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United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

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

1. Name of Property

Historic name Fiddler's Reach Fog Signal

Other names/site number Fiddler's Reach Fog Bell Tower

2. Location

street & number North shore of Kennebec River, east of Doubling Point Light Station not for publication

city of town Arrowsic vicinity

State MAINE code ME county Sagadahoc code 023 zip code 04530

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 at the following level(s) of significance:

 national X statewide local


Signature of certifying official

6/19/09
Date

SHPO.
Title

MAINE HISTORIC PRESERVATION COMMISSION
State or Federal agency and bureau

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

Signature of commenting official

Date

Title

State or Federal agency and bureau

4. National Park Service Certification

I, hereby, certify that this property is:

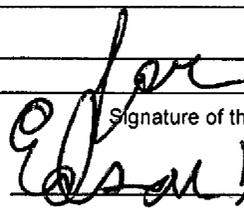
entered in the National Register

determined eligible for the National Register

determined not eligible for the National Register

removed from the National Register

other (explain:)

 Signature of the Keeper
Edson H. Beall Date of Action
8-5-09

FIDDLERS REACH FOG SIGNAL

Name of Property

SAGADAHOC COUNTY, MAINE

County and State

5. Classification

Ownership of Property
(Check as many boxes as apply)

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

Category of Property
(Check only one box)

- building(s)
- district
- site
- structure
- building(s)
- object

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

Contributing	Noncontributing	
		buildings
		sites
1		structures
		Objects
		buildings
1	0	Total

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

N/A

Number of contributing resources previously listed in the National Register

None

6. Function or Use

Historic Functions
(Enter categories from instructions)

TRANSPORTATION/ Water Related

Current Functions
(Enter categories from instructions)

WORK IN PROGRESS

7. Description

Architectural Classification
(Enter categories from instructions)

OTHER: PYRAMIDAL FOG BELL TOWER

Materials
(Enter categories from instructions)

foundation: STONE
walls: WOOD / SHINGLE
roof: METAL / COPPER
other: _____

FIDDLERS REACH FOG SIGNAL

Name of Property

SAGADAHOC COUNTY, MAINE

County and State

8. Statement of Significance

Applicable National Register Criteria

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

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

Criteria Considerations

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

Property is:

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

Areas of Significance

(Enter categories from instructions)

MARITIME HISTORY / TRANSPORTATION

ARCHITECTURE

Period of Significance

1914 – 1959

Significant Dates

Significant Person

(Complete only if Criterion B is marked above)

Cultural Affiliation

Architect/Builder

Engineering Construction Division, Bureau of
Lighthouses, Dept. of Commerce.

Period of Significance (justification)

The period of significance commences in 1914 when the Fiddler's Reach Fog Bell was constructed. Although the fog signal station was in use through the 1970s, 1959 has been designated as the end of the period of significance in recognition of the fifty-year cut off required by National Register guidelines.

Criteria Considerations (explanation, if necessary)

Not applicable.

FIDDLERS REACH FOG SIGNAL

Name of Property

SAGADAHOC COUNTY, MAINE

County and State

9. Major Bibliographical References**Bibliography** (Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets)**Previous documentation on file (NPS):**

preliminary determination of individual listing (36 CFR 67 has been requested)
 previously listed in the National Register
 previously determined eligible by the National Register designated a National Historic Landmark
 recorded by Historic American Buildings Survey # ME,12 - AROW 2-11
 recorded by Historic American Engineering Record # _____

Primary location of additional data:

State Historic Preservation Office
 Other State agency
 Federal agency
 Local government
 University
 Other
 Name of repository: National Archives, US Coast Guard Academy

Historic Resources Survey Number (if assigned): _____

10. Geographical Data

Acreage of Property .13 acres
 (Do not include previously listed resource acreage)

UTM References

(Place additional UTM references on a continuation sheet)

1	<u>19</u>	<u>0435738</u>	<u>4858809</u>	3	<u> </u>	<u> </u>	<u> </u>
	Zone	Easting	Northing		Zone	Easting	Northing
2	<u> </u>	<u> </u>	<u> </u>	4	<u> </u>	<u> </u>	<u> </u>
	Zone	Easting	Northing		Zone	Easting	Northing

Verbal Boundary Description (describe the boundaries of the property)

The boundaries of the nominated property are depicted on the Town of Arrowsic tax map # 4, lot 25. The nominated property is also described by the Quitclaim Deed without Covenants from the United States of America to the Range Light Keepers, dated September 2, 1998 and recorded in the Sagadahoc County Registry of Deeds, Bath, Maine, Book 1617, page 246.

Boundary Justification (explain why the boundaries were selected)

The above described boundaries of the nominated parcel closely, if not exactly, match the parcel of land that was conveyed to the United States of America by John H. Currier on October 20, 1913 for the express purpose of erecting the Fiddler's Reach Fog Signal. Said deed was recorded in the Sagadahoc County Registry of Deeds, Bath, Maine, in Book 127 on page 444.

11. Form Prepared By

name/title Christi A. Mitchell, Architectural Historian
 organization Maine Historic Preservation Commission date 11 April 2009
 street & number 55 Capitol Street, State House Station 65 telephone (207) 287-2132
 city or town Augusta state Maine zip code 04333-0065
 e-mail christi.mitchell@maine.gov

Additional Documentation

Submit the following items with the completed form:

- **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. Key all photographs to this map.
- **Continuation Sheets**
- **Additional items:** (Check with the SHPO or FPO for any additional items)

Photographs:

Submit clear and descriptive black and white photographs. The size of each image must be 1600x1200 pixels at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map.

Name of Property: Fiddler's Reach Fog Signal
City or Vicinity: Arrowsic
County: Sagadahoc **State:** Maine
Photographer: Christi Mitchell
Date Photographed: 14 April 2009
Description of Photograph(s) and number: ME_Sagadahoc County_Fiddler's Reach Fog Signal_001.tif
 1 of 3. East elevation of structure and view west down Reach.

Name of Property: Fiddler's Reach Fog Signal
City or Vicinity: Arrowsic
County: Sagadahoc **State:** Maine
Photographer: Christi Mitchell
Date Photographed: 14 April 2009
Description of Photograph(s) and number: ME_Sagadahoc County_Fiddler's Reach Fog Signal_001.tif
 2 of 3. West and north elevations; facing southeast.

Name of Property: Fiddler's Reach Fog Signal
City or Vicinity: Arrowsic
County: Sagadahoc **State:** Maine
Photographer: Christi Mitchell
Date Photographed: 14 April 2009
Description of Photograph(s) and number: ME_Sagadahoc County_Fiddler's Reach Fog Signal_001.tif
 3 of 3. North elevation; facing south.

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

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, PO Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

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

The Fiddler's Reach Fog Signal is one of the many aids to navigation situated along the Kennebec River in Sagadahoc County, Maine. Located midway between the Doubling Point Light Station (NR:87002271) and the Kennebec River Light Station (NR:87002263, also known as the Doubling Point or Kennebec River Range Lights), the fog signal functioned to enable safe passage through the tricky "S" turn of Fiddler's Reach. Although located about 1100 feet west of the range lights, the fog signal was maintained by the personnel who lived at this light station. When the pyramidal, timber-framed, shingle clad structure was erected in 1914, the audible fog signal was created by a bell strike. Between 1967 and 1970 the bell was replaced by an electric fog horn, the use of which was discontinued by 1982. The structure is now maintained by a private non-profit organization. It retains a high level of integrity of workmanship, design, setting, location, association and feeling, and to a lesser extent, materials. The Fiddler's Reach Fog Signal is eligible for listing in the National Register of Historic Places under Criterion A, as an aid to navigation important to the transportation aspect of maritime history, and under Criterion C as a property that embodies the distinctive characteristics of a type and method of construction.

Narrative Statement of Significance (provide at least one paragraph for each area of significance)

In 1987 the Maine Historic Preservation Commission developed and submitted to the National Register of Historic Places a Multiple Property Submission for the "Light Stations of Maine." This document outlined historic contexts for the evaluation of Maine's coastal light stations and specified registration requirements for listing these resources in the National Register. A similar, but geographically more far-reaching Multiple Property Submission, "Light Stations of the United States" was developed by the National Park Service and accepted by the National Register of Historic Places in 2002. The registration requirements for light stations under both of these documents define a light station as containing a light tower elevated above sea level and used as an aid to navigation. Beyond this minimum, however, a light station may include a dwelling and other "ancillary buildings and structures that perform specialized and very significant tasks in the entire light station system." (Mohny, July 1987, p. F. II, 2.) These additional buildings and structures included bell houses, fog signal buildings, oil storage sheds or houses, boathouse, cisterns, and barns or garages. The Fiddler's Reach Fog Signal is a stand alone structure built sixteen years after the neighboring complexes. Although it is proximal to the Doubling Point and Kennebec River Light Stations (and was tended by the keeper of one of the stations), it was not considered part of either. This distinction is reinforced by the Fiddler's Reach Fog Signal's separate listing in the annually published Local Lists of Lights. Inasmuch as the Fiddler's Reach Fog Signal is not associated with a specific light tower or considered part of either adjacent light station, it cannot be nominated to the National Register under either of the above cited Multiple Property Submissions. Nonetheless, the context statements "Federal Lighthouse Management 1789-1939" and "Maritime Transportation in Maine ca. 1600 - 1917" and the development of the property type "Bell House," both articulated in the Maine Light Stations MPS are all relevant and useful for evaluating the subject property, as are the nationwide contexts developed in the nationwide MPS, "Federal Administration of Lighthouses, U.S. Lighthouse Service, 1879-1952" and "Architecture & Engineering, U.S. Lighthouse Construction Types, Station Components, Regional Adaptations and Variations, 1789-1949".

Criterion A: Maritime History/ Transportation

The Fiddler's Reach Fog Signal achieves significance under Criterion A as part of the Federal Government's program to provide an integrated system of navigational aids and to provide for safe maritime transportation in the United States in general and in Maine in specific. The rivers and coast of Maine were the primary means of transportation and communication and provided a means of sustenance for the region's inhabitants from the first Native Americans through the early 20th century. It is almost not possible to overstate the extent to which Maine relied on maritime transportation, and in turn, on the aids to navigation that made it possible to ply the state's roughly 3,500 mile long shoreline and plot courses past her over 1,000 islands and uncounted ledges and rocks. Prior to the establishment of the state's railroads in the 1830s each of the extractive industries, including lumber, granite, lime, and ice and most of the commercial and agricultural products left the state via the Gulf of Maine: the state's extensive fishing and shipbuilding industries were also dependent on maintaining navigable waterways. Pleasure craft and passenger ferries also added to the bustle in port communities and congestion along the shipping lanes.

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Narrative Description

(Describe the historic and current physical appearance of the property. Explain contributing and noncontributing resources if necessary. Begin with a **summary paragraph** that briefly describes the general characteristics of the property, such as its location, setting, size, and significant features.)

Summary Paragraph

The Fiddler's Reach Fog Signal is a pyramidal shaped, wood-frame fog bell tower located on a ledge at the edge of the Kennebec River on Arrowsic Island, in Sagadahoc County. Located about 10 miles from the mouth of the river, the 3,500 foot long stretch of the river known as Fiddler's Reach is oriented east-to-west and is part of a dangerous "S" turn the river negotiates around the west flank of Arrowsic Island. The Fog Signal (also referred to as the "Bell Tower") is on the north shore of the river, somewhat closer to the east end of the Reach than the west end. The Kennebec River Light Station is located one-quarter mile to the east, and the Doubling Point Light Station is a little less than half a mile to the west. The structure is located on an uneven ledge outcrop elevated about three feet above the high tide line, and perhaps 20 feet inland from the river's edge. While the tower sits in a small clearing of ledge and low shrubs the surrounding shoreline is characterized by mature pine trees. Inland of the tower the land rises consistently and a frame dwelling is located 250 north of the tower at an elevation of fifty feet.

Narrative Description

The pyramidal tower has a footprint of 15 ½ feet square and is over 30 feet in height. The low, pitched, pyramidal roof is three feet square and capped with copper. The sidewalls of the structure are clad in stained wooden shingles. The northwest corner of the tower rests directly on exposed ledge and the northeast corner is supported by a low, mortared fieldstone pier built almost at grade. The southeast corner rests on a wooden post which is embedded in a mortared fieldstone pier on a section of ledge that is about five feet lower in elevation. West of this, at the midpoint of the south sill, is a second new support point, also consisting of a post and mortared fieldstone pier. At the southwest corner, the foundation consists of a taller stone pier (no post) positioned on uneven ledge. Under the middle of the tower is a vertical wooden shaft which extends from the ledge through the floor above. At sill level, a three foot wide plank deck stretches across the south elevation of the structure and is supported by braces to the middle and southeastern piers, and by posts set on ledge at the west corner.

The fog signal tower has a batten door made of beaded board hung on strap hinges at the center of the north elevation, and two windows in the west wall. The lower window contains a double-hung six-over-six wooden sash. The upper window is positioned three-quarters of the way up the wall and contains a fixed sash with three vertical panes. The shingles over the upper window flare slightly to create a protective hood. On the south wall of the tower an 8x8" beam extends about six feet through the exterior wall eight feet above the deck. This beam, from which would hang the bell, is angled slightly southwest to northeast. The northeast end of this beam is anchored to the northeast corner of the tower, but the middle of the beam, measured two feet proud of the exterior of the wall, is centered on the structure's southern elevation.

The structure's frame, which consists of three tiers of two by six inch studs, is fully exposed on the interior. The lowest tier of studs and horizontal sheathing is painted white, as is the bell beam. Extending from the rafters to the floor is a square shaft, each side of which is composed of vertical posts and cross stiles in a ladder-like pattern. This shaft enclosed the counterweights for the clockworks that guided the striking mechanism. Long ago detached from the roof framing, the counterweights are laying on the ledge at the bottom of the shaft.

At one point in time the Fog Signal contained a mechanical striking apparatus, mounted on the floor of the structure between the shaft and the south exterior wall. When engaged, the counterweights and gears triggered a spring that activated a hammer whose blow extended through the exterior wall of the structure and struck the bell, which was hung outside from the bell beam. Based on a piece of a cast-iron footing that was still bolted to the floor when the building was obtained by its current owners, the striking mechanism was most likely a Gamewell Fog Bell Striking Apparatus. The bell, which now is on display at the Coast Guard Academy in New London, Connecticut, weighs 1200 pounds and was cast in Troy, New York in 1912.

In 2008 the Fiddler's Reach Fog Signal underwent the first phase of a planned restoration. During this phase, which was supported in part by a grant from the Maine Historic Preservation Commission, the deteriorated sills and

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flooring were replaced in kind, and the middle south foundation pier reconstructed. The original shingles, which had deteriorated to the point that they were blowing off the structure, were removed and new wooden shingles, that matched the original in type and exposure, were installed. When the Coast Guard removed the bell between 1967 and 1970 they did so by cutting off the support beam with a chainsaw – thus leaving the existing beam too short to be able to hang a replacement bell. The deck under the bell was also demolished at this time. During the recent phase of the restoration project the deck was rebuilt, based on photographic evidence, and a new bell-beam was installed. Finally, the rotten roof cap was rebuilt and recovered with copper and the two windows were restored and re-installed. Future restoration plans include replacing the wooden skirting below the sills. A replacement bell, also weighing 1200 pounds, is on loan from the United States Navy, and will be hung from the new bell beam. The loan and installation of a replacement striking apparatus similar to the original is also being sought.

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When Fiddler's Reach Fog Signal Station was established in 1914, oversight of the nation's aids to navigation was the purview of the Bureau of Lighthouses under the Department of Commerce. This unit of the Federal Government continued the work of the earlier Lighthouse Service (1789 – 1852) and the Lighthouse Board (1852 – 1910), and was responsible for the placement, design, maintenance, and staffing of lighthouses, fog stations, light vessels, beacons and other aids to navigation along the coast and inland navigable waters of the country. Commencing just after the nation was formed, each of these governmental entities worked to improve the consistency, technical capacities, and reliability of the aids to navigation in order to ensure that the nation's maritime industries could operate efficiently and safely.

It is interesting to note that not all of the aids to navigation were initially under the control of the Federal Government: private interests often installed aids specific to the needs of their vessels or industry in waters they plied frequently. The earliest lights, beacons and buoys along the Kennebec River were maintained by the private companies whose ships utilized the busy ports along the lower river in Bath, Richmond, Gardiner and Augusta. However in 1892, after numerous complaints, the Light-House Board started petitioning for the establishment of an integrated system of aids under Federal management. Three years later Congress approved money for the establishment of four stations between Bath and the ocean and construction was complete by 1898 on Doubling Point Light Station, the Kennebec River Range Lights, Squirrel Point Light Station and Perkins Island Light Station. The Fiddler's Reach Fog Signal Station was erected in 1914 to assist vessels with navigating a tricky "S" turn in the river between Phippsburg and Arrowsic Islands, just south of Bath, and can be seen as part of the continuing effort of the government to provide safe passage for both commercial and passenger vessels.

Criterion C: Architecture

The Fiddler's Reach Fog Signal is a structure that clearly demonstrates the distinctive character defining features of a Fog Bell House or Tower, a specific type of aid to navigation built by the Lighthouse Service on the coastal waters of Maine during the 19th and 20th centuries. This property achieves additional significance as one of a very few Fog Bell Houses constructed independent of a larger light station. The name of the property as reported in the annual Light Lists was "Fiddler's Reach Fog Signal". This nomenclature may have been used to identify the structure, as opposed to the more common "Bell House", because the signal was a stand-alone structure rather than part of a light station. However, the form of the property is that of a "Bell House" as described in section F. II of the "Light Stations of Maine", and this example clearly illustrates the distinctive characteristics of one form of this specialized property type. While many of the fog bells were "mounted on simple skeletal frames and struck by hand" others were located in "pyramidal frame structures (which) house the mechanical apparatus that automatically operated the bells." (Mohney, July 1987, p. F.II, 5.) Evaluation of historic photographs and plans developed by the Army Corps of Engineers reveal that these types of fog towers had four tapered walls clad in shingles and a pyramidal roof, often originally covered with metal. The buildings often had only one door and one or two windows, which provided enough light to operate the equipment. The pyramidal shape of the structure provided a strong foundation and compact roof frame from which the heavy counterweights were safely suspended. The example at Fiddler's Reach is taller than some other extant bell houses (for example, Burnt Coat Light, Swans Island, NR: 87002272)– perhaps in response to the fact that the structure was located at some distance from the keeper's residence. The higher tower would provide a longer drop for the counterweight and thus allow a greater span of time between having to reset the mechanism.

The following paragraph from the "Light Stations in the United States" describes the evolution of fog bells:

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In the very early days, fog bells were rung by striking the bell by hand; the bell installed at Pooles Island lighthouse, Maryland, in the mi-1820s was operated by mechanical means, using a clockwork system. A tower on which the fog bell hung was built near the shore. A rope ran from a striker to the top of the tower where weights were attached. As those weights slowly fell, they would activate the striker so that it struck the bell periodically. When the weights hit bottom after 45 minutes, sometimes and hour and a half, the keeper cranked the weights back to the top to start the process over again. Later, Daboll, Stevens, and Gamewell invented clockworks that were advertised as good for 10,000 blows of the flog bell with one winding. With a rapid characteristic, i.e. a blow every 10 seconds, a day could pass between windings; with a characteristic of a blow every 30 seconds, four days could pass before another winding. In time, electricity was applied to fog signals that eased the burden of tending them. In the 1920s, a device that turned the bell on automatically came into use..." (Clifford, et al, p. 33.)

Not all of the bell signals were mounted on skeletal frames or lodged in pyramidal towers: some were attached directly to light houses and others were appended to the keeper's dwellings. While the type of shelter depended both on the location of and style of light station, it also reflected the method of producing the fog signal. According to the 1913 Annual Report of the Commissioner of Lighthouses there were 69 fog signals in the First District (which includes Maine and the seacoast of New Hampshire). Of these 48 were bell signals and three-quarters of those were struck by clockwork mechanisms (versus hand-struck)¹. Eighteen of the remaining signals were either steam whistles or Daboll Trumpets, either of which were more likely to have been mounted on a square or rectangular shaped brick structure that enclosed the compressed air or steam generating engines. Although other types of signals were utilized throughout the state, the bell and the bell house continued to be the most common type of fog signal found in Maine well into the 20th century. Other extant examples of pyramidal bell houses are found at Burnt Coat Harbor Light Station (NR: 87002272), Perkins Island Light Station and Whitlock Mill Light Station (NR: 87002276) The bell house at the Doubling Point Light Station was also active through at least 1974, but then its top was truncated and the building moved several hundred yards inland and attached to the rear of an automobile garage (where it remains).

Although the Bureau of Lighthouses required each proposed station to undergo a rigorous planning process that included the creation of drawings, site plans and construction plans, these have not yet been located for the Fiddler's Reach Fog Signal. However, when the four Kennebec River Light Stations were developed in 1898 only one set of plans were drawn, and matching (or similar) towers, dwellings, fuel houses, etc were erected at each station. The architectural drawings, now housed at the Coast Guard Academy in New London, Ct., included elevations and plans for a "fog signal tower". It is interesting to note that the fog signal tower depicted on plate 6 "Aids to Navigation Kennebec River, Me", undated, closely matches the Fiddler's Reach signal in terms of shape, scale, materials and design and is similar to the extant fog signal at Perkins Island. Based on this information it is not unreasonable to assert that the 1914 Fiddler's Reach bell tower was erected based on the fog signal tower depicted on these earlier plans.²

As noted in the "Light Stations of Maine" MPS although many stations historically contained a Bell House, they are now among the rarer components of these facilities. Even more uncommon were Fog Signals disassociated from Light Stations. The National Register listed Manana Island Fog Signal (NR: 02001412) and the Cuckolds Fog Signal (NR: 02001413) both in Lincoln County, Maine were two of the three independent Fog Signal Stations in the state until Fiddler's Reach was erected in 1914 (although the Cuckolds station added a light in 1907.) The Manana Island Fog station

¹ The remaining signals included 9 steam whistles, 9 reed sirens, 2 air sirens and 1 "submarine bell on a light vessel, driven by compressed air". (Page 38.)

² The fog bell at Doubling Point was built in 1897, at Squirrel Point in 1902 and at Perkins Island in 1902.

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is located on its own small island, adjacent but separate from Monhegan Island, an important landmark and harbor about 12 miles off the coast. While Monhegan contained a light station, the fog around these two islands was so intense that a separate fog station was established in 1854. The fog signals included a 2,500 pound bell until 1870, then a 10" Daboll trumpet until 1872, followed by first a 6" steam fog whistle until 1876 and an 8" steam whistle until 1877. In that year a first-class Daboll trumpet was installed and used until 1912 when it was replaced by a first-class air siren. Interestingly, the 1877 drawings for the station depict a pyramidal roofed frame structure, with four tapered sides and the Daboll trumpet protruding through one plane of the roof. This design was similar to that used forty years later at Fiddler's Reach. The third independent fog signal station was the 1904 Otter Island Fog-Signal (off Cushing in Knox County), a private aid to navigation consisting of a small wooden scaffold holding a bell that was rung when Eastern Steamship Co.'s steamers were expected.

Developmental history/additional historic context information

In 1895 the United States Congress authorized four light stations to be installed along the Kennebec River and overseen by the Federal government. Two years later four stations were erected; from south to north they were Perkins Island Light Station (NR: 87002282) Squirrel Point Light Station (NR:87002281), Doubling Point Range Light Station, also known as the Kennebec River Light Station (NR:87002263), and Doubling Point Light Station (NR:87002271). The Doubling Point and Kennebec stations are located just over a half-mile apart, and along with various cans and buoys, serve to assist vessels to negotiate a pair of right angle turns in the river at Fiddler's Reach. Both of these land-based stations were maintained by families who lived on site, and the Kennebec River Light Station featured a pair of range lights, rather than the octagonal shaped lighthouse form that characterized the other three stations.

According to tradition, in 1912 the side wheel packet boat *Ransom B. Fuller* ran aground between Doubling Point and the Range Lights in heavy fog. Whether it was actually the *Fuller* that ran aground in this location, the danger had been demonstrated.³ There were several commercial steamship companies in the early decades of the twentieth century that conducted lucrative scheduled passenger service between Boston and Bath, Gardiner, Augusta on the Kennebec River. Although the Doubling Point Light Station also had a fog bell (erected in 1897), the Commissioner of Lighthouses decided to install a second audible signal in order to warn vessel operators of a submerged ledge in the east-west reach between the two light stations. A small parcel of land upon which the structure was to be erected was purchased from a farmer, John H. Currier, in 1913, and the pyramidal structure was erected in 1914. The Bureau of Lighthouses placed the aid in service on April 22, 1914.

The Fog Bell was maintained by the station keeper at the Kennebec River Light Station, and was connected to that larger complex by way of a footpath and boardwalk with two wooden bridges. According to a profile of one of the station keepers, H.L. Kilton, published in 1948, the 1200 pound weighted clockworks which governed the bell at the fog bell station had to be wound every four hours. Winding the geared clockworks would position the counterweights near the rafters in the tower's roof, and during its slow descent it would trigger a spring that caused a hammer to strike the bell at regular intervals. According to the 1955 Local List of Lights the Fiddler's Reach signal consisted of a group of two strokes every twenty seconds. During Kilton's tenure the keeper was able to start the fog signal by way of an electric trip switch. (Ballard, 1948).

³ According to the historian William Avery Baker, although the *Fuller* was owned by the Eastern Steamship Company (one of the largest passenger ferry companies on the Kennebec River), she only ran the Kennebec until 1904, then she was on the *Penobscot* for several years and then transferred to the Boston – Portland route, after 1909. (a Maritime History of Bath, Maine and the Kennebec River Region, p. 735.)

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Name of Property	FIDDLER'S REACH FOG SIGNAL
County and State	SAGADAHOC COUNTY, MAINE
Name of multiple property listing (if applicable)	

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The following description of the function and importance of the fog bell signals at Fiddler's Reach and Doubling Point was written by the former Sequin Island light house keeper Fred Kahrl and published on the Range Light Keeper's website www.rlk.org.

Any commercial vessel transiting the Kennebec River ("river") would avail themselves of a river pilot if the ship's captain was not himself a qualified "river" pilot. This is required by both the Coast Guard and the vessel's underwriters. Any such pilot would be so familiar with the "river" that the bell at Fiddler's Reach AND the bell at Doubling Point Light would be of great help in guiding vessels through the fog (daytime) or snowstorm, making the turns through the Reach. i.e. - they could use the vectors of the sounds.

Small boats (under 100 feet) have the advantage of going slow, steering from an open cockpit or opening wheelhouse windows, and "feeling" their way through the fog or snow. The Reach looks small on the chart, but actually has lots of room to maneuver for most small to medium size vessels.

And, keep in mind that when the "river" was the primary artery of commerce ... up to WW I ... Maine boat owners were generally very knowledgeable about handling their vessels and knowing their waters. Most large vessels chose to transit the "river" against the tide ... allowing them to progress slowly but still have good steerage. Today, few large vessels (think Bath Iron Works) ever transit the river in the fog ... radar, etc. notwithstanding. BIW ships on sea trials ... i.e. - under scheduling pressure ... have been known to anchor at Bluff Head and in Atkins Bay to wait (usually overnight) for the fog to clear.

So, what's the big deal about fog bells. Well, they were most valuable for passenger vessels which ran on schedule, rather than having the luxury of waiting for a favorable tide or improved visibility. So, the captains of these big side wheelers (and early steam/propeller packets) needed every navigation aid that could be reasonably provided since they often transited the "river" with the tide behind them, in fog and snow, and even at *night* in fog and snow. The addition of the Fiddler's Reach bell not only gave a useful sound warning of the shore where it sat, but also of the reef that jutted out from the shore underwater right at that point.

Although the bells all had slightly different tones, it was the spacing of the rings that actually identified the bells one from another. (Kahrl, 2009)

Between 1967 and 1970 the 1200 pound bell was replaced with an electric horn that sounded a one second blast every ten seconds. In 1972 the bell was removed from the station and taken to the Coast Guard Academy in New London, Connecticut, where it is on display. By 1982 the electric horn was repositioned onto the front range light at the Kennebec River station and the Coast Guard essentially ceased operations at the bell tower. The structure was leased for a time and the electrical lines and walkways between the tower and the Range Light Station were taken up. In 1998 the Range Light Keepers purchased the fog signal from the U.S. Coast Guard, along with the Kennebec Range Lights. As of 2008 the Fiddler's Reach Fog Signal is being restored.

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Name of Property FIDDLER'S REACH FOG SIGNAL

County and State SAGadahoc County, MAINE

Name of multiple property listing (if applicable)

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