NPS Form 10-900 (Expires 5/31/2012) Wisconsin Word Processing Format (Approved 1/92)

United States Department of Interior National Park Service

National Register of Historic Places **Registration Form**

RECEIVED 2280 MAY 1 0 2010 NAT. REGISTER OF HISTORIC PLACES NATIONAL PARK SERVICE

DMB No. 10024-0018

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an 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 entries and narrative items on continuation sheets (NPS Form 10-900A). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

Plum Island Life-Saving and Light Station historic name other names/site number

2. Location

street	& number	Plum Island					N/A	not for p	ublication
city or	town	Town of Was	shington				N/A	vicinity	
state	Wisconsin	code	WI	county	Door	code	029	zip code	54246

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this X 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 X meets does not meet the National Register criteria. I recommend that this property be considered significant nationally X statewide locally. (See continuation sheet for additional comments.)

Eug 9 An Signature of certifying official/Title

USFISH and Wilding Service State or Federal agency and bureau

In my opinion, the property X meets does not meet the National Register criteria. (See continuation sheet for additional comments.)

Signature of commenting official/Title

1/21/10

6-24-10

Date

State Historic Preservation Officer - Wisconsin

State or Federal agency and bureau

Plum Island Life-Saving and Light Stations			County Door	Wisconsin			
Name of Property			County and State				
4. National Park Servic	e Certificatio	on					
I hereby certify that the property is: entered in the National Register See continuation sheet determined eligible for the National Register See continuation sheet determined not eligible for the National Register See continuation sheet See continuation sheet See continuation sheet removed from the National Register other, (explain:)		Bank	ana Wyat	6-24-10			
		Signature of t	he Keeper	Date of Action			
5. Classification			- Action of the second				
Ownership of Property (check as many boxes as as apply) private public-local public-State X public-Federal	Category o (Check only build X distri struc site objec	v one box) ing(s) ct ture		rces within Property eviously listed resources noncontributing buildings sites structures objects Total			
Name of related multiple pr (Enter "N/A" if property not p listing. N/A		property	Number of contributing resources is previously listed in the National Register <u>1 structure</u>				
6. Function or Use							
Historic Functions (Enter categories from instru TRANSPORTATION/water DEFENSE/coast guard facil	-related		Current Functions (Enter categories from in TRANSPORTATION/wa DEFENSE/coast guard fa	ater-related			
7. Description							
Architectural Classification (Enter categories from instructions) Late 19 th and 20 th Century Revivals: Colonial Rev Late Victorian: Queen Anne		al Revival	Materials (Enter categories from in Foundation Brick; Con walls Brick; Shin	ncrete			
			roof Shingle; A other	sphalt			
Narrative Description	M		a Castanta a Ca	A. S.			

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.)

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>7</u> Page <u>1</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

DESCRIPTION

Plum Island is located off of the tip of Door County, Wisconsin midway between the mainland and Washington Island. Bordering the Porte des Morts passage leading from Lake Michigan to Green Bay, the 325 acre island has an elevation of 610 feet and is surrounded by rocky shoals and swift currents. Plum Island is heavily wooded with hardwoods and cedar. The coastline has a narrow gravel beach, with dolomite cliffs on the south and southeast sides.

An area on the northwest side of the island was cleared for the construction of the life-saving station in 1896. A pier and breakwater extend into the lake with a 1939 boathouse adjacent to this pier. A flag pole, radio tower, and small outbuilding are located near the station building. Once covered in gravel, a .625 mile long roadway connects the life-saving station to the 1896 range light and keepers' dwelling located on the west side of the island.

The range lights are located 1,650 feet apart and are connected by a concrete sidewalk in the center of a twenty foot wide clearing. Another sidewalk leads 1,277 feet from the rear range light to the fog signal building. The keepers' dwelling is built on a slight rise 100 feet southeast of the rear range light.

Reserved from the public domain in 1848 for lighthouse purposes, the island remains under federal jurisdiction. In October 2007, the Bureau of Land Management formally transferred the island from the Coast Guard to the Fish and Wildlife Service. Plum, Hog, and Pilot Islands form the Green Bay National Wildlife Refuge, established to protect native and migratory bird habitat and endangered species habitat in the Great Lakes Basin ecosystem. The Fish and Wildlife Service has partnered with the non-profit Friends of Plum and Pilot Islands to preserve and manage the island's historic and cultural resources.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Park Service

National Register of Historic Places Continuation Sheet

Section <u>7</u> Page <u>2</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

RESOURCE COUNT - 10

CONTRIBUTING RESOURCES

Buildings – 5

- #1 Boathouse
- #2 Life-Saving Station
- #3 Outbuilding
- #4 Keepers' Dwelling
- #5 Fog Signal Building

Structures - 4

- #1 Pier and Breakwater
- #2 Flagpole
- #3 Radio Tower
- #4 Rear Range Light (NRHP 1984)
- #5 Front Range Light

Sites -1

#1 - Unimproved roadway connecting Life-Saving and Light Stations

Total Contributing Resources – 11

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>7</u> Page <u>3</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

Building 1 - Boathouse

This 46' x 62', one-and-one-half story, rectangular, wood frame structure is clad in white painted wood shingles applied in a coursed pattern. Built in 1939, the boathouse exhibits Colonial Revival design elements such as arched and multi-pane windows, corner pilasters, friezes, and detailed door surrounds. The building's overall symmetry, balance, and proportions also reflect the Colonial Revival style. The boathouse is architecturally significant as an intact example of a "Roosevelt-type" boathouse designed by U.S. Coast Guard engineers. Of the approximately fifty that were originally built, only twenty-four survive. Four of these are located on Lake Michigan. Plum Island's boathouse is the only example of the style in Wisconsin.

The boathouse's hipped roof is covered with asphalt composition shingles. A wood frieze exists at the roof-wall junction. Two gabled dormers exist on each of the east and west slopes. One gabled dormer is located on the north elevation. Dormer windows are double-hung with an arched upper sash. Lower sashes have six lights, as do the arched upper sashes. All window and doorframes are painted olive green. Painted surfaces exhibit significant weathering. A brick chimney extends from the south slope of the roof. Metal flashing is located at the base of the chimney. Concrete piers set into the lakebed support the building's concrete foundation.

The north elevation has three boat bays accessed by a wood launch ramp. Timber frame cribs infilled with large lake rocks support the ramp. The launch ramp, once covered by metal grating, has deteriorated. A wooden walkway supported by concrete piers connects the north side of the boathouse with the west breakwater. Each boat bay has a paneled wood door that opens on overhead rolling metal tracks. The doors are seven panels high and seven panels wide. The upper four rows of panels are glazed, with two lights divided by a wood muntin. Panels in the lower three rows are wood.

The east elevation has four wood-frame, double-hung, six-over-six windows. A recessed, single-leaf, paneled wood door is located at the south end of this elevation. Three fixed lights are located at the top of the door. The door opening is topped with a wood entablature and flanked by paneled pilasters. The door's threshold is concrete.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>7</u> Page <u>4</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

The south elevation has a garage door opening with a paneled wood door. Two rows of windows are located at the top of the door. A wood entablature tops the door opening. A double-hung, six-over-six window is located to the west of the garage door opening. West of the window is a bay surrounded by

a wood entablature and paneled pilasters. This bay contains a window and a door. The window is double-hung, six-over-six with a wood apron panel below. A paneled wood pilaster separates this window from a recessed, single-leaf, paneled wood door with a concrete threshold. Three fixed lights are located in the top portion of the door. West of this bay is a small rectangular three-light window. A wood boardwalk supported by timber frame cribs infilled with large lake rock accesses doors on this elevation.

The west elevation has four, wood-frame, double-hung, six-over-six windows.

The building has had no significant alterations since the time of its construction. Decorative, exterior window shutters were removed at an unknown date.

INTERIOR

As the first floor interior of the boathouse was used for boat storage, it is primarily open. Floors are painted concrete. A partition wall at the south end of the interior with two original, single-leaf, wood paneled doors separates office and shop areas from the rest of the space. The office and shop areas have wood flooring. A motorized launching mechanism is located at the partition wall. The interior configuration and materials are original to the building.

An open ladder stairway accesses the dormered half-story. Originally used as a Bosn's Locker for storage of boat equipment such as blocks, lines, and cleats, the unfinished space is floored with milled lumber laid on the diagonal. Dormer windows offer views of the surrounding water. The interior wood trim of the windows is painted white.

The boathouse contributes to the overall historical significance of the district.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>7</u> Page <u>5</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

Building 2 - Duluth-type Life-Saving Station

This 59' x 41', one-and-one-half story, rectangular, wood frame building is located south of the boathouse. A wood walkway exists between the two buildings. Constructed in 1896 on the northeast side of Plum Island, the station has a good view of Detroit Harbor, the main entrance to nearby Washington Island. Designed in 1893 by Life-Saving Service architect George Tolman, the building is architecturally significant as the sole surviving example of a Duluth-type life-saving station on the Great Lakes. The building has been vacant since 1990 when the Coast Guard moved the station to Washington Island. Since that time, the building has been minimally maintained.

Walls are clad with white-painted, wood shingles applied in a coursed pattern, although the painted finishes have deteriorated. The roof is covered with asphalt composition shingles. A brick chimney extends from the south slope of the eastern section near the ridgeline. Shed roof dormers exist on the north and south elevations. The building has a board-formed, poured concrete foundation that extends above grade.

A four-story, pyramidal hipped roof lookout tower is located at the center of the north elevation. This tower separates two distinct sections of the building. The east half of the building is one-and-one-half stories with a clipped gable roof. The first floor of the east section contained a keeper's room, office, kitchen and mess hall. Sleeping quarters were located above. A one-story, two bay boat room with exterior launch-way was located to the west of the tower.

Changing lake levels, larger boats, and additional equipment made the original boat bays unusable by the mid-1920s. As early as 1915, a Coast Guard engineer named D.C. Wickham designed a proposed boathouse and launch-way to be constructed near the location of the present boathouse. This modest two bay frame structure was never built.

In 1929, the original boat bays in the Duluth-type station were enclosed and a half-story gable roof addition was added to the east portion, straddling the ridge of the original roof. This new space provided additional sleeping quarters, while the boat bay area was used for miscellaneous storage. Until the new boathouse was constructed in 1939, boats were stored outdoors, exposed to the elements.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>7</u> Page <u>6</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

The building retains its significance despite these alterations. The alterations occurred during the building's period of significance and reflect the changing needs of the Life-Saving Service/Coast Guard and its equipment. The design and finishes used in the alterations were compatible with the original design and materials. The building is still easily recognizable as a Duluth-type station.

The east section of the north (main) elevation has a steeply pitched, side gable roof. A shed roof dormer projects from the roof's slopes. Two wood frame, double-hung, dormer windows with metal storms are separated by a wood mullion. These windows were originally four-over-four. A shed roof porch extends from the slope of the gable and is supported by square wood posts. Originally, a simple balustrade with squared balusters and railings extended around the porch. This porch was screened-in sometime in the 1960s, but all that remains is some of the framing for the screens and a crossbuck porch railing. The main entrance is a single-leaf, paneled wood door with glazed, fixed upper panels. Sometime in the 1960s, two original double-hung windows located to the west of the door were replaced by a large, fixed picture window.

The watch room on the fourth floor of the central lookout tower was in use until the early 1960s, when a watch room was added to the front of the fog signal building on the west side of the island (Building 5). The tower's flared pyramidal hipped roof is clad with red asphalt composition shingles and has a decorative hip knob at the peak. The top (fourth) story of the tower is cantilevered and has decorative double ogee brackets. The fourth story originally had two double-hung windows on each elevation. A third window was added on the north, east, and west elevations in the 1960s. Tower windows are missing glazing and are boarded up from the interior. Two small, rectangular fixed window openings are located on the second and third floors, illuminating the stairwell. Originally six light windows, they were replaced by single light windows at an unknown date.

The west section of the east elevation originally had two wood boat room doors. These were infilled in 1929 and replaced with four, double-hung, wood frame windows. Although the windows retain their glazing, they have been boarded up from the interior.

The half-story of the north elevation's west section was added in 1929. This gable-roof addition straddles the ridge of the original roofline. Two wood frame, double-hung windows are located in this addition. The original east window opening was larger and contained a six-over-six window. It was replaced with a smaller window at an unknown date. The west window is slightly larger and retains the original wood frame, double-hung, six-over-six glazing. Both windows have non-historic metal storm windows.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>7</u> Page <u>7</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

The west elevation has two, wood frame, double-hung, six-over-six windows in the gable end 1929 addition. The gable end of the original one-story section had a demi-lune fanlight window. A wood cornice and frieze exists between the half story and the first story. The first story originally had a garage door opening on the south end with three wood frame, rectangular windows. In 1929, these windows were infilled. New openings were made for a wood frame, double-hung, eight-over-eight window and a small rectangular double-hung window with non-historic metal storm. The original garage opening was moved to the north end and has a paneled wood door. A wood skirt board separates the shingled wall from the foundation. A wood frame, fixed, four-light basement window is located at grade.

The west elevation of the tower has three windows in the fourth story and two smaller, fixed windows on the third story to illuminate the stairwell. These windows originally had six lights, but were altered at an unknown date.

The south elevation of the west section's half-story 1929 addition has two, wood frame, double hung, six-over-six windows. The first floor has one wood frame, double hung window and two wood frame, double hung six-over-six windows. A wood skirt board separates the shingled wall from the concrete foundation. Three wood frame, fixed four-light windows are located in the foundation wall. Two shed roof dormer windows are located in the half story of the south elevation's east section. These windows are wood frame, double-hung.

The east portion of the south elevation has an original shed roof porch extending from the slope of the main roof. Wood steps with square wood balusters and railings lead to the partially porch. The enclosed eastern half of the porch has a wood frame, six-light window. A single-leaf, paneled wood door with six fixed upper lights is located at grade on the east elevation of the porch enclosure. The west portion of the porch was screened in at one time, but the screen door and windows are missing. A single leaf, paneled wood door with six fixed upper lights is fixed upper lights accesses the interior of the building. A non-historic metal storm door exists.

The east elevation has two, wood frame, double-hung windows in the clipped gable end. These have non-historic metal storm windows. A wood cornice and frieze separates the half-story from the first. The first story has three, wood frame, double-hung windows with non-historic metal screens. The south two windows are smaller than the north window. The first story of this elevation originally had three window openings in different locations.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>7</u> Page <u>8</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

The east elevation of the tower has three wood frame, double-hung windows. Smaller fixed windows on the second and third stories illuminate the stairwell. These windows originally had six lights, but they were altered at an unknown date. Another small fixed window is located on the tower's second story east elevation to illuminate the hallway that connects the half story to the tower. This connector has a gable roof.

A wood skirt board separates the shingled wall from the foundation. The east elevation's concrete foundation wall has two fixed glass block windows, with nine blocks each. An additional window opening is located south of these windows. It has a wood frame, double-hung window.

INTERIOR

Although the interior of the Plum Island Life-Saving Station has been altered to accommodate changing uses and personnel, it retains many original features. Interior door trim with bulls-eye molding, paneled interior doors with original hardware, and the tower staircase all date to 1896.

Originally, the east section of the building contained a keeper's room, office, kitchen, and mess room with sleeping quarters in the half-story above. The west section of the building was used for storing boats and equipment. When the boat bays were enclosed and a half-story was added to the west section in 1929, the former boat bay area was used for storage of lifesaving equipment and eventually housed the station's Jeep. The upper half-story contained a full bath and barracks style sleeping quarters. The first floor layout remained essentially the same.

The tower staircase has decorative spindle work balusters and chamfered newel posts. The cherry railings and newel post finials are unpainted, stained, and varnished wood while the balusters and newel posts are painted white. The spindle work balusters continue from the first to second floor. Balusters are plain from the second floor to the third floor. The staircase ends on the tower's third floor. A stepladder accesses the trapdoor to the fourth floor watch room. The second, third and fourth floor staircase walls have a beadboard dado. Walls are plaster above the chair rail. Stairway windows retain original trim.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>7</u> Page <u>9</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

Other interior details include: built-in closet shelving and drawers; arched doorways; and a paneled, wood Dutch door in the kitchen. The interior of the station is floored with a variety of materials including carpet, linoleum, and wood. Walls are mainly plaster, with non-historic wood paneling in

some closets. The first floor interior walls and ceiling of the west section are clad with horizontal tongue-and-groove wood sheathing.

The basement of the station's east section was used as a recreation room from the 1950s until 1990. Its concrete walls retain images painted by Coast Guard personnel, including the exoskeletal light tower located on nearby St. Martin Island, Michigan and a 36' motor lifeboat used at the Plum Island station. These painted images most likely date from the 1960s.

This building contributes to the overall historical significance of the district.

Building 3 - Outbuilding

This one-story, wood frame, pyramidal hipped roof building measures 16' by 16' and is located south of the Life-Saving Station (Building 2). A concrete path connects the two buildings. The outbuilding is clad with white-painted wood shingles applied in a coursed pattern. The roof is covered by red asphalt composition shingles and has metal flashing at the peak. A wood cornice is located at the roof wall junction. The building has a concrete foundation.

Built in 1896 as a combination privy and storage shed for coal, wood, and oil paint, the building was most recently used for paint storage. This outbuilding was designed by George Tolman in 1893 to complement his Duluth-type station. The north, or main, elevation has a centrally located door opening with a single leaf, wood door accessed by three concrete steps. The east elevation has a door opening with a single leaf wood door on the south end that has been boarded over and a wood frame, six-light window. The south elevation's fixed window is covered with Plexiglas that has sustained damage. This opening was altered at an unknown date. A metal stovepipe also extends from the south elevation wall. The west elevation has a fixed window covered in Plexiglas, similar to the south elevation's. This opening was altered at an unknown date. A smaller wood frame, double-hung window is located near the eave and originally provided light and ventilation for the two-seated privy.

The building has had minor alterations, most notably to the window openings on the west and south elevations. It has had no additions.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>7</u> Page <u>10</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

INTERIOR

The north door opens onto an entry vestibule. A two-seat privy was located west of the vestibule. To the east was a paint storage room with walls lined with shelving. No interior access was provided to the rear portion of the building. The wood storage room was accessed from the east door.

This building contributes to the overall historical significance of the district.

Structure 1 - Pier and Breakwater

The current configuration of the pier and breakwater dates to the construction of the boathouse in 1939. Prior to that, a wood dock was located in front of the life-saving station. Timber frame cribs infilled with large lake rocks supported its fir plank walkway. A wood launch-way extended over the beach from the two bay boat room.

With the construction of the new boathouse, a breakwater was added to the west. The breakwater is connected to the boathouse by a walkway supported by concrete piers. The breakwater begins at the end of this walkway and continues north until it hooks to the east. It is constructed of heavy timbers spiked together in large cribs that are infilled with large lake rocks.

The pier is located east of the breakwater and extends from the shore, past the boathouse, and then further north. Although not as tall as the breakwater, the pier is of similar construction. Decking consists of two-inch fir planking.

A smaller pier extended east at a right angle from the main pier. This pier was designed to allow the Washington Island ferry to dock and deliver supplies and Coast Guard personnel. This secondary pier was removed in the early 1990s.

The piers and breakwater contribute to the overall historical significance of the district.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>7</u> Page <u>11</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

Structure 2 - Flagpole

A pyramidal steel skeletal flagpole is located west of Building 2. Although the exact date of its installation is unknown, it appears in historic photographs dating to 1927.

The cross spar on the flagpole was used to display signal flags indicating coded messages for mariners. Two flags could be hung from each side. For example, a solid red triangular flag was flown when the wind was above 15 knots but less than 33 knots, indicating a small craft advisory. If the wind increased to 34 to 48 knots, an additional red triangular flag indicated a gale. For 48 to 63 knots, a whole gale, a square red flag with a smaller inset black box was flown. Winds in excess of 64 knots warranted another square red with black flag, indicating a hurricane. On the north side of the pole, three lights corresponded to the coded storm flags, enabling sailors to see the warnings at night. At the junction of the cross, an angled gaff spar on the south side of the pole displayed the American flag.

This structure contributes to the overall historical significance of the district.

Structure 3 - Radio Tower

A steel skeletal radio tower is located east of Building 2. Based on historic photographs, a radio tower was located on the island as early as 1929. It is estimated that the current tower dates to the early 1960s.

Antennae for both AM and FM radio are mounted on this tower. First used by the Coast Guard in the late 1920s, AM radio signals had a greater range than the FM radios introduced in the 1960s. However, FM signals were not sensitive to static produced during the electrical storms that the Coast Guard often encountered during rescue operations.

This structure contributes to the overall historical significance of the district as a resource type commonly associated with life-saving stations. While the tower's construction date falls outside the 50 year period, it represents continued use and improvement of the life-saving station's facilities and is part of the development of the entire station.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>7</u> Page <u>12</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

Site 1 - Unimproved Roadway

Extending southwest from the grounds of the Life-Saving Station to the grounds of the Light Station, this unimproved roadway is .625 miles long. Although it was never paved, this wide trail was clear-cut shortly after the stations were established in the mid-1890s. Ongoing maintenance of its gravel surface kept it clear of all vegetation, as it was a vital link between the two stations. Vehicular traffic on the island was limited to a Jeep used after World War II, and a wide, cleared trail was all that was necessary for pedestrian and animal-powered locomotion. The roadway was maintained until 1990, the year the station was relocated to Washington Island.

This site contributes to the overall historical significance of the district as it played an important role in the management and function of the stations and social life of their personnel.

Building 4 - Keepers' Dwelling

Designed by an unnamed Lighthouse Board engineer, this 50' x 32', two-story, Cream City brick structure was built in 1896 to provide living quarters for the lighthouse keeper, his assistant, and their families. Located on a five acre clearing on the west side of Plum Island, the building is set on a slight rise 100 feet southeast of the Rear Range Light (Structure 4). The building's cross-gable roof clad is in red asphalt composition shingles and has metal-lined, bracketed wood pole gutters and metal leaders. Three brick chimneys extend from the roof. Unpainted wood shingles exist in gable ends. The foundation is brick.

This building's ornamentation reflects the Queen Anne style. The most elaborate detailing exists in the east and west gable ends. These gables have false overhangs in the form of a pent roof applied directly to the wall surface and "supported" by ornamental, wood brackets. The overhangs are clad in unpainted, staggered shingles and have three inset panels simulating windows. The panels on the west gable have been covered with individual boards, while the east gable's panels have two long boards covering all three panels.

Ornamentation also exists at the roof-wall junction. Wide overhanging boxed eaves with brackets are located where the gable roof extends down to the first story on the east and west elevations. Cornices consist of bed molding and a frieze board. All trim, including the fascia boards, are painted white. Boxed eaves at the intersecting gable ends (east and west elevations) have bulls-eye trim.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>7</u> Page <u>13</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

Walls are common bond, smooth face, Cream City brick with pinkish, beaded mortar joints. Cream City brick is a light yellow-colored brick made from a type of clay found near Milwaukee, Wisconsin. Deposits of this lime and sulfur rich clay are found along the western shore of Lake Michigan and in the Menomonee River Valley. When fired, the red clay turns its distinctive cream color. Bricks from this clay were used as early as the 1830s. By the 1850s, many brickyards were established in and around Milwaukee and the brick became the city's primary construction material. The bricks were also shipped throughout the Midwest, and several Lake Michigan lighthouses were built with Cream City brick. According to the 1897 Annual Report of the Lighthouse Board, 82,000 Cream City bricks were delivered to Plum Island for the construction of the Keepers' Dwelling.

All window and door openings have been boarded over, but windows were originally wood frame, double-hung, two-over-two and doors were wood, single leaf. (A limited interior inspection in 2003)

revealed some original windows still exist, although with missing or damaged glazing.) Each opening has a bush-hammered limestone lintel and sill, with the exception of the smaller windows on the second story of the north and south elevations. These windows were added at an unknown date and have red brick sills laid in a rowlock course.

The west elevation of the keepers' dwelling faces the Porte des Morts passage and the rear range light. The north and south portions of this elevation mirror each other. The first story of this elevation has two window openings in the center. Door openings are located on the north and south ends where the gable roof extends down to the first story. Narrow window openings are located next to these doors. All window openings on this elevation have stone lintels and sills. A belt course of five stretcher rows delineates the basement from the first story. Another belt course exists between the first and second stories. Two basement window openings with stone lintels and sills are located at grade.

The north elevation has a basement window opening at grade and a centrally located window openings on the first and second stories. All window openings have stone lintels and sills. A smaller second story window was added east of this window at an unknown date. This window opening has a red brick sill laid in a rowlock course. A small original window opening is located under the eave of the extended gable, illuminating the interior staircase. The south elevation mirrors the north elevation.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section 7 Page 14

Plum Island Life-Saving and Light Stations Door County, Wisconsin

On the east elevation, the location of the windows and doors mirrors the west elevation. However, the east elevation's first and second story window openings have segmental arches with brick radiating voussoirs. Door openings are also topped with segmental arches and radiating voussoirs. The east elevation also has first story windows located at the north and south ends. All windows and doors have stone sills.

No major additions or alterations have been made to this building.

INTERIOR

The keepers' dwelling functioned as a triplex. The keeper and his family occupied both floors of the south half of the building. The first assistant keeper lived on the north half of the first floor, with the second assistant residing on the north half's second floor.

After the Coast Guard absorbed the Lighthouse Service in 1939, Coast Guard personnel housed at the station on the northeast side of the island maintained the lights. Following World War II, all operations were consolidated at Plum Island's Coast Guard station and the keepers' dwelling was vacated. Due to budget and personnel constraints, it was not well maintained. By the late 1960s, damage to the building's roof was extensive. The roof was replaced in 1999, but interior damage was significant. For safety reasons, the interior of the building is not accessible, but a limited inspection in 2003 revealed many intact original features. These include: geometric tile floors in the entries; pressed tin ceilings; pressed tin cornices with egg-and-dart and bead-and-reel molding; original door and window trim; wood, five panel interior doors; and beadboard dados.

The building contributes to the overall historical significance of the district.

Structure 4 - Rear Range Light

The rear range light was listed on the National Register of Historic Places in 1984 (WHS reference #84003659). It was listed on the State Register in 1980.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>7</u> Page <u>15</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

The rear range light was erected in 1896 and lit for the 1897 navigable season. It is located 1,650' from the Front Range Light (Structure 5) and 100' from the Keepers' Dwelling (Building 4). The tower's design allowed for prefabricated components to be reassembled onsite. The cast iron skeletal tower has four cylindrical legs set on a diagonal to provide bracing. The central cylinder consists of individual cast iron segments with flanges on each side, with each side flange bolted to the adjacent segments. Legs are set into concrete foundation piers. Horizontal cross members and diagonal tie rods connect the legs and help maintain the rigidity of the structure.

The central iron stair cylinder is also set in concrete. The cylinder houses an iron open spiral staircase leading to the circular watch room. A double-leaf door made of riveted iron plates accesses the staircase. Each leaf has a black-painted porthole window infilled with a perforated iron panels. The door's iron cornice has an applied iron star in the central arch. Iron brackets support the cornice. Two wood frame, double-hung, two-over-four windows illuminate the staircase, one on the west side of the stair cylinder and one on the east side.

The iron watch room measure eight feet in diameter and has an iron double-leaf door on the west elevation accessing the octagonal exterior gallery. An ironwork balustrade surrounds the gallery. A wood frame, double-hung, two-over-four window is located on the east side of the watch room.

An interior stairway leads to a trap door accessing the smaller octagonal iron lantern room. The lantern room houses a Fourth Order Fresnel manufactured in Paris in 1889 by Sautter, Lemonnier, and Co. Originally illuminated by kerosene, the light was electrified in 1931 and automated in 1969. The original Fourth Order Fresnel lens is still in use. Its light characteristic is fixed red with a focal plane of 80 feet. The light operates 24 hours a day, 365 days per year and is visible from a distance of thirteen miles. A hinged iron panel, part of the lantern room's base, accesses the exterior gallery. An ironwork balustrade surrounds this gallery.

Originally, the lantern room was painted black, with the rest of the tower painted white. This paint scheme provided the tower with a measure of visual contrast, enhancing its use as a daymarker. Currently, the entire tower is painted white and the iron roof is red. The rear range light is 65' tall from its base to the top of the ventilator ball. A red and white daymarker is affixed to the south side of the tower.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>7</u> Page <u>16</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

Range lights function in pairs. When the shorter front range light is in line with the taller rear range light, a specific line of position (range line) is indicated. If the front range light appears left of the rear range light, the observer is to the right of the range line. If the front range light appears to the right of the rear range light, the observer is left of the range line. The location of Plum Island's rear range light affords it a double purpose – its light is also visible to vessels approaching the Porte des Morts passage from the west.

The structure contributes to the overall historical significance of the district.

Structure 5 - Front Range Light

The front range light is located 1,650 feet (330 degrees) from the Rear Range Light (Structure 4). It is located on the southwest side of Plum Island, near the shoreline. The 1896 front range light was a square two-story wooden tower with an octagonal wooden second story topped by a black metal roof. It was nearly identical to the extant front range light at Bailey's Harbor, Wisconsin. The original tower was replaced in 1964 by the current structure.

The front range light is an approximately 25' steel skeletal tower with a red and white striped day marker affixed to the front of the tower. The tower's isophase light characteristic is red, turning on and off at equal intervals of six seconds. It is lit 24 hours a day, 365 days per year and the height of its focal plane is 41 feet.

Both the front and rear range lights were electrified in 1931 and automated in 1969.

This structure contributes to the overall historical significance of the district as a resource type commonly associated with a light station. While the front range light's construction date falls outside the 50 year period, it represents continued use and improvement of the light station's facilities and is part of the development of the entire station.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>7</u> Page <u>17</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

Building 5 - Fog Signal Building

This one-story brick building was constructed in 1896 to house two boilers and other equipment necessary for the duplicate steam operated fog signals. The building is located near the shore about 1,300 feet north of the rear range light (Structure 4). A concrete sidewalk runs between the two. The original portion of the fog signal building measures 42' x 22'. It has a steeply pitched, hipped roof clad in asphalt composition shingles. Metal fascia and ridge caps with hip knobs exist. A red brick chimney extends from the north slope of the roof. Brick walls are painted white. The foundation is concrete.

Originally, a dock extended out from the shore near the fog signal building into four feet of water. Pipes were then laid from the end of the dock to the building to provide water for the boilers. All necessary equipment was provided in duplicate to prevent an interruption in fog signal operation due to mechanical failure. This was particularly essential for an isolated location such as Plum Island. A tramway track led from the main dock to the fog signal building to move ashore boilers, pumps, tanks, injectors, sirens, and related machinery. Because repeated freezing and thawing of the pipes that supplied lake water to the fog signal was problematic, a well was drilled in 1898. The fog signal dock was then dismantled.

The original fog siren had a three second blast followed by a seventeen second interval of silence. This pattern was distinct from nearby Pilot Island's siren to enable sailors to differentiate between the two. After nearly continuous mechanical problems with the original fog sirens, less complicated 10" steam whistles were installed in 1902. In 1931, these were upgraded to a pair of air Tyfon signals powered by a diesel engine air compressor. The Tyfon signal was more compact and efficient than its predecessors and employed a metal diaphragm vibrated by differential air pressure produced by the compressors.

In the early 1960s, a wood frame watch room was added to the west elevation of the fog signal building. This addition has a half hipped roof clad in corrugated metal panels. A hipped roof tower was added to the center of the original building's ridgeline in 1931. The tower walls are clad with corrugated metal, while the roof is clad with asphalt composition shingles. Wood frame, three light windows exist on the tower's north, south, and east elevations. The Tyfon fog signal's resonators extended from the west elevation of this tower. Coast Guard personnel manned the watch room and maintained the fog signal equipment. Use of the fog signal was discontinued in 1975, as developments in electronic navigational guidance rendered it obsolete.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>7</u> Page <u>18</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

The south elevation of the fog signal building has one door opening and one window opening. The openings are topped with segmental arches with brick radiating voussoirs. The wood frame, double hung, six-over-six window has been boarded over. A single leaf, paneled wood door currently provides the only means of access to the interior. A boarded over window exists in the south elevation of the west addition.

The east elevation has a centrally located door opening. Although boarded over, the double leaf, paneled wood doors remain. Glazing is missing in the upper half. A four light transom exists over the doors.

The north elevation of the fog signal building has one door opening and one window opening. The openings are topped with segmental arches with brick radiating voussoirs. The wood frame, double-hung, six-over-six window has been boarded over. The door opening has been boarded over, but the single leaf, paneled wood door remains. The door is missing its glazing in the upper half. The three light sidelight is also missing glazing. A boarded over window exists in the north elevation of the west addition.

All original doors and windows were replaced sometime in the 1920s or 1930s.

INTERIOR

Currently, the interior of the fog signal building is empty. It originally housed the duplicate boilers and equipment necessary to operate the fog signal. When use of the fog signal was discontinued in 1975, the fog signal equipment was removed. The building also housed the diesel generators that provided electrical power for the entire island, as well as the range lights. A wood door separated this main area from the watch room addition. This addition also housed the radio beacon and telephone equipment. A stairway leads to the attic space. From here, a ladder accesses the resonators in the tower addition.

The building contributes to the overall historical significance of the district.

Plum Island Life-Saving and Light Stations

Name of Property

County Door

County and State

Wisconsin

8. Statement of Significance

Applicable National Register Criteria

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

- X 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.
- X 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.

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 of age or achieved significance within the past 50 years.

Areas of Significance (Enter categories from instructions)

TRANSPORTATION	
COMMERCE	
MARITIME HISTORY	
ARCHITECTURE	

Period of Significance

1896 - 1964

Significant Dates

1896, 1939

Significant Person (Complete if Criterion B is marked)

N/A

Cultural Affiliation

N/A

Architect/Builder

<u>Tolman, George Russell</u> U.S. Army Corps of Engineers/Lighthouse Board Engineers; U.S. Coast Guard Engineers

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>8</u> Page <u>1</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

STATEMENT OF SIGNIFICANCE

The 1896 Plum Island Life-Saving and Light Stations are being nominated as an historic district under Criteria A and C. Under Criterion A, the district is significant for its contributions to transportation, commerce, and maritime history of the State of Wisconsin. Contextually, the district relates to the *Cultural Resource Management in Wisconsin's* Transportation Theme – Great Lakes Navigation (Study Unit 4; Thematic Group - United States Coast Guard Light Houses and Light Stations on the Great Lakes). The construction of both life-saving and light stations on Plum Island reflects the island's important location on a busy Great Lake's shipping channel. The safe and expedient passage of goods and people through the Porte des Morts passage necessitated the establishment of navigational aids and life-saving facilities on the island. Plum Island's Life-Saving and Light Stations assisted Lake Michigan's mariners until well into the twentieth century.

Additionally, the entire complex is being nominated under Criterion C as a representative example of a collection of building types. The buildings and structures of the Plum Island Life-Saving and Light stations are representative examples of the types of resources that would be associated with such facilities. Individually, the 1896 Life-Saving Station is architecturally significant as the sole surviving example of a Duluth-type station on the Great Lakes. The 1939 Colonial Revival boathouse is architecturally significant as Wisconsin's only example of a "Roosevelt-type" boathouse. The 1896 Queen Anne-style Keepers' Dwelling is architecturally significant as an intact example of a Lighthouse Board-designed housing solution. The National Register-listed Rear Range Light is an intact example of a distinctive method of lighthouse tower construction on the Great Lakes.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>8</u> Page <u>2</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

Historical Background and Significance

Plum Island Light Station

Plum Island, Wisconsin is located off the tip of Door County on the Porte des Morts (Death's Door) passage connecting the waters of Green Bay and Lake Michigan. This treacherous passage, known for its swift currents and changeable weather, was named for the high number shipwrecks that occurred on its rocky shoals.

Native Americans occupied Plum Island seasonally for fishing, but there is no evidence of a permanent island settlement. However, the island is known to have several recorded archaeological sites related to Native American use. Both Native Americans and the first European explorers and fur traders utilized the chain of islands at the mouth of Green Bay as stepping stones, enabling them to traverse into northern Lake Michigan and the Straits of Mackinac by canoe and later, mackinaw boat. For most of the nineteenth century, sailing vessels dominated lake transport. After the St. Mary's Falls Ship Canal at Sault St. Marie opened in 1855, maritime commerce on Lake Michigan rapidly expanded as the ore and copper deposits around Lake Superior were extracted. By the 1880s, steam vessels had mostly replaced schooners and ore replaced wheat and lumber as the major export cargo. As the volume of traffic increased, routes changed and the size and speed of ships increased. The need for more and better aids to navigation increased correspondingly.

Prior to 1840, the majority of vessels traveling from the lake into the bay used the more northern Rock Island passage. However, as traffic from Chicago and Milwaukee increased, the closer Porte des Morts passage became more traversed. In 1848, Congress appropriated \$3,500 to build a lighthouse on this passage. That same year, Wisconsin attained statehood and all of Plum Island was reserved from the public domain for lighthouse purposes. Construction of a masonry lighthouse with attached keeper's dwelling was completed in 1849 on the southwest side of Plum Island. The location of this first lighthouse soon proved to be disadvantageous, as it was situated too far west to mark the entrance into the Porte des Morts passage. It was abandoned in 1858 after a new light was constructed on Pilot Island, two miles to the southeast. The ruins of the 1849 lighthouse's foundation may exist a few hundred feet east of the present front range light.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>8</u> Page <u>3</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

Even with the construction of the Pilot Island light, mariners continued to have difficulty crossing Death's Door. By the late 1880s, consideration was being given to the construction of range lights and a fog signal on Plum Island. Range lights function in pairs; when the shorter front range light is in line with the taller rear range light, a specific line of position, the range line, is indicated. Range lights constructed in 1870 approximately twenty miles south at Bailey's Harbor had proven effective at helping mariners avoid the rocky shoals at the harbor's entrance.

The 1890 Annual Report of the Lighthouse Board recommended that "range lights and a fog-signal at the south west side of Plum Island would be an invaluable addition to...the Porte des Morts passage." The Board requested \$21,000 for the construction of the lights, a fog signal, and related buildings on Plum Island.

Established in 1852, the nine-member Lighthouse Board was comprised of: members from the Army, Navy, and Corps of Engineers; the Secretary of the Treasury; and two civilian scientists. The Board was the federal agency responsible for the construction and maintenance of aids to navigation. In 1910, the Lighthouse Board was replaced by the United States Lighthouse Service, also known as the Lighthouse Bureau, which operated within the Department of Commerce. In 1939, the United States Coast Guard took over all lighthouse operations. However, the vast majority of Great Lakes' lighthouses were constructed between 1860 and 1900, during the Lighthouse Board's tenure. Plum Island was located within the Board's Ninth District.

Congress failed to heed the Board's 1890 request for funding the Plum Island range lights, and repeated appeals in 1891 and 1892 were similarly overlooked. Finally, a Congressional act approved in February 1893 authorized the funds for Plum Island. After the money was appropriated in 1895, lighthouse engineers made plans for a fog-signal house, oil house, boathouse, duplicate fog signal house, and "men's quarters." Bids were obtained and contracts were finalized in early 1896, with construction set to begin in the fall of that year.

Also in 1895, Congress appropriated funding for the establishment of life-saving stations on Plum Island and at Bailey's Harbor. The nearest life-saving station to Plum Island was located at Sturgeon Bay, but a station closer to Porte des Morts and Washington Island was desperately needed. Plum Island's Life-Saving and Light Stations were constructed on opposite sides of the island in the same year. They would enjoy a symbiotic relationship for nearly a century.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>8</u> Page <u>4</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

The lighthouse tender *Amaranth* delivered the first work party and building supplies to the island in July 1896. Thirty men set up camp and began clearing the land along the southwest side of the island for the building site. The 20' x 1,650' range was then opened up. By August, forty men were working on the island. Piers, docks, and tramways were installed to unload and move building materials to the various building sites. Plum Island was one of only two light stations in Door County to have a tramway system.

Also in August 1896, the basement was dug for the tri-plex keepers' dwelling (men's quarters) and masons began constructing the building's Cream City brick foundation and walls. The iron skeletal rear range tower was constructed, as was the smaller wood front range light. The location of Plum Island's rear range light afforded it a double purpose, as its light was also visible to vessels approaching the Porte des Morts passage from the west. North of the rear range light, a strip of land was cleared to the site of the fog signal building.

Most of the construction was completed by the end of October, with interior finish work on the keepers' dwelling completed in November. Fog signal equipment was delivered and installed and a 1,500+' network of wood boardwalks, later replaced by concrete, was laid between the buildings. The 1897 Lighthouse Board Annual Report stated that all work was completed by December 4, 1896. Because the navigable season had already ended, the light was not officially established until May 1, 1897, when Plum Island's first keeper, Martin Knudsen, lit the lamps for the first time.

The front and rear range lights had a Fifth and Fourth Order Fresnel lenses, respectively. The Fresnel lens was developed in 1821 by Frenchman Augustine Fresnel. Using a series of highly polished glass prisms arranged in a "bee-hive" shape, a Fresnel lens could capture and focus up to 70% of the light emitted from an illuminant. This was a tremendous improvement over the parabolic reflector systems in use at the time. Fresnel lenses were quickly installed in most European lighthouses. The United States, however, did not adopt the technology until the formation of the Lighthouse Board in the early 1850s. The rear range light's original Fourth Order Fresnel lens is still in use.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>8</u> Page <u>5</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

Knudsen was an experienced lighthouse keeper, having won national recognition for his valiant rescue efforts while stationed at Pilot Island. In addition to their regular duties, Knudsen and his assistant keepers began removing stumps from the cleared areas and graded the land around the dwelling. Although private contractors delivered wood to the island, the keepers had to cut it into usable lengths, an arduous and on-going undertaking. Another work crew arrived in the summer of 1897 to construct a summer kitchen. A barn and chicken coop were also built. The summer kitchen, barn, and chicken coop are no longer extant.

In 1899, Knudsen was transferred to the North Point lighthouse in Milwaukee and replaced by Keeper Hans Hansen. The Plum Island lights would have seven civilian keepers before the Coast Guard assumed responsibility for the lights via Franklin Roosevelt's Presidential Reorganization Act of 1939.

Life for the keepers of the light station followed a fairly predictable pattern. The lights on Plum Island were operated seasonally. The exact dates for the navigable season on the lake and bay fluctuated based on the amount of ice and, initially, the schedule of the Ann Arbor Railroad Ferries, delivering cargo to Menominee, Michigan. After the station was closed for the season, typically in December or early January, keepers and their families would return to the mainland or Washington Island to stay at family homes or visit friends. The station would re-open in April. Older children would leave the island at the end of summer to attend school.

Life at the light station was not entirely isolated. Keepers and their families had almost daily contact with the surfmen and their families assigned to the Plum Island Life-Saving Station on the northeast side of the island. They assisted each other in time of need and their families socialized, especially on holidays. During the summer months, many visitors came to the station to picnic or deliver personal items. Mail service from Washington Island was fairly regular. Travel to nearby Pilot Island was facilitated by the delivery of a gasoline engine for one of the station's boats in 1909.

In 1904, an underwater telephone cable was laid between Plum Island and Northport. The life-saving station already had a phone connection with Washington Island. For the first time, the Plum Island stations could communicate directly with the communities they served. New lines between the light and life-saving stations enabled intra-island communication as well. Also in 1904, a new well was drilled near the dwelling for the keepers' use. Prior to that, the keepers and their families used water collected from the lake or the dwelling's cistern.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section	8	Page	6	

Plum Island Life-Saving and Light Stations Door County, Wisconsin

In the ensuing years, the annual cycle of opening and closing the station continued. The lights provided navigational guidance to commercial vessels, as well as an increasing number of private recreational boats. In 1931, the lamps were electrified and the 10" steam sirens were replaced by diesel engine-powered Tyfon signals. Generators were used to provide light to the interior of the dwelling during the summer months. Keeper's used kerosene lamps in the winter and water was still hand pumped from the well near the dwelling.

The year 1939 is a significant date for the Plum Island Life-Saving and Light Stations district. The last civilian keeper of the Plum Island light station, Clayton Kincaid, served as a Lighthouse Service employee for only one year, beginning in 1938. When the Lighthouse Service was transferred to the Coast Guard in 1939, Kincaid joined that service and continued as keeper until 1941. After Kincaid's First Assistant, Irving Carlson, departed in 1942, all operations on Plum Island were consolidated at the Coast Guard Station on the northeast side of the island. Coast Guard personnel continued to operate and maintain the range lights and fog signal, but the dwelling was closed. The piers, boathouse, and tramway were removed in 1939. The other outbuildings, including the barn and oil house, were removed in the early 1960s. The deteriorated wood front range light was replaced by a steel skeletal tower in 1964 and the lights were automated in 1969. The fog signal was silenced in 1975.

The Plum Island Rear Range light is architecturally significant as an intact example of a distinctive method of lighthouse tower construction on the Great Lakes. The cast iron skeletal tower has four cylindrical legs set on a diagonal to provide bracing for the central stair cylinder. The central cylinder consists of individual cast iron segments with flanges on each side, with each side flange bolted to the adjacent segments. Legs are set into concrete foundation piers. Horizontal cross members and diagonal tie rods connect the legs and help maintain the rigidity of the structure. The rear range light also retains its original Fourth Order Fresnel lens.

Only eleven freestanding skeletal towers were built on the western Great Lakes (Michigan, Superior, and Huron). The Plum Island Rear Range Light is one of only three on Lake Michigan. Other skeletal towers are located at Rawley Point and the Sturgeon Bay Canal, both in Wisconsin, but neither of these towers have the same design as the Plum Island rear range light. Lights of the same design were built on Lake Superior at the Duluth Harbor (Minnesota) in 1901 and at La Pointe, on Long Island (Wisconsin) in 1897.¹

¹ National Park Service, "Maritime Heritage Program Inventory of Historic Light Stations," <u>http://www.nps.gov/history/maritime/light/wi.htm</u> (accessed September 2007 to April 2008).

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>8</u> Page <u>7</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

The Keepers' Dwelling is also architecturally significant as an intact example of a Lighthouse Boarddesigned housing solution. The size, complexity, and relative isolation of Plum Island's light station necessitated a keeper and two assistants to operate and maintain the lights and the fog signal. In stormy or foggy weather, at least one person had to continually stoke the boilers that fired the steam sirens. In 1902 alone, the duplicate sirens were in operation some 345 hours and consumed about 69 cords of wood. In addition to the meticulous care given to the lights and lenses, the grounds, gardens, piers, boats, and equipment also had to be maintained. Such a workload required three keepers and their families.

To house three families in one building, Lighthouse Board engineers designed the building as a triplex. The keeper and his family occupied both floors of the south half of the building. The first assistant keeper lived on the north half of the first floor, with the second assistant residing on the north half's second floor. Each family had their own separate entrance. This layout afforded privacy to individual families, while consolidating resources within a single structure. The design proved so successful, it was duplicated in 1904 for the Cream City brick keepers' dwelling on nearby St. Martin Island, Michigan. However, this island is privately owned and there is no public access.

Plum Island Life-Saving Station

The same factors that led to the establishment of Plum Island's light station also contributed to the construction of its Life-Saving Station. An increase in the number of damaged and lost vessels was a reflection of increased traffic in and around the tip of Door County, on both the Rock Island and the Porte des Morts passages.

After an 1895 congressional appropriation, the United States Life-Saving Service awarded a contract for \$9,000 to contractor C.J. Olsen of Marinette, Wisconsin for the construction of Duluth-type lifesaving stations at Plum Island and Bailey's Harbor. The stations were built from a design created by United States Life-Saving Service (USLSS) architect George R. Tolman in 1893 and first constructed in Duluth, Minnesota. Characteristic features of a Duluth-type station include: a central, four-story watch tower; double bay boat room; and shingle clad walls and roof.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section 8 Page 8

Plum Island Life-Saving and Light Stations Door County, Wisconsin

George Russell Tolman became the third USLSS architect in January 1892. The Life-Saving Service was established in 1878 by a congressional vote to pass the Act to Organize the Life-Saving Service bill. Because there was no centralized, organized system in place to assist shipwreck victims or survivors, the bill had overwhelming public support on the coasts and in the Great Lakes region.

Prior to the establishment of the USLSS, the Department of the Treasury's Revenue Cutter Service had been responsible for rescue operations, which more often than not turned into recovery operations. Small wood boathouses were built at various points along the Massachusetts, New York, and New Jersey coasts and supplied with basic rescue and support equipment. The buildings were locked and the keys given to nearby volunteers. This arrangement proved inefficient at best. The volunteers were not properly trained and had no practice working as a team, a critical component of rescue work.

Within the first few years of Sumner Kimball's leadership of the USLSS, the number of deaths from shipwrecks decreased by 87.5%. Kimball's proven organizational abilities enabled the USLSS to acquire the resources, training, and personnel necessary to prevent loss of life and property. A large part of this success relied upon the construction of many new life-saving stations. The most efficient way to design these stations was through the services of an "in-house" architect.

Prior to his USLSS appointment, George Tolman was a partner in the Boston architecture firm of Moffette and Tolman. He also had experience as a draftsman for the Treasury Department. Of Tolman's three major station designs – Quonochontaug-type, Niagara-Type, and Duluth-type – the Duluth-type was most widely adopted. It is also his most distinctive and easily identifiable design. Tolman's tenure coincided with a USLSS building boom, and fifty-four stations were constructed from his designs between 1890 and 1908. Duluth-type stations were still constructed twelve years after Tolman's 1896 dismissal from the USLSS for personal reasons.

The Plum Island Life-Saving Station housed the keeper, the surfmen, the mess hall, and the kitchen. Boats were stored in the west boat room and pulled directly into the water via a launchway. Lifesaving equipment, such as the breeches buoy and beach apparatus, was stored in a separate wood frame building west of the station. Other structures included an outbuilding (also designed by Tolman), blacksmith shop, and pier.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>8</u> Page <u>9</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

When the Plum-Island Life-Saving Station officially opened on August 4, 1896, Ingar Olsen was appointed its first keeper. Born in Norway in 1870, Olsen moved to Milwaukee in 1885 to work as sailor on the Great Lakes. Olsen joined the USLSS in 1890. While stationed as a surfman at the Milwaukee Life-Saving Station, Olsen was involved in a dramatic rescue in April 1893 in which he rescued the sole survivor of a waterworks construction accident that left ten others dead. His heroic efforts earned him the Gold Lifesaving Medal for "superior intelligence, remarkable strength, and courageous daring."

A crew of nine surfmen joined Olsen at the Plum Island station. Their equipment enabled them to provide aid to vessels up to twenty-five miles from shore, although most of their rescue operations occurred close to land (in addition to continual monitoring from the four-story watch tower, surfmen walked daily patrols on a trail around the perimeter of the island). Eight other Keepers operated the station for the USLSS until the newly-created Coast Guard absorbed the service in 1915.

The Plum Island life-saving crew assisted dozens of stranded and damaged vessels. Although Green Bay frequently iced over, financial pressures often caused commercial vessels to try to extend the shipping season as long as possible. November gales were notorious on the Great Lakes. Storms could develop rapidly and violent winds could make already dangerous passages treacherous. The greatest test for Plum Island's life-saving crew occurred between November 7 - 10, 1913. The infamous November Gale, or White Hurricane, caused more damage (nineteen ships lost and nineteen stranded) and loss of lives (250) on the Great Lakes than any other storm on record. Most of the damage was on Lake Huron, but vessels on Lake Michigan also encountered difficulty.

Several ships in distress sought refuge in Washington Harbor on the northwest side of nearby Washington Island. The Plum Island station was contacted to provide assistance. Winds of up to 70 miles per hour with heavy snow and freezing temperature made for difficult rescue conditions. Despite this, Plum Island life-savers carried their beach apparatus - the equipment necessary to deploy the breeches buoy - by boat to Detroit Harbor on the southwest side of Washington Island. They then hauled the equipment across land to Washington Harbor, three miles away. One of the vessels, the steamer *Louisiana*, was already abandoned and burning. The barge *Halsted* was too far from shore for the surfmen to get a line across for the breeches buoy.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>8</u> Page <u>10</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

After the life-saving crew attempted to get a line to the *Halsted* for twenty hours in full gale conditions, the ship was finally heaved ashore by a large swell (waves of up to 35' were recorded during the storm). The ship's crew disembarked safely and sought shelter on Washington Island. The life-saving crew continued on duty at the harbor for three more days to assist other ships if necessary. After the storm finally abated, the crew returned exhausted to Plum Island. While the 1913 November Gale created exceptional circumstances, it illustrated the danger involved in life-saving and proved the USLSS motto, "You have to go out, but you do not have to come back."

Like the light station, the Plum Island Life-Saving station was open only during the navigable season. Surfmen were laid off for four months, but the keeper remained employed year round, spending the winter months on Washington Island.

In 1915, the Coast Guard was created by an act of Congress that merged the Revenue Cutter Service with the Life-Saving Service. Under the umbrella of the Department of the Treasury, the Coast Guard was charged with saving life at sea and enforcing the nation's maritime laws. This change did not greatly affect the daily operation of the Plum Island station. During World War I, the Coast Guard fell under the jurisdiction of the Navy. After the war, it was returned to the Treasury Department and year-round employment was implemented for all Coast Guard personnel. While surfmen were re-assigned to other units during the winter, the Officer in Charge continued to spend winters on Washington Island.

As surfmen married, it became an accepted, though not officially sanctioned, practice for them to bring their families to live with them on Plum Island. They built temporary homes known as "surfman cottages" on cedar post foundations in the woods around the life-saving station. A 1915 Coast Guard sketch map of Plum Island shows four of these cottages. By the late 1920s, there were seven. Beginning in 1931, the life-saving station had electricity provided by generators, but the cottages were lit by kerosene lamps and heated with wood or coal. The families kept chickens and cultivated gardens. When the cottages were no longer in use, several of them were pulled across the ice on cedar rafts to Washington Island. At least three of these still exist, in use as cottages or businesses.

Changing lake levels, larger boats, and additional equipment made the original boat bays in the station building unusable by the mid-1920s. As early as 1915, a Coast Guard engineer named D.C. Wickham designed a proposed boathouse and launch-way to be constructed near the location of the present boathouse. This modest two bay frame structure was never built.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>8</u> Page <u>11</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

In 1929, the original boat bays in the Duluth-type station were enclosed and a half-story gable roof addition was added to the east portion, straddling the ridge of the original roof. This new space provided additional sleeping quarters, while the boat bay area was used for miscellaneous storage. Until the new boathouse was constructed in 1939, boats were stored outdoors, exposed to the elements. By the 1940s, the cart house and blacksmith shop were removed.

The 1939 boathouse is architecturally significant as an intact example of a "Roosevelt-type" boathouse. Of the approximately fifty that were originally built from this design, only twenty-four survive. Four of these are located on Lake Michigan. Plum Island's boathouse is the only example of the style in Wisconsin.² The plans for this station were created in 1937 by the U.S. Coast Guard's Office of Division Civil Engineers, and marked with the initials P.H.P. and D.K.R. The identity of these engineers has not yet been determined. The three-bay boathouse was built on concrete piers approximately two hundred feet out into the lake and exhibits Colonial Revival design elements such as arched and multi-pane windows, corner pilasters, friezes, and detailed door surrounds. The building's overall symmetry, balance, and proportions also reflect the Colonial Revival style.

The Plum Island Life-Saving Station is architecturally significant as the sole surviving example of a Duluth-type station on the Great Lakes. Of the twenty-eight Duluth-type stations that were built by the Life-Saving Service between 1893 and 1908, the vast majority (twenty-two) of these stations were built on the East Coast. Of these, only fourteen survive. Of the six that were built on the Great Lakes, only Plum Island remains.³ The Plum Island station is also the only remaining example of a Duluth-type station located on an island. The proven functionality of Tolman's design was reflected in its use by the United States Life-saving Service for a decade and a half.

The Coast Guard continued to operate the Plum Island station and act as the "Guardians of Death's Door" until 1990. In 1973, a series of budget cuts led the Coast Guard to consider closing the Plum Island station. Protests by area residents and the numerous recreational boaters that plied Door County waters resulted in a compromise – the station would only be open during the summer months (Memorial Day through Labor Day) and would be operated by Coast Guard reservists.

² Wick York, "Unpublished List of Roosevelt-Type Boathouses" (Stonington, CT: 2008).

³ Ralph Shanks and Wick York, *The U.S. Lifesaving Service: Heroes, Rescues and Architecture of the Early Coast Guard* (Petaluma, CA: Costano Books, 1996), 247.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>8</u> Page <u>12</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

By the fall of 1990, the Coast Guard determined that the isolated, aging Plum Island station was too costly to staff and maintain. The station was relocated to Washington Island and renamed Washington Island Station, operated during the summer under the direction of the Sturgeon Bay Canal Station. Although the Coast Guard continued to maintain the lights as active aids to navigation, the property was administered by the Bureau of Land Management. In 2004, the Coast Guard completed an \$863,000 lead abatement and fuel contamination clean-up. In October 2007, the Bureau of Land Management formally transferred Plum Island, along with Pilot Island, from the Coast Guard to the Fish and Wildlife Service. Plum, Hog, and Pilot Islands form the Green Bay National Wildlife Refuge, established to protect native and migratory bird habitat and endangered species habitat in the Great Lakes Basin ecosystem. The Fish and Wildlife Service has partnered with the non-profit Friends of Plum and Pilot Islands to preserve and manage the island's historic and cultural resources.

The year 1964 marks the end of the period of significance for the Plum Island Life-Saving and Light Stations. This is the year in which the new front range light was constructed, the last new construction to occur on the island. While this date falls outside of the National Park Service's current "50 year" criterion, it encompasses the entire period of development of the two station complexes. The changes made through 1964 represent the continued use and improvement of the facilities on Plum Island.

Plum Island is an exceptional historical and natural resource in Wisconsin waters. The island's removal from the public domain in 1848 precluded private development, and the establishment of the Life-Saving and Light Stations in 1896 confirmed Plum Island's prominent location along an important shipping passage. The evolution of Life-Saving Service and the Light House Board is reflected in the physical and organizational changes that occurred during the district's period of significance. The resources within the district retain a high degree of integrity and are significant at a statewide level. Throughout the nineteenth century, maritime trade was the most important link for developing Wisconsin communities, connecting them economically and culturally with the wider regional markets. The Plum Island Life-Saving and Light Stations contribute to a greater understanding of the state's maritime history and the importance of Great Lakes shipping to the development of Wisconsin.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>8</u> Page <u>13</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

Archaeological Potential

Plum Island has a high potential for archaeological discovery though late prehistoric/proto-historic archaeological sites. In addition to sites related to seasonal Native American occupation of the island, there are several recorded archaeological deposits associated with the Euro-American historic occupation of the island, as well as three documented shipwreck sites in the waters around the island. All of these records and site forms are on file with the Wisconsin Historical Society's Division of Historic Preservation.

Plum Island Life-Saving and Light Stations

Name of Property

County Door

County and State

Wisconsin

9. Major Bibliographic References

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

	ious Documentation on File (National Park Service):	Primary location of additional data:
	preliminary determination of individual	X State Historic Preservation Office
	listing (36 CFR 67) has been requested	_ Other State Agency
X	previously listed in the National	X Federal Agency
	Register	Local government
X	previously determined eligible by	University
	the National Register	Other
	designated a National Historic	Name of repository:
	landmark	
1.1	recorded by Historic American Buildings Survey #	
X	recorded by Historic American Engineering Record #Great La	kes Lighthouse Survey

10. Geographical Data

Acreage of Property 325 acres

UTM References (Place additional UTM references on a continuation sheet.)

1	16	503430	5017928	3	16	504309	5017070	
	Zone	Easting	Northing	_	Zone	Easting	Northing	
2	16	504135	5017822	4	16	504355	5016445	-
	Zone	Easting	Northing	-	Zone	Easting	Northing	
				X	See Con	tinuation She	et	

Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet)

Boundary Justification (Explain why the boundaries were selected on a continuation sheet)

11. Form Prepared By						
name/title organization street & number	Sarah Zaske, Historic Preservation Co Friends of Plum and Pilot Islands 2034 N. 59 th St.	onsultant		date telephone	April 14, 2008; 11/09 414-257-4146	
city or town	Milwaukee	state	WI	zip code	53208	

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>10</u> Page <u>1</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

BIBLIOGRAPHY

- Annual Report of the Light-House Board of the United States. Washington, DC: U.S. Government Printing Office, 1890-1909.
- Eaton, Conan Bryant. Rock Island. Washington Island, WI: Self-published, 1979.
- Gjerset, Knut. Norwegian Sailors on the Great Lakes. Northfield, MN: The Norwegian-American Historical Society, 1979 (re-print).
- Johnson, Robert Erwin. Guardians of the Sea: History of the United States Coast Guard, 1915 to Present. Annapolis, MD: Naval Institute Press, 1987.
- Jones, Ray. The Lighthouse Encyclopedia: The Definitive Reference. Guildford, CT: The Globe Pequot Press, 2004.
- Karges, Steven. Keepers of the Lights: Lighthouse Keepers and Their Families, Door County, Wisconsin – 1837-1939. Ellison Bay, WI: Wm. Caxton Ltd., 2000.
- National Archives and Records Administration. Records of the Office of the United States Coast Guard, Record Group 26 and Records of the United States Coast Guard Central Engineering Unit.
- National Park Service. <u>http://www.nps.gov</u> (Maritime Heritage Program online database of Historic Light Stations).
- Nesbit, Robert C. Wisconsin: A History. Madison, WI: The University of Wisconsin Press, 1989.
- Ostrom, Thomas P. The USCG on the Great Lakes. Oakland, OR: Red Anvil Press, 2007.
- Palmquist, John C., Ed. Wisconsin's Door Peninsula: A Natural History. Appleton, WI: Perin Press, 1989.
- Pepper, Terry. "Seeing the Light: Lighthouses of the Western Great Lakes." Terry Pepper. http://terrypepper.com/lights.index.html (accessed September 2007 to April 2008).
Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>10</u> Page <u>2</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

Rhein, Michael J. Lighthouse Spotter's Guide. San Diego, CA: Thunder Bay Press, 2005.

- Robb, David James. Seaman First Class, United States Coast Guard stationed on Plum Island in 1965. Interviewed by Sarah Zaske. Milwaukee, WI: February March 2008.
- Shanks, Ralph and Wick York. The U.S. Life-Saving Service: Heroes, Rescues and Architecture of the Early Coast Guard. Petaluma, CA: Costano Books, 1996.
- State Historical Society of Wisconsin, Historic Preservation Division. Cultural Resource Management in Wisconsin: A Manual for Historic Properties, Volume 2. Madison, WI: State Historical Society of Wisconsin, 1987.
- Stonehouse, Frederick. Wreck Ashore: The United States Life-Saving Service on the Great Lakes. Duluth, MN: Lake Superior Port Cities Inc., 1994.
- Thomas, Stacy and Virginia. Guarding Door County: Lighthouses and Life-Saving Stations. Charleston, SC: Arcadia Publishing, 2005.
- United States Department of Homeland Security. United States Coast Guard Light List: Volume VII Great Lakes. Washington, DC: U.S. Government Printing Office, 2007.
- Wardius, Ken and Barb. Wisconsin Lighthouses: A Photographic and Historical Guide. Madison, WI: Prairie Oak Press, 2000.
- Wisconsin Historical Society, Division of Historic Preservation. Archaeological Site Inventory Forms. Madison, WI: Wisconsin Historical Society, 2003.
- Wisconsin Marine Historical Society. Plum Island and Coast Guard Files. Milwaukee, WI: Milwaukee Public Library.
- Wright, Larry and Patricia. Great Lakes Lighthouse Encyclopedia. Erin, ONT: Boston Mills Press, 2006.

York, Wick. "Unpublished List of Roosevelt-Type Boathouses." Stonington, CT: March 2008.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>10</u> Page <u>3</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

GEOGRAPHICAL DATA

UTM References (continued)

5)	16	503400	5016719
	Zone	Easting	Northing
6)	16	503105	5017542

Zone Easting Northing

Verbal boundary description

The boundary is the high water mark all around Plum Island, Town of Washington, Door County, Wisconsin; including ten feet around each side of the boathouse, breakwater, and pier.

Township 33 N, Range 29 E Section 26, Lots 1 and 2 Section 27, Lots 1, 2, and 3

Verbal boundary justification

The nominated property includes all of Plum Island, including ten feet around each side of the boathouse, breakwater, and pier. An Executive Order dated December 11, 1848 withdrew the 325 acres of public land that comprised Plum Island from surface entry and reserved them for use by the federal government for lighthouse purposes. Plum Island is located off the tip of Door County, Wisconsin on the treacherous Porte des Morts passage from Lake Michigan into the waters of Green Bay. As commercial shipping on the Great Lakes increased, the need for well situated aids to navigation became evident.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>10</u> Page <u>4</u>

Plum Island Life-Saving and Light Stations Door County, Wisconsin

The first lighthouse on Plum Island was built in 1849. After that lighthouse was abandoned in 1858, land on Plum Island remained unavailable for sale to individuals. When the Life-Saving Station was established on the northeast side of the island in 1896, surfmen patrolled the perimeter of the island at regular intervals searching out vessels in distress. In 1896, construction began on the range lights and keepers' dwelling on the west side of the island. The range lights were first exhibited on May 1, 1897,

guiding mariners through the Porte des Morts passage. From 1897 until 1901, the Lighthouse Board harvested trees on Plum Island and utilized the timber for the construction and operation of other light stations on the Great Lakes. The 1939 boathouse, breakwater, and pier contribute to the significance of the historic district, and are therefore included within the boundary.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section	10	Page	5

Plum Island Life-Saving and Light Stations Door County, Wisconsin



Plum Island Life-Saving and Light Stations	County Door	Wisconsin	
Name of Property	County and State		

Additional Documentation Submit the following items with the completed form: Continuation Sheets Maps A USGS map (7.5 or 15 minute series) indicating the property's location. A sketch map for historic districts and properties having large acreage or numerous resources. Photographs Representative black and white photographs of the property. Additional Items (Check with the SHPO or FPO for any additional items) Property Owner Complete this item at the request of SHPO or FPO.)

name/title organization			date	
street&number			telephone	
city or town	state	WI	zip code	

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. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 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 Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects, (1024-0018), Washington, DC 20503.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section photos Page 1

Plum Island Life-Saving and Light Stations Door County, Wisconsin

PHOTOGRAPH LOG

With two exceptions noted below, all photographs were taken on September 28, 2007. Since digital images were used, no negatives exist.

Photo #1 Name of Photographer: Tim Sweet Description of View: North elevation of Building 1; Direction of Camera: S

Photo #2 Name of Photographer: Sarah Zaske Description of View: North and west elevations of Building 1; Direction of Camera: SE

Photo #3 Name of Photographer: Sarah Zaske Description of View: South elevation of Building 1; Direction of Camera: N

Photo #4 Name of Photographer: Sarah Zaske Description of View: South elevation of Building 1 with view of walkway; Direction of Camera: NE

Photo #5 Name of Photographer: Tim Sweet Description of View: East elevation dormers on Building 1; Direction of Camera: W

Photo #6 Name of Photographer: Sarah Zaske Description of View: East elevation entry of Building 1; Direction of Camera: W

Photo #7 Name of Photographer: Tim Sweet Description of View: Structure 1; Direction of Camera: N

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section photos Page 2

Plum Island Life-Saving and Light Stations Door County, Wisconsin

Photo #8 Name of Photographer: Tim Sweet Description of View: East and south elevations of Buildings 1, 2, and 3; Structures 2 and 3; Direction of Camera: W

Photo #9 Name of Photographer: Sarah Zaske Description of View: North elevation of Building 2; Direction of Camera: S

Photo #10 Name of Photographer: Sarah Zaske Description of View: East elevations of Building 2 and Structure 2; Direction of Camera: W

Photo #11 Name of Photographer: Sarah Zaske Description of View: East and south elevations of Building 2; Direction of Camera: NW

Photo #12 Name of Photographer: Sarah Zaske Description of View: West elevation of Building 2; Direction of Camera: E

Photo #13 Name of Photographer: Tim Sweet Description of View: East elevation of Building 2's tower; Direction of Camera: W

Photo #14 Name of Photographer: Sarah Zaske Description of View: Building 2 interior staircase; Direction of Camera: N

Photo #15 Name of Photographer: Tim Sweet Description of View: Building 2 second floor interior; Direction of Camera: N

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section photos Page 3

Plum Island Life-Saving and Light Stations Door County, Wisconsin

Photo #16 Name of Photographer: Sarah Zaske Description of View: North and east elevations of Building 3; Direction of Camera: SW

Photo #17 Name of Photographer: Sarah Zaske Description of View: North and west elevations of Building 3; Direction of Camera: SE

Photo #18 Name of Photographer: Sarah Zaske Description of View: South elevations of Buildings 2 and 3; Direction of Camera: N

Photo #19 Name of Photographer: Tim Sweet Description of View: Interior of Building 3 paint storage room; Direction of Camera: E

Photo #20 Name of Photographer: Tim Sweet Description of View: North and west elevations of Building 4 and Structure 4; Direction of Camera: SE

Photo #21 Name of Photographer: Sarah Zaske Description of View: North and east elevations of Building 4; Direction of Camera: SW

Photo #22 Name of Photographer: Sarah Zaske Description of View: East elevation of Building 4; Direction of Camera: W

Photo #23 Name of Photographer: Sarah Zaske Description of View: South and east elevations of Building 4; Direction of Camera: NW

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section photos Page 4

Plum Island Life-Saving and Light Stations Door County, Wisconsin

Photo #24

Name of Photographer: Tim Sweet Date of Photograph: August 20, 2003 Description of View: Interior of Building 4; Direction of Camera: E

Photo #25 Name of Photographer: Tim Sweet Date of Photograph: August 20, 2003 Description of View: Interior of Building 4; Direction of Camera: N

Photo #26 Name of Photographer: Sarah Zaske Description of View: South and east elevations of Structure 4; Direction of Camera: NW

Photo #27 Name of Photographer: Sarah Zaske Description of View: Structure 4 watch room and lantern room; Direction of Camera: NW

Photo #28 Name of Photographer: Sarah Zaske Description of View: South elevation of Structure 4; Direction of Camera: N

Photo #29 Name of Photographer: Sarah Zaske Description of View: Structure 4 interior staircase; Direction of Camera: E

Photo #30 Name of Photographer: Tim Sweet Description of View: South elevations of Structures 4 and 5; Direction of Camera: NE

Photo #31 Name of Photographer: Tim Sweet Description of View: North from Structure 4 to Building 5; Direction of Camera: N

Photo #32 Name of Photographer: Sarah Zaske Description of View: South and east elevations of Building 5; Direction of Camera: NW

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section photos Page 5

Plum Island Life-Saving and Light Stations Door County, Wisconsin

Photo #33 Name of Photographer: Sarah Zaske Description of View: West elevation of Building 5; Direction of Camera: E

Photo #34 Name of Photographer: Sarah Zaske Description of View: North and east elevations of Building 5; Direction of Camera: SW

Photo #35 Name of Photographer: Sarah Zaske Description of View: Building 5 interior; Direction of Camera: W

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section photos Page 6

Plum Island Life-Saving and Light Stations Door County, Wisconsin



Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section photos Page 7

Plum Island Life-Saving and Light Stations Door County, Wisconsin



Plum Island Light Station, circa 1902 Photo courtesy of United States Fish and Wildlife Service

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section photos Page 8

Plum Island Life-Saving and Light Stations Door County, Wisconsin



Plum Island Life-Saving Station, circa 1900 Photo courtesy of Wisconsin Marine Historical Society

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section photos Page 9

Plum Island Life-Saving and Light Stations Door County, Wisconsin



Plum Island Coast Guard Station, circa 1954 Photo courtesy of David Robb

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY Plum island Life-Saving and Light Station NAME:

MULTIPLE NAME:

STATE & COUNTY: WISCONSIN, Door

DATE RECEIVED: 5/10/10 DATE OF PENDING LIST: 6/08/10 DATE OF 16TH DAY: 6/23/10 DATE OF 45TH DAY: 6/24/10 DATE OF WEEKLY LIST:

REFERENCE NUMBER: 10000385

REASONS FOR REVIEW:

APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N N PROGRAM UNAPPROVED: OTHER: N PDIL: PERIOD: N N N SLR DRAFT: N NATIONAL: N REQUEST: N SAMPLE: COMMENT WAIVER: N DATE ACCEPT RETURN REJECT

ABSTRACT/SUMMARY COMMENTS:

The Plum Island Life-Saving Station and Light Station is listed in the National Register as a historic district under criteria A and C for its significance in Transportation, Commerce, Maritime History, and Architecture. The period of significance is 1896 – 1964, representing the construction of the "Duluth-type" station (the last surviving example on the Great Lakes) and the year when the new front-range light was constructed—the last new construction on the island. The district also includes a Colonial Revival boathouse, a Queen Anne-style keeper's dwelling, and the rear range light (NRHP, 7-19-84), which is an intact example of a distinctive lighthouse tower constructed on the Great Lakes.

RECOM. /CRITERIA A&C	\cap
REVIEWER B. What	DISCIPLINE MISTONAN
TELEPHONE 202-354-2252	DATE 6-24-10

DOCUMENTATION see attached comments Y/N see attached SLR Y/N

If a nomination is returned to the nominating authority, the nomination is no longer under consideration by the NPS.



1. Boathouse, Plum Island Life-Saving and Light Stations 2. Door County, WI 7. Photo 1



1. Boathouse, Plum Island Life-Saving and Light Stations 2. Door County, WI 7. Photo 2



2. Door County, UII 7. Photo 3.



1. Boathouse, Plum Island Life-Saving 2. Door County, WI 7. Photo 4



1. Boathouse, plum Island Life-Saving and Light Stations 2. Door County, WI 7. Photo 5



2. Door County, WI 7. Photo 6



1. Prer and Breakwater (with Boathouse ramp), Plum Island Life-Saving and Light Stations 2. Door County, WI 7. Photo 7



Flagpole, and Radio Tower; Plum Island Life-Saving and Light Stattons

2. Door County, WI 7. Photo 8



Life-Saving Station, Plum Island 2. Door County, WI 7. Photo 9



1. Life-Saving Station, Plum Island Life-Saving and Light Stations 2. Door County, WI 7. Photo 10


1. Door County, WI 7. Photo II



1. Life-Saving Station, Plum Island Life-Saving and Light Stations 2. Door County, WI 7. Photo 12



Life-Saving Station, Plum Island Life-Saving and Light Stations 2. Door County, WI 7. Photo 13



1. Life-Saving Station, Plum Island Life-Saving and Light Stations 2. Door County, WI 7. Photo 14



Life-Saving Station, Plum Island Life-Saving and Light Stations 2. Door County, WI 7. Photo 15



2. Door County, WI 7. Photo 16



2. Door County, WI 7. Photo 17



Libertouilding and Life-Saving Station, Plum Island Life-Saving and Light Stations 2. Door County, WI 7. Photo 18



1. Outlouilding, plum Island Life-Saving and Light Stations 2. Door County, WI 7. Photo 19



1. Rear Range light and Keepers' Dwelling, Plum Island Life-Saving and Light Stations 2. Door County, WI 7. Photo 20



1. Keepers' Dwelling, Plum Island Life-Saving and Light Stations 2. Door County, WI 7. Photo 21



" Keepers' Dwelling, Plum Island, Dife Saving and Light Stations 2. Door County, WI 1. Photo 22



Life-Sautug and Light Stations 2. Door County, WI 7. PNOTO 23



Life - Saving and Light Stations 2, Door County, WI 7, Photo 24



h Reepers' Dwelling, Plum Island Life-Saving and Light Stations 2. Door County, WI 7. Photo 25



1 Rear Range Light, Plum Island IIID Life-Saving and Light Stations 2. Door County, WI 7. Photo 26



"Rear Range light, Plum Island Life Saving and Light Stations 2. Door County, WI 7. Photo 27



Life-Saving and light Stations 2, Door County, WI 7, Photo 22


1 Rear Range Light, Plum Island, D life-Saving and Light Stations 2. Door County, WI 7. Photo 29



Light and Rear Range Lights, plum Island life-saving and Light Stations 2. Door County, WI 7. Photo 30



1. View from Rear Range Light 2. Door County, WI and Light Stations 7. Photo 31



1. Fog Signal Building, Plum Island Life-Saving and Light Stations 2. Door County INII 7. Photo 32



Life-Saving and Light Stations 2, Door County, WI 7, Photo 33



2. Door County, WI 7. Photo 34



1. Fog Signal Boilding, Plum Island Life-Saving and light Stations 2. Door County, WI 7. Photo 35





January 21, 2010

David Kluth Regional Historic Preservation Officer Fish and Wildlife Service Bishop Henry Whipple Federal Building 1 Federal Dr Fort Snelling MN 55111-4056

Dear Mr. Kluth:

Enclosed please find a signed cover sheet printed on bond paper for the Plum Island Life-Saving and Light Station. This is a great resource and we look forward to its listing on the National Register.

Please feel free to contact me if you have any questions. I may be reached at 608-264-6501 or <u>daina.penkiunas@wisconsinhsitory.org</u>.

Sincerely, Leukuinas alna

Daina Penkiunas National Register Coordinator Wisconsin Historical Society

Collecting, Preserving and Sharing Stories Since 1846

816 State Street Madison, Wisconsin 53706

wisconsin history.org

65010002

NWRS READ FILE x VSO FILE COPY



FWS/NWRS-VSO

MAR 1 5 2010

Memorandum

To:

Director (ANRS) Attention: Kevin Kilcullen, Division of Visitor Services and Communication

FromCTING Regional Director, Region 3

Subject: Nomination of the Plum Island Lifesaving and Light Stations, Green Bay National Wildlife Refuge, to the National Register of Historic Places

I am requesting that the enclosed nomination be transmitted to the Keeper of the National Register of Historic Places for consideration. The Plum Island Lifesaving and Light Stations are unique and important cultural resources that represent the Golden Age of maritime navigation and shipping on the Great Lakes. The site was established in 1848 in order to protect ships entering the dangerous *Porte des Morts* passage leading from Lake Michigan to Green Bay. The site, along with the entire island, was transferred to the Service in 2007. Since that time, the Service is working cooperatively with the State of Wisconsin and other interested parties to support the goals of cultural resource preservation, restoration, and maintenance while conserving and protecting wildlife resources within the Green Bay National Wildlife Refuge.

Should you have any questions regarding the nomination and/or the property, please contact David W. Kluth, the Regional Historic Preservation Officer for Region 3, at (612) 713-5439, or Patti Meyers, Project Leader for Green Bay National Wildlife Refuge, at (920) 387-2658, ext. 11.

/S/CHARLES M. WOOLEY

Enclosure

cc: Patti Meyers, Project Leader, Green Bay NWR David Kluth, RHPO, Region 3 VSO:KLUTH::margie:x5440:2/17/10:h:\david/WI.HRC.Plum Island.feb10