

United States Department of the Interior  
National Park Service

# National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form*. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional certification comments, entries, and narrative items on continuation sheets if needed (NPS Form 10-900a).

### 1. Name of Property

historic name Milwaukee Breakwater Light  
other names/site number \_\_\_\_\_

### 2. Location

street & number Offshore at S end of N breakwater, 0.7 mile E of Milwaukee River mouth  not for publication  
city or town Milwaukee  vicinity  
state Wisconsin code WI county Milwaukee code 079 zip code 53202

### 3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,  
I hereby certify that this  nomination  request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property  meets  does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

national  statewide  local

[Signature]  
Signature of certifying official/Title

June 11  
Date

United States Coast Guard  
State or Federal agency/bureau or Tribal Government

In my opinion, the property  meets  does not meet the National Register criteria.

\_\_\_\_\_  
Signature of commenting official Date

\_\_\_\_\_  
Title State or Federal agency/bureau or Tribal Government

### 4. National Park Service Certification

I hereby certify that this property is:

- entered in the National Register
- determined eligible for the National Register
- determined not eligible for the National Register
- removed from the National Register
- other (explain:)

\_\_\_\_\_  
Signature of the Keeper

\_\_\_\_\_  
Date of Action

Milwaukee Breakwater Light  
 Name of Property

Milwaukee County, WI  
 County and State

**5. Classification**

**Ownership of Property**  
 (Check as many boxes as apply.)

- private
- public - Local
- public - State
- public - Federal

**Category of Property**  
 (Check only one box.)

- building(s)
- District
- Site
- Structure
- Object

**Number of Resources within Property**  
 (Do not include previously listed resources in the count.)

Contributing	Noncontributing	
		buildings
		district
		Site
1		structure
		Object
1	0	<b>Total</b>

**Name of related multiple property listing**  
 (Enter "N/A" if property is not part of a multiple property listing)

Light Stations of the United States

**Number of contributing resources previously listed in the National Register**

0

**6. Function or Use**

**Historic Functions**  
 (Enter categories from instructions.)

Transportation

Water-related

**Current Functions**  
 (Enter categories from instructions.)

Transportation

Water-related

**7. Description**

**Architectural Classification**  
 (Enter categories from instructions.)

Modern Movement

**Materials**  
 (Enter categories from instructions.)

foundation: Reinforced concrete

walls: Steel

roof: Metal

other: Lantern: Cast iron, glass

Milwaukee Breakwater Light  
Name of Property

Milwaukee County, WI  
County and State

---

**Narrative Description**

---

**Summary Paragraph**

The Milwaukee Breakwater Light was established as a Federal aid to navigation in 1926 to mark the entry to Milwaukee Harbor. It is situated offshore in Lake Michigan, approximately 0.7 mile east of the mouth of the Milwaukee River in Milwaukee County, Wisconsin. This property consists of one contributing resource, the lighthouse. It is an active Federal aid to navigation owned by the U.S. Coast Guard (USCG) and identified as number 20635 on the USCG Great Lakes regional light list. This structure is designed with Art Deco styling that expresses modernity and verticality. It is approximately 95 feet tall from the base of its rectangular wood and concrete foundation to the top of its steel superstructure. The foundation includes a wooden crib and a concrete pier enclosing the lighthouse's basement. The superstructure is five stories tall and includes a rectangular keepers dwelling with an integral light tower supporting a circular lantern surrounded by an open-air gallery. The lantern is equipped with a modern automated optic that signals a red flash every 10 seconds and is visible for 14 miles in clear weather. The lighthouse optic's focal plane is 61 feet above water level. The keepers dwelling and tower are painted white; the lantern and lantern gallery railing are painted black. The lighthouse is floodlighted from dusk to dawn. It is accessible by boat but is not open to public visitation. The property's offshore setting includes the Lake Michigan waters surrounding it. These waters are controlled by the State of Wisconsin, which owns the submerged land in the lighthouse vicinity. Milwaukee Breakwater Light is a prominent visual landmark for the city of Milwaukee.

---

**Narrative Description**

(see continuation sheets)

Milwaukee Breakwater Light  
Name of Property

Milwaukee County, WI  
County and State

**8. Statement of Significance**

**Applicable National Register Criteria**

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B Property is associated with the lives of persons significant in our past.
- C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D Property has yielded, or is likely to yield, information important in prehistory or history.

**Areas of Significance**

(Enter categories from instructions.)

Maritime History

Transportation

Engineering

**Period of Significance**

1926 to 1966

**Significant Dates**

1926

**Significant Person**

(Complete only if Criterion B is marked above.)

N/A

**Cultural Affiliation**

N/A

**Architect/Builder**

Office of the Superintendent of Lighthouses

12<sup>th</sup> Lighthouse District, Milwaukee, WI

**Criteria Considerations**

(Mark "x" in all the boxes that apply.)

Property is:

- A Owned by a religious institution or used for religious purposes.
- B removed from its original location.
- C a birthplace or grave.
- D a cemetery.
- E a reconstructed building, object, or structure.
- F a commemorative property.
- G less than 50 years old or achieving significance within the past 50 years.

**Period of Significance (justification)**

The property's period of significance begins with the establishment of Milwaukee Breakwater Light as a Federal aid to navigation in 1926 and continues to 1966, the year when this lighthouse was automated.

**Criteria Considerations (explanation, if necessary)**

N/A

United States Department of the Interior  
National Park Service

Milwaukee Breakwater Light
Name of Property
Milwaukee County, Wisconsin
County and State
Light Stations of the United States MPDF
Name of multiple listing (if applicable)

## National Register of Historic Places Continuation Sheet

### ADDITIONAL DOCUMENTATION

**Statement of Significance Summary Paragraph** (Provide a summary paragraph that includes level of significance and applicable criteria.)

#### Summary Paragraph

The Milwaukee Breakwater Light is a prominent landmark in Milwaukee County and is historically significant on the local level. It embodies the maritime heritage of the port of Milwaukee and serves as an important guide for waterborne traffic. The property's period of historic significance begins in 1926 when it was established as a Federal lighthouse and ends in 1966, the year when its aid to navigation equipment was automated. It is eligible for listing in the National Register under Criteria A and C. This lighthouse is significant in terms of Criterion A for its association with the efforts of the Federal government to provide for safe maritime transport on the Great Lakes. It exemplifies how the long-term Federal program for establishing an integrated system of navigational aids throughout the United States was manifested in the Milwaukee County locality. Milwaukee Breakwater Light is significant under Criterion C because it represents and embodies second quarter of the twentieth century lighthouse architecture and engineering. It exemplifies methods used in building crib foundation, steel tower lighthouses during that time period. The structure's existing integrity attests to the lasting value of its design, as well as the high quality of materials and construction. This property's character and appearance are largely unchanged from when it was first established as an aid to navigation. Changes that have been made include repainting its day mark color from red, to buff and black, to white and black, as well as replacing its original beacon with a modern optic and removing equipment and furnishings associated with the lighthouse's operation by resident keepers. Despite these changes, the lighthouse's appearance remains essentially the same as during its period of historical significance. This property possesses its original location, setting and design, and embodies qualities of integrity in materials, workmanship, feeling and association. Milwaukee Breakwater Light has been an operating Federal aid to navigation for more than eight decades and continues to guide vessels navigating Wisconsin's Lake Michigan waters. It prominently exemplifies Milwaukee County's maritime history, and evokes feelings that recall the dedication to duty that characterized United States lighthouse keepers throughout the country's history.

**Narrative Statement of Significance** (Provide at least one paragraph for each area of significance.)

(see continuation sheets)

**Developmental history/additional historic context information** (if appropriate)

(see continuation sheets)

United States Department of the Interior  
National Park Service

Milwaukee Breakwater Light
Name of Property
Milwaukee County, Wisconsin
County and State
Light Stations of the United States MPDF
Name of multiple listing (if applicable)

# National Register of Historic Places Continuation Sheet

## ADDITIONAL DOCUMENTATION

### 9. Major Bibliographical References

Bibliography (Cite the books, articles, and other sources used in preparing this form.)

(see continuation sheet)

#### Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67 has been requested)
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey # \_\_\_\_\_

#### Primary location of additional data:

- State Historic Preservation Office
- Other State agency
- Federal agency
- Local government
- University
- Other

U.S. National Archives; USCG Civil Engineering Unit (CEU) Cleveland, OH; USCG Historian's Office, Washington, DC; Wisconsin Maritime Museum; Wisconsin Historical Society.

\_\_\_\_\_ recorded by Historic American Engineering Record # \_\_\_\_\_  
\_\_\_\_\_ recorded by Historic American Landscape Survey # \_\_\_\_\_

Name of repository: \_\_\_\_\_

Historic Resources Survey Number (if assigned): \_\_\_\_\_

### 10. Geographical Data

Acreage of Property Less than one acre

(Do not include previously listed resource acreage.)

#### UTM References

(Place additional UTM references on a continuation sheet.)

1 16 428140 4764180  
Zone Easting Northing

3 \_\_\_\_\_  
Zone Easting Northing

2 \_\_\_\_\_  
Zone Easting Northing

4 \_\_\_\_\_  
Zone Easting Northing

#### Verbal Boundary Description (Describe the boundaries of the property.)

The property's boundary is the exterior limit of the perimeter of the rectangular base of the lighthouse's foundation.

#### Boundary Justification (Explain why the boundaries were selected.)

This boundary encompasses the USCG-owned lighthouse structure nominated for National Register listing.

United States Department of the Interior  
National Park Service

Milwaukee Breakwater Light
Name of Property
Milwaukee County, Wisconsin
County and State
Light Stations of the United States MPDF
Name of multiple listing (if applicable)

# National Register of Historic Places Continuation Sheet

## ADDITIONAL DOCUMENTATION

### 11. Form Prepared By

name/title Daniel Koski-Karell, Ph. D., USCG HQ Office of Environmental Management, and Jayne Aaron and Daniel Hart, e<sup>2</sup>M, Inc.

organization United States Coast Guard (COMDT CG-47) date 1 June 2011

street & number 2100 Second Street SW – STOP 7901 telephone 202.475.5683

city or town Washington state DC zip code 20593-7901

e-mail Daniel.A.Koski-Karell@uscg.dhs.gov

### Additional Documentation

Submit the following items with the completed form:

- **Map:** A USGS topographic map (7.5 minute series) indicating the property's location.
- **Continuation Sheets**
- **Additional Items:** Black and white photograph prints.

### Property Owner:

Name United States Coast Guard

street & number 2100 Second Street SW telephone 202.267.1587

city or town Washington state DC zip code 20593

**Paperwork Reduction Act Statement:** This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

**Estimated Burden Statement:** Public reporting burden for this form is estimated to average 18 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management, U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.

United States Department of the Interior  
National Park Service

## National Register of Historic Places Continuation Sheet

Milwaukee Breakwater Light
Name of Property Milwaukee County, Wisconsin
County and State Light Stations of the United States MPDF
Name of multiple listing (if applicable)

### ADDITIONAL DOCUMENTATION

Section number 7, continued Page 1

#### Narrative Description

##### Setting

The Milwaukee Breakwater Light is located offshore of the City of Milwaukee waterfront. It is in Lake Michigan, 0.7 mile east of the mouth of the Milwaukee River. Its setting includes the waters that surround the lighthouse and the southern end of the adjoining breakwater. The lighthouse is situated on the northern side of the principal channel for vessels navigating between Lake Michigan and Milwaukee Harbor. The submerged land surrounding the lighthouse is owned by the State of Wisconsin, which also controls the offshore setting's Lake Michigan waters. This lighthouse property sits at the southern end of the Milwaukee Harbor north breakwater, which is approximately 20 feet wide and extends 1.2 miles towards the north. It is part of the breakwater complex approximately four miles long that shelters the waters of Milwaukee Harbor. This complex includes five breakwaters separated by openings for the passage of vessels and is a Federal navigation structure owned and maintained by the U.S. Army Corps of Engineers (USACE). The property's setting has remained essentially unchanged since the lighthouse was originally constructed in 1926.

##### Contributing Resource: Lighthouse

The Milwaukee Breakwater Light sits upon submerged land in 30 feet of water at the southern end of the Milwaukee Harbor north breakwater. It includes a foundation crib, concrete pier, and a five-story steel superstructure designed with Art Deco styling. The structure's overall height from the foundation's base to the top of its superstructure is approximately 95 feet. From water level to the top is approximately 65 feet. The lighthouse's concrete pier is not painted and its wood and concrete crib foundation is underwater. The superstructure is painted white, except for the lighthouse's lantern and lantern gallery railing which are painted black. Its façades include recessed and projecting vertical sections leading upward to colonnettes standing atop each corner of the roof and light tower. The structure's Art Deco styling expresses its modernity and height. This lighthouse was established as a Federal aid to navigation in 1926 and continues in operation with a beacon light and fog signal. Milwaukee Breakwater Light is floodlighted from sunset to sunrise and is a prominent offshore landmark visible from much of the City of Milwaukee's waterfront. It is accessible by boat. This property is owned by the U.S. Coast Guard and is not open for public visitation.

The lighthouse's crib foundation and concrete pier are rectangular and measure 60 feet by 54 feet. This part of the structure is oriented with the four corners pointing toward north, east, south and west. The crib is approximately 30 feet tall and constructed of heavy timbers attached with steel fastenings. Its interior is filled with rock ballast and concrete. This foundation supports a rectangular concrete pier that stands approximately 14 feet tall above water level. The pier supports the lighthouse superstructure and contains its basement. The pier's four façades include built-in ladders with steel rungs on all four sides. These extend from water level to the pier's topside deck. There are two ladders on the pier's northwest (NW) and southwest (SW) sides, one each on the northeast (NE) and southeast (SE) sides. The pier's concrete exterior is largely intact though deterioration is evident in several places.

The pier's SW and NW sides are each pierced with a rectangular doorway fitted with a steel door. These sea doors provided access between the lighthouse's basement and a vessel moored alongside the pier. The SW side is also pierced with four rectangular window openings. The NW side is pierced with one rectangular window opening and three round port-light window openings. The SE and NE sides are both pierced with four round port-light window openings. All these port-light and rectangular window openings are presently covered with metal plates. The basement interior is 43 feet long by 26 feet wide with concrete floor, columns and ceiling. Horizontal steel I-beams provide additional support for the ceiling. The basement's northern corner includes a fuel and paint storage room partitioned from the main room. A steel stairway leads up from the basement floor to the lighthouse's first story interior.



United States Department of the Interior  
National Park Service

## National Register of Historic Places Continuation Sheet

Milwaukee Breakwater Light
Name of Property
Milwaukee County, Wisconsin
County and State
Light Stations of the United States MPDF
Name of multiple listing (if applicable)

### ADDITIONAL DOCUMENTATION

Section number 7, continued Page 2

The pier supports the lighthouse's five-story superstructure which is approximately 51 feet tall. The superstructure is approximately 43 feet long by 26 feet wide with its long axis oriented NW to SE. The first to fourth stories are clad with steel plates fastened with rivets. The walls are pierced with windows that are 28 inches wide by 48 inches tall and fitted with double hung sash holding two-over-two lights. The windows are covered on the inner side with an acrylic sheet. The lighthouse's fifth story is its lantern, which is made of cast iron and glazing. There are open deck areas approximately 17 feet wide by 54 feet long atop the pier adjoining the superstructure's SW (front) and NE (rear) sides. Additional narrow sections of open deck approximately 5 feet wide adjoin the superstructure's NW and SE ends, between it and the edge of the pier. A non-original railing made with steel pipe and chain surrounds the pier deck's perimeter.

The lighthouse's frontal façade faces SW. Its first and second story elevation includes three bays. The left and right bays are each two stories (22 feet) tall. The center bay forms an integral, rectangular symmetrical tower that rises to four stories (42 feet) tall. This tower supports the lighthouse's lantern, which sits centered atop the tower surrounded by a rectangular open air gallery. The SW façade's left and right bays have the appearance of two-story wings abutting the center bay's tower.

A rectangular metal sign reading "U.S. Coast Guard Cable Crossing Do Not Anchor" is attached to the SW (front) façade's middle bay between the first and second stories. This sign is approximately 10 feet wide by 8 feet tall. It warns of the underwater cable that brings electrical power to the lighthouse from shore.

The first story's NW bay is on the left when viewed from the superstructure's front. It is distinguished by a 10-foot wide by 10-foot tall doorway fitted with an overhead-retracting door. The interior consists of a single room that is 26 feet long by 13 feet wide. This was used for storing and maintaining the lighthouse keepers' boat. The room's floor, walls, and ceiling are concrete; steel girders support the ceiling. A metal track used for moving a boat extends NE from the doorway into the room. It is made with two parallel steel rails spaced 42-3/8 inches apart. The boat room's NW wall has three windows; the NE wall has one. A modern electrical circuit box used for powering the lighthouse's aid to navigation equipment sits in the middle of the floor.

The SW façade of the first story's center bay includes a window and the lighthouse's front entrance. This entry is fitted with a 2-foot, 8-inch wide steel door. The doorway leads to an interior foyer approximately 12.5 feet wide by 12 feet long. This includes a closet and stairways leading up to the second story and down to the basement. The original wood flooring has been removed, leaving wooden floor joists embedded in the concrete subfloor. A rectangular window pierces the foyer's SW wall, next to the doorway. Three wood framed doorways 2 feet, 8 inches wide provide access from the foyer to other first story rooms. A doorway on the NW side provides access to the boat room. A doorway on the SE side leads to a room in the SW half of the first story's SE bay. A door on the foyer's NE side leads to the lighthouse's kitchen, which occupies the middle bay's NE half. This kitchen is approximately 12.5 feet wide by 12 feet long with a plaster ceiling. Its original wood floor has been removed leaving the wooden floor joists and concrete subfloor exposed. The kitchen's NE wall is pierced by two windows. A wood framed doorway 2 feet, 8 inches wide in the kitchen's SE wall leads to a room in the NE half of the first story's SE bay.

The first story's SE bay includes two rooms that are each approximately 12 feet long by 13 feet wide. The wooden partition separating these rooms is not original. The bay's NE room adjoins the kitchen. Its original wooden floor has been removed, exposing the wooden floor joists and concrete subfloor. The room's concrete walls and ceiling are covered with plaster. There is a 6-inch diameter floor drain in the eastern corner. This room has a window in the NE wall and another in the SE wall. A doorway in the room's SW wall leads to this bay's SW room, where the floor is covered with linoleum tiles over wooden boards. The SW room's concrete walls and ceiling are plastered. Non-original wall materials have been installed on the room's NW, NE, and SE walls. This room has one window in the SW wall and two in the SE wall. A doorway in the room's NW wall connects with the middle bay's foyer.

United States Department of the Interior  
National Park Service

Milwaukee Breakwater Light
Name of Property
Milwaukee County, Wisconsin
County and State
Light Stations of the United States MPDF
Name of multiple listing (if applicable)

## National Register of Historic Places Continuation Sheet

### ADDITIONAL DOCUMENTATION

Section number 7, continued Page 3

The second story's plan includes three bays, directly above those on the first story. The original wooden flooring has been removed, leaving the concrete subfloor and wooden floor joists exposed. The NW bay, above the boat room, is divided into two bedrooms (SW and NE). The SW room measures 11 feet by 13 feet, 9 inches. It has two windows on the NW side and one window on the SW side. The bay's NE room measures 10 feet by 13 feet, 9 inches. It has one window on the NW side and another on the NE side. The center bay includes a hallway and a stairway with flights leading down to the first story and up to the light tower's third story. The hallway extends NW to SE across the middle bay and provides access to bedrooms in the second story's NW and SE bays. Partition walls on the hallway's NE side enclose a linen closet that is lighted with a window and a broom closet. The center bay's SE corner, next to the broom closet, is occupied by a bathroom lighted with a window. Opposite the bathroom, across the hallway, other partitions enclose a small room that measures 12 feet by 5 feet, 4 inches and is lighted by a window. The second story's SE bay is divided into two bedrooms (SW and NE). The SW room measures 13 feet, 9 inches by 13 feet, 9 inches. It has a closet and three windows, two on the SE side and one on the SW side. This is the second story's largest bedroom. It adjoins the small room in the center bay. The SE bay's NE room measures 10 feet by 13 feet, 9 inches. It has two windows, one on the SE side and one on the NE side.

The lighthouse's third story is part of the light tower and sits atop the SW half of the second story's center bay. The third story is rectangular and measures 14 feet long on each side. Its interior is a single room approximately 12 feet square. A stairway providing access down to the second story and up to the tower's fourth story occupies approximately one-third of the room. This room's original wooden flooring has been removed, leaving the concrete subfloor and wooden floor joists exposed. The four walls are each pierced with two windows. A doorway 2 feet, 8 inches wide pierces the NE wall between two windows. It is fitted with an original metal door and provides access to the roof above the superstructure's second story.

The second story's roof is metal. Its perimeter includes a decorative, three-foot tall rectangular column at each of the roof's four corners and spaced along the perimeter at approximately 12-foot intervals, including one on either side of the light tower. The spaces between these are filled with steel balustrades made with an upper and a lower horizontal steel bar and simple bar balusters. Each balustrade segment is ornamented with a metal circle below the top bar at the segment's midpoint.

The lighthouse's fourth story sits atop the third story and consists of the light tower's watch room. It includes the upper end of the light tower's stairway, which is bounded by a 3-foot tall partition except for an opening at the top of the stairs. As with other rooms below, the original wooden flooring has been removed, leaving the concrete subfloor and wooden floor joists exposed. The fourth story's NE, SE, and SW walls are each pierced with three windows. The NW wall has two windows. This is because the lighthouse originally included a metal smokestack that extended upward from the second story along the tower's midline on that side. The fourth story room is furnished with modern electrical panels used for powering the lighthouse's existing aid to navigation equipment. A television camera is installed to look out one window. In the center of the room, a curving metal ladder with a simple pipe handrail ascends to a trapdoor opening in the ceiling. This provides access to the lantern room, above.

The lighthouse's fifth story is its lantern, which sits centered atop the fourth story. The lantern is circular and approximately nine feet in diameter by nine feet tall. It includes a circular cast iron parapet wall approximately three feet tall that is pierced with five vents spaced at equal intervals. The parapet supports a series of "X" shaped mullions extending around the lantern in a helical pattern. These hold the lantern's glazing. The lantern's conical roof springs from a soffit above the glazing and rises to a cylindrical vent atop the roof's apex. A pedestal standing in the center of the lantern room's metal floor supports the lighthouse's optic, a modern automated VRB-25 marine rotating beacon with a focal plane 61 feet above water level. It signals a red flash every 10 seconds and is visible for 14 miles in clear weather.

United States Department of the Interior  
National Park Service

Milwaukee Breakwater Light
Name of Property
Milwaukee County, Wisconsin
County and State
Light Stations of the United States MPDF
Name of multiple listing (if applicable)

## National Register of Historic Places Continuation Sheet

### ADDITIONAL DOCUMENTATION

Section number 7, continued Page 4

A six-foot tall door on the lantern's southern side includes a solid metal lower panel and a glazed upper panel. This door provides access to the open-air lantern gallery. The gallery is rectangular and measures approximately 12 feet long on each side. Its perimeter includes a decorative, three-foot tall rectangular column at each of the four corners. The spaces between these are filled with steel balustrades made with an upper and a lower horizontal steel bar and simple bar balusters. Each balustrade segment is ornamented with a metal circle below the top bar at the segment's midpoint. The lantern, columns, and railings are painted black. A modern automated fog signal and a fog detector are mounted atop the gallery deck's NE side. The fog signal sounds two 2-second blasts every 20 seconds and operates from April to November.

#### Changes in Physical Appearance and Overall Integrity

The Milwaukee Breakwater Light's structural characteristics remain largely unchanged from when it was originally established in 1926, though there have been changes to its exterior appearance and interior. One aspect that has changed is the lighthouse's day mark colors. Its superstructure was originally painted red. This was changed during the 1930s to a black lantern atop a buff-colored superstructure. The day mark colors were changed again during the 1960s to a white colored superstructure supporting a black lantern. This remains the lighthouse's day mark today. A change has also been made to the cable crossing warning sign mounted on the lighthouse. From 1926 to circa 1940, it was attached to the lighthouse's SE side. From then to the present it has been displayed on the superstructure's SW side.

Physical changes that have been made to the property include windows in its concrete pier and elements of the superstructure. When built, there was a round port-light next to the sea door on the concrete pier's SW side. This has been removed and its circular opening sealed with concrete. The pier's other windows have been covered with metal plates. Changes to the lighthouse superstructure include the removal of two metal smokestacks that originally were positioned alongside and atop the light tower. One rose upward midway between the windows on the tower's NW side. The other smokestack was attached to the lantern gallery's northern corner. Both were removed following the lighthouse's automation in 1966.

Another superstructure change relates to the lighthouse's radiobeacon, which operated from 1926 to the 1990s. When Milwaukee Breakwater Light was originally established, it was equipped with a radiobeacon distance finding system that operated in tandem with the fog signal. The radiobeacon transmitted two dashes in Morse code simultaneously with a blast of the fog signal. The crew of a vessel could estimate their distance from the lighthouse by counting the time from when the instantaneous radiobeacon signal was received until the fog signal was heard. Sound travels a little more than one mile in five seconds, so each second of time between receiving the radio signal and hearing the fog signal was approximately equivalent to 0.2 mile. The radiobeacon also provided a means for determining the direction to the lighthouse from a vessel through use of a radio direction finder. The property's radiobeacon was upgraded through time as radio technology improved and remained in use until 1995. The widespread adoption of radar, Loran-C, and global positioning system (GPS) instruments aboard commercial and recreational vessels by the late twentieth century eventually made the lighthouse's radiobeacon superfluous and it was discontinued. The radiobeacon included an antenna array that extended from the light tower to a steel monopole atop the north breakwater, approximately 200 feet from the lighthouse. After the radiobeacon was discontinued, its antenna and monopole were removed.

There have been several changes to the lighthouse's equipment and furnishings. From 1926 to 1966 the property was operated as a manned lighthouse and outfitted with facilities and furnishings for resident lighthouse keepers. After the keepers departed when the property was automated, equipment and furnishings no longer required were removed. Mechanical equipment removed included diesel engines, fuel tanks, compressors, and generators. It also included four cylindrical steel tanks that had been mounted atop the pier deck on the lighthouse's northeast side. These had held compressed air used for operating the fog signal.

United States Department of the Interior  
National Park Service

## National Register of Historic Places Continuation Sheet

Milwaukee Breakwater Light
Name of Property
Milwaukee County, Wisconsin
County and State
Light Stations of the United States MPDF
Name of multiple listing (if applicable)

### ADDITIONAL DOCUMENTATION

Section number 7, continued Page 5

Other changes include the pier deck's guardrail and a crane that had been originally installed. When built, the deck's guardrail included steel stanchions spaced at intervals of approximately six feet with two tiers of steel chain strung between them. This was removed circa the 1960s when the existing steel pipe and chain railing was installed. In addition, from 1926 to 1966 a steel crane was mounted atop the pier deck at the western corner. It was used for lifting and lowering the lighthouse keepers' boat. This crane was removed after the lighthouse was automated in 1966.

Changes made to lighthouse's internal structure include installation of a wooden partition wall with doorway in the first story's SE bay. This partition divided what was originally a single room (16 feet long by 13 feet wide) into the existing two equal-sized rooms. Another change has been removal of the lighthouse's original wood flooring, which became deteriorated. What remains today is the concrete subfloor and wooden joists that supported the original flooring. The floor removal and first story SE bay partition wall modifications are reversible.

There have been a series of changes to the lighthouse's aid to navigation equipment. When established in 1926, the lighthouse was equipped with a fourth order Fresnel lens as its optic. This signaled a red light that cycled on for 4.5 seconds and off for 1.5 seconds. The fourth order Fresnel optic remained in use until it was removed in 1994 and replaced with the existing VRB-25 rotating marine beacon. The lighthouse's original Fresnel lens is presently on display at the Wisconsin Maritime Museum in Manitowoc, Wisconsin.

The lighthouse's fog signal equipment has also changed through time. It was originally equipped with a single horn Diaphone fog signal operated using compressed air. This sounded a 2-second blast followed by 18 seconds of silence. The existing device is a modern automated diaphragm fog signal that sounds two blasts every 20 seconds. It operates during the shipping season from April to November and is connected to an automated fog detector.

Today, the significant character-defining features of Milwaukee Breakwater Light remain largely unaltered. It retains a high level of integrity regarding its location, setting, design, workmanship, materials, feeling, and association. This includes its pier, superstructure, and lantern. Features that are missing, changed or degraded have had limited impacts on the property's integrity. These changes have not significantly altered the lighthouse's appearance and are largely reversible.

United States Department of the Interior  
National Park Service

## National Register of Historic Places Continuation Sheet

Milwaukee Breakwater Light
Name of Property
Milwaukee County, Wisconsin
County and State
Light Stations of the United States MPDF
Name of multiple listing (if applicable)

### ADDITIONAL DOCUMENTATION

Section number 8, continued Page 1

#### Narrative Statement of Significance

##### Significance under Criterion A

The Milwaukee Breakwater Light is eligible for listing in the National Register of Historic Places (NRHP) under Criterion A for its association with local events in Milwaukee County related to Federal efforts to provide for an integrated system of navigational aids throughout the United States. It exemplifies how this long-term government program has been manifested in Wisconsin state waters. This lighthouse has been an important aid to navigation since it was established by the U.S. Bureau of Lighthouses in 1926. It is historically significant because of its contribution to the broad historical patterns of local maritime transportation and commerce. This lighthouse's signal light, fog signal and day mark have guided mariners and been an important enhancement to navigational safety in and around Milwaukee for more than eight decades. The Milwaukee Breakwater Light has enabled safe passage for thousands of ships and remains an operating lighthouse. It is widely recognized in Milwaukee County as a landmark.

##### Significance under Criterion C

This property also qualifies for the NRHP under Criterion C. It embodies and exemplifies distinctive architectural design and engineering aspects characteristic of steel lighthouses built on crib and pier foundations in the Great Lakes region during the second quarter of the twentieth century. This property retains integrity in terms of location, setting, design, materials, workmanship, feeling, and association. Its state of preservation represents the durable and weather-resistant character of its materials and construction, as well as the lasting success of its design and appropriateness to this natural setting. The appearance and character of Milwaukee Breakwater Light remain essentially the same as during its period of historical significance. Changes made to the property have been limited and are largely reversible.

#### Additional Context Information and Developmental History

This NRHP registration form is submitted as an individual listing under the overarching *Light Stations of the United States* multiple property documentation form (MPDF). The specific historic contexts that apply are *Bureau of Lighthouses and the U.S. Lighthouse Service (1910-1939)*, and *Lighthouses under the U.S. Coast Guard (1939-present)*. The property type sections of the MPDF relating to this registration are *U.S. Lighthouse Construction Type – Non-Cast Iron Tower (Steel)*, and *Foundation Type – Crib Foundation*. Information and historic contexts available in the *Light Stations of the United States* MPDF are not repeated here. This submission emphasizes facts and details supporting the historical significance of Milwaukee Breakwater Light as an individual property.

The property's Great Lakes regional setting includes Lakes Ontario, Erie, Huron, Michigan and Superior, along with their connecting waters and the St. Lawrence River. This is one of the largest concentrations of fresh water on earth. It encompasses a waterway system having a total shore length of approximately 11,000 statute miles and a total water surface area of about 95,000 square miles. The property's local setting is characterized by a combination of natural features conducive to the development of commercial activity and maritime trade. These features include the confluence of the Milwaukee River with Lake Michigan, which connects with the other Great Lakes. The river mouth provides access from Lake Michigan's open waters to a sheltered area where vessels can load and unload cargo and passengers. This includes the lower Milwaukee River as well as two other connecting navigable waterways near its mouth, the Menomonee River and Kinnickinnic River. The area's combination of ample habitable shorelines and waterborne transportation routes made it unusually favorable for the development of settlement and trading.

United States Department of the Interior  
National Park Service

## National Register of Historic Places Continuation Sheet

Milwaukee Breakwater Light
Name of Property
Milwaukee County, Wisconsin
County and State
Light Stations of the United States MPDF
Name of multiple listing (if applicable)

### ADDITIONAL DOCUMENTATION

Section number 8, continued Page 2

During late prehistoric times, the Milwaukee vicinity was inhabited by various American Indian groups including members of the Menominee, Potawatomi, and Ho-Chunk (Winnebago) tribes. Access to Lake Michigan and the area's three rivers provided opportunities for native groups to converge by canoe and meet for trade. The aboriginal name for this area, which is preserved in the place name "Milwaukee," means "pleasant land" or "gathering place." The indigenous use of this vicinity and its routes of access to interior lands were attractive to French Canadian fur traders during the seventeenth and eighteenth centuries when colonial exploration and commerce extended into the western Great Lakes.

Expansionist rivalry between the empires of France and Great Britain led to warfare during the 1760s that ended French colonial rule in Canada. Under British sovereignty, fur trading activity in the western Great Lakes region continued to grow over time. This included the 1785 establishment of the first trading post at Milwaukee by Alexis Laframboise. Shortly after this, the 1789 Treaty of Paris concluded the American Revolution. This treaty included transferring the Northwest Territory, which encompassed the Lake Michigan area, from British sovereignty to the United States of America. Even so, American settlement of the Milwaukee area did not begin to develop significantly until after the War of 1812 was concluded by the 1814 Treaty of Ghent, and lands in Wisconsin became available through treaties between the United States government and resident Native American groups.

The Great Lakes region's historic context was generally characterized by limited settlement and commercial development until the second quarter of the nineteenth century. These aspects began to expand tremendously following completion of the Erie Canal in 1825. This important commercial waterway linked Lake Erie at Buffalo, New York, with the port of New York City via the Hudson River. Its opening marked the beginning of a period of enormous growth in the Great Lakes Region's population, maritime traffic, and trade.

Another important man-made waterway, Canada's Welland Canal, opened in 1829. It provided the means for vessels to navigate between Lake Ontario and Lake Erie. The St. Mary's Falls Ship Canal (the Soo Locks) at Sault Sainte Marie, Michigan, opened in 1855. This provided for navigation between Lake Huron and Lake Superior, thus completing one of the last major links in the Great Lakes navigation system. With the opening of the St. Lawrence Seaway in 1959, Great Lakes navigation routes to the industrial and agricultural heartland of North America became accessible to deep-draft oceangoing vessels. In addition, barge and small craft traffic reaches the Great Lakes from the Gulf of Mexico via the Mississippi River and the Illinois Waterway, and also from the Hudson River by way of the New York State Barge Canal System.

Commerce grew rapidly in the Great Lakes region throughout the second half of the nineteenth century and into the twentieth century. The lumber industry accounted for a major part of the early development and expansion of marine traffic. Through time, development of iron ore production in Michigan's Upper Peninsula, northern Wisconsin and Minnesota, as well as grain from farms and flour from mills in the Midwest and northern Great Plains, furnished cargoes carried aboard vessels bound for the lower Great Lakes. These shipments corresponded with the heavy up-bound movement of coal and manufactured goods from ports in the lower lakes.

By 1910, the amount of goods shipped annually on the Great Lakes increased to 80 million tons. Most of this was bulk cargo such as iron ore and coal. Shipped freight tonnage reached a record of 217 million tons in 1948. The combined movement of lumber, grain, flour, iron ore and coal, together with limestone cargoes from the Lake Michigan area to centers of steel production, resulted in the greatest bulk freight marine commerce the world had ever seen.

The need for aids to navigation on the Great Lakes increased along with the expansion of shipping and settlement. Seven lighthouses were built in the region between 1818 and 1822, and 32 were completed during the 1830s. From 1841 to 1852, the U.S. Lighthouse Establishment added 33 new lights. Between 1852 and 1860, the total number of aids to navigation increased from 76 to 102. Another construction spurt occurred in the 1890s. By the beginning of the twentieth century, the Great Lakes had 334 major lighted aids, 67 fog signals, and 563 buoys.

United States Department of the Interior  
National Park Service

Milwaukee Breakwater Light
Name of Property
Milwaukee County, Wisconsin
County and State
Light Stations of the United States MPDF
Name of multiple listing (if applicable)

National Register of Historic Places  
Continuation Sheet

ADDITIONAL DOCUMENTATION

Section number 8, continued Page 3

Several distinct designs or types of lighthouses emerged during the nineteenth century. Until 1870 or so, the most common design consisted of a wood, stone, or brick keeper's dwelling that exhibited the lighthouse's optic in a lantern on the roof or atop an attached square tower. By the 1870s, taller towers that were connected to a keeper's dwelling by an enclosed passageway became popular. From 1870 to around 1910, lighthouse engineers practiced and perfected the construction of light stations built on isolated islands and on crib structures placed atop submerged reefs and shoals.

Another widespread Great Lakes lighthouse type is the pierhead light, used for guiding vessels into harbors along the lake shores. In the region, pierhead lighthouses are most common on Lake Michigan. Such lights differ from East Coast lights that serve the same purpose in that they are constructed on piers that project from shore into the lakes, rather than being built on land. Nineteenth century and early twentieth century Great Lakes piers consisted of timber cribs which were floated into place and then filled with rocks and other material to sink them. A timber superstructure was then built above the water, including a wooden deck where pierhead lights were placed. These piers did not hold up well to harsh weather, ice, and fire hazards such as cinders from steamers and lightning. The older wooden piers were largely replaced by the U.S. Army Corps of Engineers between 1916 and 1930 using concrete caisson piers surrounded with steel sheet piling.

Early Great Lakes pierhead lighthouses were built of wood, which was a readily available local material. This was generally suitable because they had to be strong to withstand constant buffeting from wind, waves and vibrations, but light enough so as to not overstress the wooden piers that supported them. However, wooden lighthouses were problematic to maintain in the harsh Great Lakes marine environment. Beginning in the middle 1850s, wooden towers began to be replaced with towers built of cast iron. Metal construction was more suitable because it resisted deterioration and was inexpensive and water-tight. It was also lighter than brick or stone. Elevated walkways were frequently built along the piers to provide for safe access to the lights. These were configured as catwalks that stood above the waves washing over the pier, as well as above the several feet of ice that accumulated during winter. As piers were extended through time, many pierhead lighthouses were picked up and moved with the extensions. Great Lakes breakwater lights are closely related to pierhead lights, and are usually positioned at the head of a breakwater. Both of these lighthouse varieties are usually tower-like structures constructed of metal plates.

The timber crib design concept was also used for the construction of offshore lights in the Great Lakes region from the middle nineteenth century onwards. This involved assembling a rectangular crib on shore that included several open-top compartments and was tall enough to reach the water's surface at the lighthouse's designated offshore site. It was towed to a pre-determined offshore location and sunk using ballast at a position that had been previously leveled. Additional ballast and concrete were added to stabilize and strengthen the structure, and a concrete pier was then built on top. This pier often included one or more interior rooms and served as the lighthouse's basement. It was often used as an engine room for motors powering electrical generators and air compressors, as well as the lighthouse's heating plant. The pier included a top deck and supported the lighthouse's superstructure.

The superstructures of offshore lighthouses in the Great Lakes region also went through evolution in design and technology. The earlier ones were built of masonry using cut stone or brick. During the late nineteenth century, cast iron came into widespread use for U.S. lighthouses. These cast iron structures were commonly built from parts prefabricated to specification at a foundry and sent to the designated site as a kit for onsite assembly. The expansion of mass production steel mills in the United States from the early twentieth century onwards led to a decline in the cost of steel buildings. By the 1920s, the cost versus benefit ratio for fabricating a structure using steel instead of cast iron led to the adoption of steel as the preferred building material for lighthouses. This led to the construction of several offshore lighthouses with steel superstructures, including the Milwaukee Breakwater Light.

United States Department of the Interior  
National Park Service

## National Register of Historic Places Continuation Sheet

Milwaukee Breakwater Light
Name of Property
Milwaukee County, Wisconsin
County and State
Light Stations of the United States MPDF
Name of multiple listing (if applicable)

### ADDITIONAL DOCUMENTATION

Section number 8, continued Page 4

#### Milwaukee Breakwater Light Historic Context

In 1818, pioneer developer Solomon Juneau established a frontier settlement named Juneau's Side or Juneau Town on the east side of the Milwaukee River near its mouth. This attracted a number of settlers to the area, including one named Byron Kilbourn who established a second settlement named Kilbourntown on the river's western shore. A third settlement was established a short distance south along the Milwaukee River's west side in 1834 by George H. Walker. Its location came to be called Walker's Point. The three neighboring communities grew over time, reaching a population of 1,700 in 1840. They eventually merged and were incorporated as the City of Milwaukee in 1846.

Milwaukee grew tremendously during the remainder of the nineteenth century, becoming Wisconsin's principal commercial center. It became especially important in the processing and shipment of agricultural products, manufacturing, brewing, insurance, and financial services. The city's population reached 285,000 in 1900. From then to 1930, the number of residents doubled to more than 578,000. Much of this increase included large numbers of German and Polish immigrants, along with other European nationalities.

Maritime commerce was important to the early growth of Milwaukee and became an essential aspect of its economic expansion through time. The first commercial cargo vessel entered the port in 1835, and the number of vessels calling there increased steadily in the years that followed. While the Milwaukee River's confluence with Lake Michigan provided access for vessels, its natural channel was curved instead of straight and there was a sand bar offshore of the river's mouth. These factors restricted the size of vessels that could enter and depart.

In 1843, local commercial interests first petitioned the Federal government for aid to improve navigation in the area. In 1852, the U.S. Congress finally approved an appropriation to fund such work. This led to a harbor improvement project directed by the U.S. Army Corps of Engineers (USACE) that began in 1857. It included excavating a channel connecting the Milwaukee River with Lake Michigan. This new, straight channel was located one-half mile north of the Milwaukee River's natural mouth and included wooden piers on either side to stabilize it. In conjunction with this, the U.S. Lighthouse Establishment built a light tower to mark the north pier for mariners. It included a one-story skeletal framework supporting a second story enclosed service room, and was topped with a lantern. This Federal aid to navigation was designated Milwaukee Pierhead Light.

In 1881, Congress authorized the creation of a Harbor of Refuge at Milwaukee to provide a protected offshore anchorage where vessels could find shelter during inclement weather or while waiting to enter the port. This project included construction of a breakwater in Lake Michigan that would extend southward from approximately 1.5 miles north-northeast of the Milwaukee Pierhead Light. The northern section of this breakwater was completed by 1896. Another section extending approximately one mile farther south was completed by 1904. Its southern terminus was originally marked by an unmanned two-light (red above white) navigational aid. This signal was changed to a flashing red light by 1912.

Other harbor improvement projects at Milwaukee during the late nineteenth century and early twentieth century included rebuilding and lengthening the north and south piers at the river mouth, and establishing a fog signal station near the head of the north pier. The original Milwaukee Pierhead Light was replaced in 1906 by a pair of range lights. Mariners approaching the port would orient their vessels so that the range lights aligned and provided a guide for identifying the entrance channel's axis. The front light of this range was a conical cast iron tower with a circular lantern equipped with a fourth order Fresnel lens. The inner range light was a taller light tower atop the north pier nearer to shore. The inner range light was discontinued and dismantled in 1926. The 1906 outer range lighthouse remains in operation today as Milwaukee Pierhead Light.



United States Department of the Interior  
National Park Service

Milwaukee Breakwater Light
Name of Property
Milwaukee County, Wisconsin
County and State
Light Stations of the United States MPDF
Name of multiple listing (if applicable)

## National Register of Historic Places Continuation Sheet

### ADDITIONAL DOCUMENTATION

Section number 8, continued Page 5

During the 1910s, additional improvements to Milwaukee Harbor were proposed to Congress. This included a USACE plan for a complex of breakwaters at Milwaukee that would extend the Harbor of Refuge breakwater southward. The proposed project was to be approximately four miles long overall when completed and include multiple entries to the port. Its principal entry was to be located directly east of the Milwaukee River mouth. Work to complete this project was approved by Congress in 1922. The first section built was a dogleg breakwater extending southeast from the Harbor of Refuge, terminating at the north side of the proposed principal entry to the port. Work on the breakwater south of the entry began later. The Milwaukee breakwaters project was finally completed in 1930 at a total cost of \$6,250,000.

The U.S. Bureau of Lighthouses was responsible for establishing and operating aids to navigation along the Milwaukee breakwaters. This included constructing a lighthouse at the north breakwater's new southern end to mark the entry to Milwaukee Harbor. The Bureau decided to build this structure using a crib and pier foundation surmounted by a steel superstructure. The new lighthouse was constructed in 1926. This included removing the lantern and fourth order Fresnel lens from the 1906 Milwaukee Pierhead Light and installing it atop the new breakwater light. A decagonal lantern and a fifth order Fresnel lens were installed atop the Milwaukee Pierhead Light in their place. An underwater electrical cable extending from the Milwaukee harbor north pier to the offshore breakwater lighthouse was also installed.

When Milwaukee Breakwater Light was officially established in 1926, its fourth order Fresnel lens optic had a 61-foot focal plane and signaled a red flash that was visible for 14 miles in clear weather. It was originally operated by a resident crew of four keepers employed by the U.S. Lighthouse Service. After the Bureau of Lighthouses merged with the U.S. Coast Guard in 1939, Coast Guard personnel were assigned as keepers. The lighthouse was manned until 1966 when it was automated.

The Milwaukee Breakwater Light's fourth order Fresnel lens was replaced with a modern beacon in 1994. This Fresnel lens is presently on display at the Wisconsin Maritime Museum in Manitowoc, Wisconsin. The lighthouse's existing optic is a modern, automated VRB-25 marine beacon that signals a red flash every ten seconds. It is visible for 14 miles in clear weather. The lighthouse's fog signal was also upgraded through time and is now a modern automated device mounted on the lantern gallery. It sounds two blasts every 20 seconds and operates from April to November. Electrical power is still supplied to the lighthouse using a submarine cable, and a large rectangular sign reading "U.S. Coast Guard Cable Crossing Do Not Anchor" is affixed to the lighthouse's southwestern side.

Today, Milwaukee Breakwater Light remains standing in its original location at the south end of the harbor's north breakwater. It is floodlighted every night from sunset to sunrise. The lighthouse's basic structure, appearance, and setting remain essentially unchanged from the property's 1926 to 1966 period of historical significance. It continues to fulfill its original role of aiding mariners by marking the entry to the port of Milwaukee and providing a guide for vessels entering the harbor from Lake Michigan. This lighthouse is widely recognized as a prominent landmark in the Milwaukee County vicinity. It serves as a lasting reminder of the City of Milwaukee's historical role as one of Lake Michigan's most important commercial ports.

United States Department of the Interior  
National Park Service

## National Register of Historic Places Continuation Sheet

Milwaukee Breakwater Light
Name of Property Milwaukee County, Wisconsin
County and State Light Stations of the United States MPDF
Name of multiple listing (if applicable)

### ADDITIONAL DOCUMENTATION

#### Bibliography

Browning, Robert. 2009. Lighthouse evolution and typology. U.S. Coast Guard Historian's Office website. Available online at <http://www.uscg.mil/history/web/lighthouses/LHEvolution.asp>.

Clifford, Candace. 1994. *Inventory of historic light stations*. Washington, DC: National Park Service.

\_\_\_\_\_. 2002. Light Stations of the United States, Multiple Property Documentation Form, National Register of Historic Places. On file at the National Register of Historic Places, U.S. National Park Service, Washington, DC.

Hyde, Charles K. 1996. *The northern lights: lighthouses of the Upper Great Lakes*. Reprint. Detroit: Wayne State University Press.

Milwaukee Board of Harbor Commissioners. 1936. *The Milwaukee harbor project*. Milwaukee, January 1936.

Pepper, Terry. 2005. Seeing the light - Milwaukee Breakwater Lighthouse. Available online at <http://www.terrypepper.com/lights/michigan/milwbreakwtr.htm>.

Roberts, Bruce, and Ray Jones. 2001. *Western Great Lakes lighthouses: Michigan and Superior*. Guilford, CT: Globe Pequot Press.

Sapulski, Wayne S. 2001. *Lighthouses of Lake Michigan: past and present*. Manchester, MI: Wilderness Adventure Books.

United States Army Corps of Engineers. 2010. Milwaukee Harbor, Wisconsin (Project Overview). Available online at [http://www.lre.usace.mil/who/operationsofficehomepage/project\\_overview/milwaukee/](http://www.lre.usace.mil/who/operationsofficehomepage/project_overview/milwaukee/).

United States Coast Guard. 2010. Light list, volume VII, Great Lakes. Washington: U.S. Government Printing Office.

\_\_\_\_\_. 2010. Historic light station information and photography – Wisconsin. U.S. Coast Guard Historian's Office website. Available online at <http://www.uscg.mil/history/web/lighthouses/LHWI.asp>.

United States Department of the Interior  
National Park Service

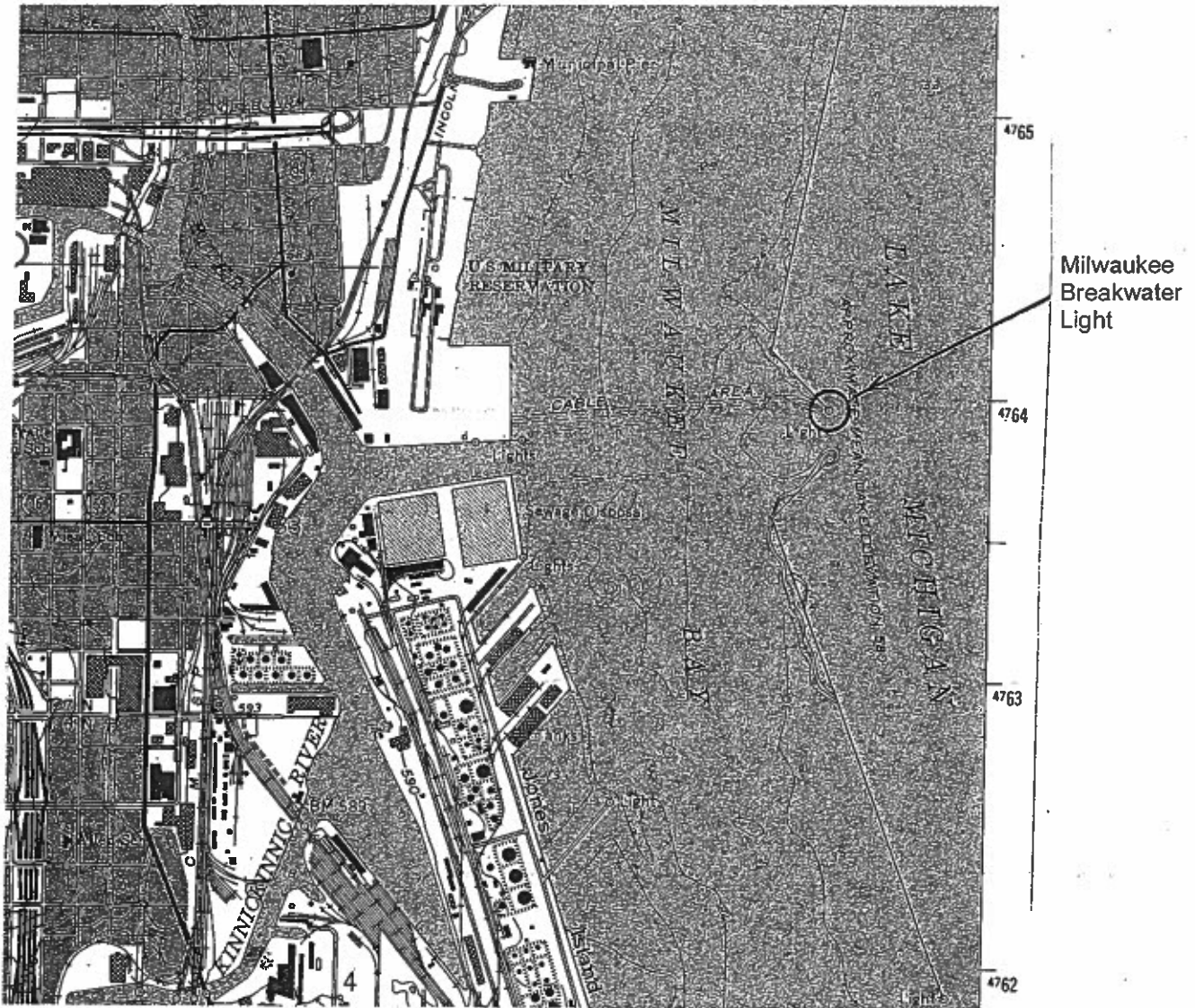
# National Register of Historic Places Continuation Sheet

Milwaukee Breakwater Light
Name of Property
Milwaukee County, Wisconsin
County and State
Light Stations of the United States MPDF
Name of multiple listing (if applicable)

## ADDITIONAL DOCUMENTATION

### Location Map

This is part of the *Milwaukee, Wis.* 7.5 minute series quadrangle topographic map (U.S. Geological Survey 1958, photorevised 1971).



United States Department of the Interior  
National Park Service

Milwaukee Breakwater Light
Name of Property
Milwaukee County, Wisconsin
County and State
Light Stations of the United States MPDF
Name of multiple listing (if applicable)

### National Register of Historic Places Continuation Sheet

#### ADDITIONAL DOCUMENTATION

##### Photographs

The following information is common to these photographs:

Name of Property: Milwaukee Breakwater Light  
 Location: Milwaukee County, Wisconsin  
 Photographer: Timothy McGrath  
 Date: September 2005  
 Location of original negative: U.S. Coast Guard Historian's Office,  
 U.S. Coast Guard Headquarters, Washington, DC.

Photograph  
Number

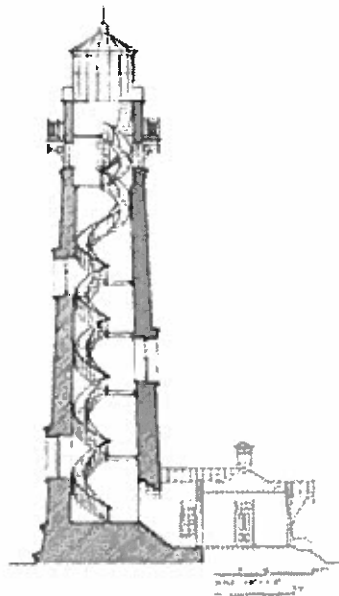
Description

1. Lighthouse northwest and southwest elevations, looking east from shore.
2. Southwest façade with light tower in center, looking upward towards northeast.
3. Concrete pier interior, lighthouse basement equipment room, looking south.
4. Keepers dwelling second story interior, northwest bay, southwest room, looking west.
5. Tower fourth story watch room, descending stairway on left, ladder to lantern room in center, looking north.
6. Lantern room interior, door to gallery on left, modern beacon in center, looking northwest.
7. Lantern gallery with lantern on left, fog signal on gallery deck, breakwater and Milwaukee skyline in rear, looking northwest.

## National Historic Lighthouse Preservation Act of 2000

[Back to Lighthouse Heritage](#)

[Background | Agency Roles in Process](#)  
[History of Program to Date | Further Information on the Program](#)  
[Available Lighthouses | NHLPA Monitoring Reports | Reference Material](#)  
[What's New](#)



## BACKGROUND

The National Historic Lighthouse Preservation Act of 2000 (NHLPA), 16 U.S.C. § 470w-7, an amendment to the National Historic Preservation Act of 1966, as amended, provides a mechanism for the disposal of federally-owned historic light stations.

NHLPA recognizes the cultural, recreational, and educational value associated with historic light station properties by allowing these to be transferred at no cost to federal agencies, state and local governments, nonprofit corporations, educational agencies, and community development organizations. These entities must agree to comply with conditions set forth in NHLPA, and be financially able to maintain the historic light

station. The eligible entity to which the historic light station is conveyed must make the station available for education, park, recreation, cultural or historic preservation purposes for the general public at reasonable times and under reasonable conditions.

Only those light stations that are listed, or determined eligible for listing, in the National Register of Historic Places, can be conveyed under this program. The nomination for listing, or determination of eligibility, is prepared by the USCG following guidelines set forth in 36 CFR 60.9(c) and 36 CFR 63 respectively, as part of their responsibilities prior to the property being transferred to the GSA inventory for disposal. Light stations that are not eligible for listing will be disposed of through other processes.

Prior to the NHLPA, historic lighthouses could be transferred to state or local agencies through the [National Park Service's Historic Surplus Property Program](#) or the [Federal Lands to Parks Program](#).

## AGENCY ROLES IN PROCESS

Administering NHLPA involves several federal and state agencies that play different roles in transferring surplus historic light stations to new owners:

- The U.S. Coast Guard (USCG), and other federal agencies, identify and report historic light stations to be excessed through the NHLPA process. These agencies also make available condition reports,



maintenance records and related documentation on these properties to the other agencies involved in the process as well as to prospective applicants.

- The General Services Administration (GSA) issues Notices of Availability (NOA) on historic light stations available for transfer, and works with the USCG to arrange open houses at the properties. In addition, GSA initiates Section 106 review with State Historic Preservation Officers, conducts environmental reviews in compliance with the National Environmental Policy Act (NEPA) and the Coastal Zone Management Act as applicable, and develops and executes conveyance documents. In the event that no applicant is approved to receive the historic light station, GSA may sell the property in accordance with procedures outlined in NHLPA (16 U.S.C. § 470w-8; Sec. 309).
- The National Park Service (NPS) of the Department of the Interior, acting on behalf of the Secretary of the Interior (Secretary), provides applications to interested parties, and reviews and evaluates submitted applications. The Secretary recommends a single suitable applicant to GSA or indicates that no suitable applicant was found.
- The State Historic Preservation Officers (SHPO) are consulted during the review of applications (16 U.S.C. § 470w-8; Sec. 308(b)(2)) and after the transfer of ownership takes place (16 U.S.C. § 470w-8; Sec. 308(c)(1)(D)).

#### HISTORY OF PROGRAM TO DATE

Through the NHLPA Program, nine historic light stations were excessed during the pilot phase in Fall 2001 and nineteen were excessed during the national phase in Fall 2002. Of these twenty-eight light stations, the NPS has recommended that twenty be transferred to new owners including other federal agencies, state and local governments, and nonprofit organizations.

The "pilot" and "national" phases of the program were managed by the NPS Maritime Heritage Program in Washington, DC. The program was transferred to the NPS regional offices on April 29, 2004.

General questions regarding the program should be addressed to [NPS\\_MaritimeHeritage@nps.gov](mailto:NPS_MaritimeHeritage@nps.gov)

To sign up to receive electronic updates on the NHLPA program see the [GSA Office of Property Disposal](#) web site.

#### Further Information:

- [The NHLPA Program at a Glance](#)
- [Full text of legislation](#)
- [Flow chart of process](#)
- [Current Application Criteria](#)
- [NPS and GSA Regional Contacts](#)
- [Application to Obtain Historic Light Station Property](#) (pdf 1195 kb)
- [Fresnel Lense Guidelines](#)
- [2009 Program Report](#)

#### Available Lighthouses :





- [2011 Program \(including Notices of Availability\)](#)
- [2010 Program \(including Notices of Availability\)](#)
- [2009 Program \(including Notices of Availability\)](#)
- [2008 Program \(including Notices of Availability\)](#)
- [2007 Program](#)
- [2006 Program](#)
- [2005 Program](#)
- [2004 Program](#)
- [Fall 2002 \(National Pilot Program\)](#)
- [Fall 2001 \(National Pilot Program\)](#)
- [Press Releases on NHLPA Pilot Program and National Pilot Program](#)

#### Monitoring Reports:

Under NHLPA, lighthouse recipients are required submit detailed annual reports to the National Park Service. These reports outline the recipients' activities and include information about maintenance/preservation, finances, and other issues or problems.

While each light station is unique and presents its own challenges, there are many issues that are common for all stewards. Posted on this page are monitoring reports from NHLPA light station recipients. The reports are presented as searchable pdf documents, to make it easier for anyone to research specific problems or solutions.

Click to view the [NHLPA monitoring reports](#).

#### Reference Material:

- [Historic Lighthouse Preservation Handbook](#)
- [Secretary of the Interior's "Standards for the Treatment of Historic Properties"](#)
- [NPS "Preservation Briefs"](#)
- [National Register of Historic Places](#)
- [Listing of State Historic Preservation Offices](#)

HOME

Last Modified: 6/2/11  
SM

[Privacy & Disclaimer](#)

