interpretation, and illustrates the technological evolution of navigation aids.

The capped water cistern located in front (west) of the fog signal building dates to the 1903 construction of the building. It provided water, siphoned from the lake, for the boilers that powered the steam fog whistle. The historic period hand pump and water lines have been removed. The height of the feature has also been reduced. Nevertheless, the cistern retains integrity and illustrates the changing technology at the station.

Two concrete oil cradles flank the oil building. These cradles, likely built ca. 1932 in association with the conversion of the foghorn from steam to compressed air furnished by diesel-powered compressors, originally supported metal fuel tanks. The saddles retain integrity. The tanks that were once associated are no longer extant. The cradles illustrate the changing technology at the station.

A cement drainage trough, probably constructed ca. 1906, lies adjacent to a portion of cement walkway immediately east of the fog signal building. This trough is the only visible extant remnant of the historic drainage system. The feature retains integrity and conveys the measures that lighthouse residents took to relieve the drainage problems associated with the yard's clay soils and minimal slope.

Located along the west side of the reconstructed garden plot is a non-historic feature dating from the NPS reconstruction of the station gardens in the 1980s. There is no visual evidence that such a feature existed at the station during the period of significance.

The pair of white wooden poles that supported the secondary flagstaff or aerial mast are located between the fog signal building and the reconstructed garden plot. These poles appear to date from the 1930s and are visible in many period photos. Historic photographs clearly show a flag flying from this staff, although it may have served as a radio antenna mast after 1941. This feature retains a diminshed integrity. No flagstaff is currently present at the station. These supports once held a secondary flagstaff.

A swing existed at the station from as early as 1900. The present swing is an NPS reconstruction, dating from ca. 1978, approximating the form and location of the historic swing.

Clotheslines presumably existed at the station from an early date. Though the location of the clothesline has shifted over the years, the present clothesline appears to date from ca. 1939 and is visible in historic photographs. The clothesline retains integrity.

The weather station, located within the historic clearing east of the barn, was installed by the Coast Guard after their assumption of management duties on the island. It is presently non-functional.

Birdhouses existed at several locations at the station and date from at least 1931. The present birdhouse, located south of the barn, approximates the form and location of one of these historic features, but was constructed by the NPS during the 1970s.

The surviving range marker, consisting of a cedar pole and a diamond-shaped device made of rough lumber, is one of a pair of navigation aids erected in the station clearing in the 1930s. It provided a visual reference in the daylight for passing ships so that the navigator could determine if they were within the main navigation channel. The marker, originally visible from the lake, is now located in the encroaching woods alongside the trail to the sand point. The marker has diminished integrity. It represents an important navigational tool and is important for interpretation.

Interpretive signs erected by the NPS are located at the south end of the present lighthouse yard in an area historically located within the station clearing.

Two modern pit toilets are located near the southern edge of the clearing. These facilities were constructed by the NPS to accommodate island visitors.

The extant small-scale features that date from the station's period of significance retain sufficient integrity to be considered contributing elements within the cultural landscape. These remaining objects speak not only to the operation of the station as part of Lighthouse Service, but also the Keepers' daily lives including routine domestic chores, children's recreation, and individual interests. Although the inventory of these features has diminished, they are representative of the range of objects formerly extant and contribute to its historical significance.

Small-scale features that do not contribute to the historic landscape include the contemporary navigation beacon, pit toilets, and landscape feature reconstructed by the NPS. Although the reconstructions augment site interpretation, because they do not meet current NPS standards they are considered noncontributing. Significant non-extant small-scale features include the light station fence, the flagstaffs, and the birdbath. Their absence diminishes the level of landscape integrity.

## **Character-defining Features:**

Feature: Light Beacon

Feature Identification Number:	133638	3			
Type of Feature Contribution:	Non C	Contributing			
Feature: Cistern					
Feature Identification Number:	133752	2			
Type of Feature Contribution:	Contri	ibuting			
Feature UTM Source	<u>Type of</u> <u>Point</u>	<u>Datum</u>	<u>UTM</u> Zone	<u>UTM</u> Easting	UTM Northing
GPS-Differentially Corrected	Point	NAD 83	15	666,985	5,204,202
IDLCS Number:	10162	.8			
LCS Structure Name:	Raspb	erry Island Li	ght Station Ci	stern	
LCS Structure Number:	08104	·C			
Feature: Concrete Oil Cradles	5				
Feature Identification Number:	133754	1			
Type of Feature Contribution:	Contri	ibuting			
Feature UTM Source	<u>Type of</u> <u>Point</u>	<u>Datum</u>	<u>UTM</u> Zone	<u>UTM</u> Easting	<u>UTM</u> Northing
	• •	<u>Datum</u> NAD 83			
Source GPS-Differentially	Point	NAD 83	Zone	Easting	<u>Northing</u>
Source GPS-Differentially Corrected	Point Point 10162	NAD 83	<u>Zone</u> 15	Easting	<u>Northing</u> 5,204,189
Source GPS-Differentially Corrected IDLCS Number:	Point Point 10162	NAD 83 7 perry Island Li	<u>Zone</u> 15	<u>Easting</u> 666,984	<u>Northing</u> 5,204,189
Source GPS-Differentially Corrected IDLCS Number: LCS Structure Name:	Point Point 10162 Raspb	NAD 83 7 perry Island Li	<u>Zone</u> 15	<u>Easting</u> 666,984	<u>Northing</u> 5,204,189
Source GPS-Differentially Corrected IDLCS Number: LCS Structure Name: LCS Structure Number:	Point Point 10162 Raspb	NAD 83 7 perry Island Li E	<u>Zone</u> 15	<u>Easting</u> 666,984	<u>Northing</u> 5,204,189
Source GPS-Differentially Corrected IDLCS Number: LCS Structure Name: LCS Structure Number: Feature: Drainage Trough	Point Point 10162 Raspb 08104 133644	NAD 83 7 perry Island Li E	<u>Zone</u> 15	<u>Easting</u> 666,984	<u>Northing</u> 5,204,189
Source GPS-Differentially Corrected IDLCS Number: LCS Structure Name: LCS Structure Number: Feature: Drainage Trough Feature Identification Number:	Point Point 10162 Raspb 08104 133644	NAD 83 7 Perry Island Li E	<u>Zone</u> 15	<u>Easting</u> 666,984	<u>Northing</u> 5,204,189
Source GPS-Differentially Corrected IDLCS Number: LCS Structure Name: LCS Structure Number: Feature: Drainage Trough Feature Identification Number: Type of Feature Contribution:	Point Point 10162 Raspb 08104 133644	NAD 83 7 perry Island Li E 4 ibuting	<u>Zone</u> 15	<u>Easting</u> 666,984	<u>Northing</u> 5,204,189
Source So	Point Point 10162 Raspb 08104 133644 Contri	NAD 83 7 perry Island Li E 4 ibuting	<u>Zone</u> 15	<u>Easting</u> 666,984	<u>Northing</u> 5,204,189
Source GPS-Differentially Corrected IDLCS Number: LCS Structure Name: LCS Structure Number: Feature: Drainage Trough Feature Identification Number: Feature: Grape Arbor Feature Identification Number:	Point Point 10162 Raspb 08104 133644 Contri 133646 Non C	NAD 83 7 perry Island Li E 4 ibuting	<u>Zone</u> 15	<u>Easting</u> 666,984	<u>Northing</u> 5,204,189

Type of Feature Contribution:	Contributing
Feature: Swing	
Feature Identification Number:	133650
Type of Feature Contribution:	Non Contributing
Feature: Clothesline	
Feature Identification Number:	133652
Type of Feature Contribution:	Contributing
Feature: Weather Station	
Feature Identification Number:	133666
Type of Feature Contribution:	Non Contributing
Feature: Birdhouses	
Feature Identification Number:	133668
Type of Feature Contribution:	Non Contributing
Feature: Range Marker	
Feature Identification Number:	133670
Type of Feature Contribution:	Contributing
Feature: Interpretive Signage	
Feature Identification Number:	133672
Type of Feature Contribution:	Non Contributing
Feature: Picnic Tables	
Feature Identification Number:	133674
Type of Feature Contribution:	Non Contributing
Feature: Pit Toilets	
Feature Identification Number:	133676
Type of Feature Contribution:	Non Contributing
Landscape Characteristic Graphics:	



*View to west of fog signal building with concrete oil cradles flanking oil building in the foreground. (Curran for NPS, 2008)* 



Clothesline. View to south. (Curran for NPS, 2008)

## **Archeological Sites**

Two archaeological features have been identified at Raspberry Island Light Station. The remains of a ca. 1935 root house are located in the clearing east of the lighthouse yard. This feature has not been fully investigated and its integrity is presently undetermined. Nevertheless, because the feature can be identified in the Keepers logs and because it retains integrity of location it is considered a contributing resource within the landscape.

Remnants of the system of wood walkways that occupied the lighthouse yard are evident immediately in front (west) of the barn entry and extending southwest from the assistant keepers' privy. The extent of these resources is unknown, and their integrity as archaeological features is presently undetermined. Nevertheless, because they retain integrity of location they are considered contributing resources within the landscape.

# Condition

# Condition Assessment and Impacts

Condition Assessment:	ган
Assessment Date:	01/12/2009

# Impacts

Type of Impact:	Erosion
External or Internal:	Internal
Type of Impact:	Vegetation/Invasive Plants
External or Internal:	Internal
Type of Impact:	Improper Drainage
External or Internal:	Internal
Type of Impact:	Deferred Maintenance
External or Internal:	Internal
Type of Impact:	Fire
External or Internal:	Internal
Type of Impact:	Visitation
External or Internal:	Internal

# Treatment

# Treatment

Approved Treatment:

Undetermined

# **Bibliography and Supplemental Information**

# Bibliography

Citation Author:	NPS
Citation Title:	General Management Plan: Apostle Islands
Year of Publication:	1989
Citation Publisher:	NPS
Citation Type:	Both Graphic and Narrative
Citation Location:	MWRO
Citation Author:	NPS, HRA Gray & Pape LLC, and Woolpert LLP
Citation Title:	Cultural Landscape Report and Environmental Assessment: Raspberry Island Light Station, Apostle Islands National Lakeshore, Bayfield County, Wisconsin
Year of Publication:	2004
Citation Publisher:	NPS
Citation Type:	Both Graphic and Narrative
Citation Location:	MWRO
Citation Author:	Parnes, Herschel L.D.
Citation Author: Citation Title:	Parnes, Herschel L.D. Apostle Islands Lighthouses National Register Nomination
Citation Title:	Apostle Islands Lighthouses National Register Nomination
Citation Title: Year of Publication:	Apostle Islands Lighthouses National Register Nomination 1977
Citation Title: Year of Publication: Citation Number:	Apostle Islands Lighthouses National Register Nomination 1977 77000145
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