

## **FINDING OF NO SIGNIFICANT IMPACT**

### **Fire Island Lighthouse First Order Fresnel Lens Return and Display Environmental Assessment/Assessment of Effect Fire Island National Seashore, Northeast Region Suffolk County, New York August, 2007**

#### **INTRODUCTION**

The National Park Service (NPS) proposes to return the First Order Fresnel Lens (Lens) to Fire Island National Seashore (the Park) and provide an exhibit space to protect and display the Lens.

The proposed action includes constructing a new structure to house the Lens and the relocation of the Boat House to its historic location. The proposed action is needed because no such facilities currently exist at Fire Island to house and display the lens. The new facility will offer an enhanced visitor experience and provide a fuller understanding of the technological changes in visible signals from the 1850's to the present. The project will also provide additional opportunities to interpret the history and significance of the Fire Island Light Station (Light Station). Housing and display of the First Order Fresnel Lens will help to fulfill the goals, themes and objectives for the Lighthouse tract that is described in the park's General Management Plan (GMP) and the Interpretive Prospectus (IP).

An Environmental Assessment/Assessment of Effect (EA/AoE) was released on March 27, 2007 for a 30-day agency review and public comment period in accordance with the National Environmental Policy Act of 1969, as amended (NEPA), the implementing regulations of the Council on Environmental Quality (40 CFR 1500-1508.9) and NPS Director's Order #12: *Conservation Planning, Environmental Impact Analysis and Decision-Making* (DO-12) and accompanying Handbook (2001). This EA/AoE also fulfilled the requirements of Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA), and has been prepared in accordance with the implementing regulations of the Advisory Council for Historic Preservation (36 CFR Part 800) and NPS Director's Order #28: *Cultural Resources Management* (DO-28) and accompanying Handbook.

#### **NPS SELECTED ALTERNATIVE**

Based on the analysis presented in the EA/AoE, the NPS has selected Alternative B: Construct New Compatible Structure for implementation. The NPS Selected Alternative is described on pages 14-17 and Figure 6 of the EA/AoE.

Under the selected alternative, the NPS will construct a new structure to house the Lens. The new compatible structure will be built southwest of the Lighthouse where the Boat House now stands. The Boat House will be moved off its current foundation and moved

to its original 1939 location, north of the Light Station and adjacent to the narrow gauge rail system used to provide coal to the Power Generation Building.

The Boat House will be relocated to its 1939 location over land via cribbing. This process has been used to relocate houses in other Fire Island communities outside of the Park's boundaries. The Boat House will be lifted intact onto logs and rolled to its 1939 location. Relocation will occur during winter when ground disturbance will be minimal. Ground disturbance will occur through depressions made by the weight of the building. During relocation, the Boat House will follow the path of the abandoned rail line to stay on previously disturbed ground and avoid wetlands. The Boat House will be placed on piling as originally constructed. There is a single piling remaining from the circa 1954 move of the Boat House.

One modification has been made to the selected alternative, based on additional site investigation completed subsequent to the release of the EA/AoE. In the EA/AoE, the description of Alternative B stated that the new compatible structure will be built on the existing foundation of the Power Generation Building, where the Boat House currently stands. Building the new structure requires drilling holes into the foundation to install support posts. More detailed evaluation of the foundation revealed that it is too weak to support a new structure and drilling the required post holes would almost certainly crack the foundation, resulting in an additional adverse effect to the historic resource. In order to avoid this, the selected alternative has been modified by moving the new compatible structure to a position immediately adjacent to the north edge of the foundation. A wooden deck will be built from the new structure, extending over the historic foundation to preserve it in place.

The new building will be built in accordance with the Secretary of Interior's Standards for new construction and will be compatible with the architectural styles of the 1939 Light Station Tract, reminiscent of the mass and scale of historic buildings previously located on the site. The building will be approximately 25 feet by 50 feet and 22 feet in height, providing adequate space for the physical protection, display and access to the Lens

## **OTHER ALTERNATIVES CONSIDERED**

In addition to the NPS Selected Alternative described above, the EA/AoE analyzed a No-Action Alternative and one other action alternative.

### **Alternative A (No-Action)**

As described in the EA/AoE on page 14 and Figure 5, Alternative A, the No Action Alternative, would continue current management direction.

Under this alternative, the Lens would remain in storage under the care of the U.S. Coast Guard. No space would be provided to exhibit, protect and display the Lens at the Park and the Lens would not be accessible to the public. The Boat House would not be moved.

Development and interpretation of the Light Station tract at the Park would continue as stated in the GMP and IP. This includes returning the Light Station Tract to its appearance in 1939 as stated in the Recommended Treatments for the Light Station, but without returning the Lens to the Park. The visitor experience would remain as it currently is. At present, the Keepers Quarters has two floors of exhibits and displays depicting life as a Lighthouse Keeper and the purpose of the Fire Island Lighthouse. Daily tower tours to the top of the Lighthouse for school groups and visitors would continue. In addition, special events and programs would continue to be presented monthly on the natural and cultural history of the lighthouse area and facilities.

Alternative A was not chosen as the NPS Selected Alternative because it does not meet the purpose and need of the proposed action. Alternative A would not provide exhibit space to protect and display the Lens, improve visitor experience, provide additional interpretive and educational opportunities, or fulfill objectives, goals and themes described in GMP and IP for the Light Station Tract.

### **Alternative C (Reconstruct Period Historic Structure)**

As described on pages 17-21 of the EA/AoE, under Alternative C, a new structure to house and display the Lens would be built to portray a period historic structure from the treatment period (1939), following the Secretary of Interior Standards for reconstruction (Figure 7 in the EA/AoE). A new replication of the lost Power Generation Building would be constructed on the historic foundation of the original Power Generation Building (Figure 8 in the EA/AoE). The Power Generation Building was constructed in 1894 to provide electrical power to the Lens and the Light Station and was in use in that location until circa 1945. The Power Generation Building was located on the 25 x 50 foot foundation west of the Light Station, where the Boat House currently stands. The new structure would be designed to replicate the lost building as closely as possible. As with Alternative B, the new period historic building in Alternative C would entail moving the Boat House off that foundation and moved to its original 1939 location, north of the Light Station and adjacent to the narrow gauge rail system used to provide coal to the Power Generation Building.

Alternative C was not chosen as the NPS Selected Alternative because it does not meet the purpose and need of the proposed action to the same extent as Alternative B. Although this alternative meets the project's objectives, it falls short of fully meeting the planning issues to the same extent as Alternative B because it creates a false historical appearance. The park would need additional interpretation to educate visitors on the origin of the reconstructed building, so as not to create a false sense of history.

### **ENVIRONMENTALLY PREFERRED ALTERNATIVE**

The NPS is required to identify the environmentally preferred alternative in its NEPA documents for public review and comment. The NPS, in accordance with the Department of the Interior policies contained in the Departmental Manual (516 DM 4.10) and the Council on Environmental Quality's (CEQ) *NEPA's Forty Most Asked Questions*,

defines the environmentally preferred alternative (or alternatives) as the alternative that best promotes the national environmental policy expressed in NEPA (Section 101(b) (516 DM 4.10). In their *Forty Most Asked Questions*, CEQ further clarifies the identification of the environmentally preferred alternative, stating “Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources” (Q6a).

Alternative B best protects the cultural resources of the Park by providing a facility to house and display the Lens in a setting that does not compromise the historic appearance or integrity of the Lighthouse Tract. Based on the analysis of environmental consequences of each alternative in Chapter 3 of the EA/AoE, Alternative B is the Environmentally Preferred Alternative. Alternative B also was chosen as the NPS Selected Alternative.

## **MITIGATION MEASURES**

As part of the NPS Selected Alternative, the NPS will implement the following mitigation measures:

**Cultural Resources:** Mitigation measures may be necessary related to the archaeology and relocation of the Boat House to its historic location. Mitigation measures will not be known until design is complete and the Determination of Effects is finalized.

Relocating the Boat House to its original location will be accomplished under the Secretary of the Interior’s Standards for the Treatment of Historic Properties. A Programmatic Agreement (PA) will be developed with the SHPO to outline consultation for moving the Boat House, ensure proper identification and treatment of archaeological resources if they are identified, and address treatment of the Boat House and the Power Generation Building foundation in accordance with a determination of *no adverse effect*.

In order to avoid adverse effects to the historic foundation, the new compatible structure will be positioned immediately adjacent to the north edge of the foundation. A wooden deck will be built from the new structure, extending over the historic foundation to preserve it in place.

**Natural Resources:** Mitigation measures for vegetation include erecting construction fencing for work crews and equipment to follow. The Boat House will be moved to its original location via cribbing. Relocation will occur during winter when ground disturbance via depressions made by the weight of the building will be minimal. Relocation of the Boat House will follow the path of the abandoned rail line to stay on previously disturbed ground and avoid wetlands.

At the new site for the compatible structure vegetation removal will occur in the footprint of the new structure. Minimal removal of vegetation will occur at the foundation site. Vegetation in this area is classified as Northern Dune Shrubland. Dominant plants of this

vegetation type include mixed deciduous shrubs like bayberry, beach plum, cedar, juniper, poison ivy, and rugosa rose. There is also a few invasive/exotic species like oriental bittersweet and autumn olive. Vegetation removal will be minimum to where the Boat House will be relocated and limited to the area required for the pilings that are approximately 12 -14 inches in diameter. A minimal amount of boardwalk (approximately 200 feet) will be required to provide accessibility from the existing boardwalk.

## **WHY THE NPS SELECTED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT**

As defined in 40 CFR § 1508.27, significance is determined by examining the following criteria:

***1) Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts that require analysis in an EIS.***

No major adverse or beneficial impacts were identified that would require analysis in an EIS. The NPS Selected Alternative will have direct, long-term, beneficial impacts to the cultural landscape, historic structures and museum collections. Based on the project design, the NPS Selected Alternative will result in either no impact or direct, long-term and negligible to moderate adverse impacts to the archaeological resources. There will be direct, adverse, minor, site-specific, short-term and long-term impacts to vegetation. The project will increase visitor experience and visitor satisfaction. There are no cumulative impacts associated with the project.

***2) The degree to which public health and safety are affected.***

The NPS Selected Alternative will have no impact on overall public health and safety.

***3) Unique characteristics of the area such as proximity to historic or cultural resources, wild and scenic rivers, ecologically critical areas, wetlands or floodplains.***

As described in the EA/AoE, Fire Island National Seashore encompasses the Fire Island Light Station, which includes the 1858 Light Tower, Connector, Keepers Quarters, Terrace and all the associated features and characteristics of the Light House Reservation from bay to ocean. The Light Station contains cultural resources that are listed or have been determined eligible for listing on the National Register of Historic Places.

The Boat House is one of the historic core buildings of the Light Station and is the only historic structure within the study area. Under the NPS Selected Alternative the changes implemented to historic structures will consist of relocating the Boat House to its original, historic location northwest of the Light Station, placing it back in its historic context where it will be preserved. A new compatible structure will be constructed to fit within the historic character of the surrounding landscape and will not detract from the

character of the existing historic structures. The new compatible structure will be constructed to the north of the existing Power Generation Building foundation. There will be no effect to other historic structures.

The Light Station is considered to be an individual cultural landscape within the park. The period of significance for the cultural landscape spans from 1826-1960. Characteristics contributing to the landscape's significance include spatial organization, land use, vegetation, circulation, buildings and structures, views and vistas, and small-scale features. The new compatible structure will be designed to fit the historic character of the cultural landscape and the Boat House returned to its 1939 historic location northwest of the Light Station.

As described in the EA/AoE, archaeological investigations have been conducted within the Light Station tract. Although no archaeological sites have been documented as eligible for the National Register, previous testing has determined that archaeological resources do exist at the Light Station and that there are archaeologically sensitive areas immediately surrounding the Light Station. While resources have been documented to exist in the area of the Light Station, it is not yet known whether resources exist directly within the area that will be affected by this project.

The NPS Selected Alternative will have beneficial impacts to museum collections as the Lens will be returned to the park.

No wetlands exist in the study area. Two wetlands are located in the vicinity of the proposed project; however, the proposed route for relocating the Boat House for the NPS Selected Alternative will avoid these wetlands.

No prime farmlands, ecologically critical areas, or wild and scenic rivers exist in the study area.

***4) The degree to which impacts are likely to be highly controversial.***

As measured by public comment, this project is not likely to be highly controversial. During the 30-day agency and public review and comment period, 4 comments were received. All were supportive of the project.

***5) The degree to which the potential impacts are highly uncertain or involve unique or unknown risks.***

No highly uncertain, unique, or unknown risks were identified during preparation of the EA/AoE or the public review period.

***6) Whether the action may establish a precedent for future actions with significant effects, or represents a decision in principle about a future consideration.***

The NPS Selected Alternative neither establishes NPS precedent for future actions with significant effects nor represents a decision in principle about a future consideration. Future actions will be evaluated through additional, project-specific planning processes that incorporate requirements of NEPA, Section 106 of the NHPA and NPS policies.

***7) Whether the action is related to other actions that may have individual insignificant impacts but cumulatively significant effects.***

Impacts of the NPS Selected Alternative to cultural landscapes, historic structures, archaeological resources, museum collections, vegetation, and visitor experience were identified. As described in Chapter 3 of the EA/AoE, cumulative impacts were defined by combining the impacts of the NPS Selected Alternative with the impacts of other past, present, and reasonably foreseeable future actions. No reasonably foreseeable future development is anticipated for the Fire Island Light Station. There are no proposed NPS projects or projects by others with the potential to result in cumulative impacts on the resources analyzed in the EA/AoE. Therefore, the NPS Selected Alternative will not contribute or result in cumulative impacts.

***8) The degree to which the action may adversely affect historic properties in or eligible for listing in the National Register of Historic Places, or other significant scientific, archeological, or cultural resources.***

The NPS Selected Alternative will not cause the loss or destruction of significant historic structures, cultural landscapes or scientific resources. As described in the EA/AoE, Fire Island National Seashore encompasses The Fire Island Light Station, which includes the 1858 Light Tower, Connector, Keepers Quarters, Terrace and all the associated features and characteristics of the Light House Reservation from bay to ocean. The Light Station contains cultural resources that are listed or have been determined eligible for listing on the National Register of Historic Places.

The Boat House is one of the historic core buildings of the Light Station and is the only historic structure within the study area. Under the NPS Selected Alternative changes implemented to historic structures consist of relocating the Boat House to its original, historic location northwest of the Light Station and placing it in its historic context where it will be preserved. A new compatible structure will be constructed to fit within the historic character of the surrounding landscape and will not detract from the character of the existing historic structures. The new building will be built in accordance with the Secretary of Interior's Standards for new construction and will be compatible with the architectural styles of the 1939 Light Station Tract, reminiscent of the mass and scale of historic buildings previously located on the site. The new compatible structure will be constructed to the north of the existing Power Generation Building foundation. There will be no effect to other historic structures.

The Light Station is considered to be an individual cultural landscape within the park. The period of significance for the cultural landscape spans from 1826-1960. Characteristics contributing to the landscape's significance include spatial organization,

land use, vegetation, circulation, buildings and structures, views and vistas, and small-scale features. The new compatible structure will be designed to fit the historic character of the cultural landscape and the Boat House returned to its 1939 historic location northwest of the Light Station. Changes implemented in the existing cultural landscape will constitute steps toward the landscape's rehabilitation and will be completed in accordance with The Secretary of Interior's Standards for rehabilitation.

As described in the EA/AoE, archaeological investigations have been conducted within the Light Station tract. Although no archaeological sites have been documented as eligible for the National Register, previous testing has determined that archaeological resources do exist at the Light Station and that there are archaeologically sensitive areas immediately surrounding the Light Station. While resources have been documented to exist in the area of the Light Station, it is not yet known whether resources exist directly within the area that will be affected by this project. The project will need further design and archaeological resources may need further identification for a determination of effect to be completed.

This project is in consultation with the SHPO. Currently there is a preliminary finding of no adverse effect under Section 106 to historic structures and cultural landscapes. A determination of effect for archaeology cannot be fully determined at this time. A final finding will be given when design of the project and archaeology is complete. 106 consultation with the SHPO will be ongoing through final design and a PA will be developed with the SHPO.

The NPS Selected Alternative will have beneficial impacts to museum collections as the Lens will be returned to the park.

***9) The degree to which an action may adversely affect an endangered or threatened species or its habitat.***

The NPS Selected Alternative will not adversely affect endangered or threatened species or its habitat. The NPS consulted with the U.S. Fish and Wildlife Service (FWS) and the New York State Department of Environmental Conservation (NYDEC). In a letter dated July 3, 2007, the FWS concurred that implementation of the selected alternative is not likely to adversely affect federally listed species. In a letter dated April 27, 2007, The NYDEC also concurred that the selected alternative will not have adverse impacts to state-listed species.

Federally listed threatened species that occur in the Park are the piping plover (*Charadrius melodus*) and the seabeach amaranth (*Amaranthus pumilis*). State-listed (rare) species that occur in the Park habitat include the common tern, (*Sterna hirundo*), least terns (*Sterna albifrons*), and seaside knotweed (*Polygonum glaucum*).

***10) Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.***



The NPS Selected Alternative violates no federal, state, or local environmental protection laws.

## **IMPAIRMENT OF PARK RESOURCES OR VALUES**

The National Park Service Organic Act of 1916, and related laws, mandate that the units of the national park system must be managed in a way that leaves them “unimpaired for the enjoyment of future generations”. These laws give the NPS the management discretion to allow certain impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, so long as the impact does not constitute impairment of the affected resources and values. Director’s Order 12 states that environmental documents will evaluate and describe impacts that may constitute an impairment of park resources or values. In addition, the decision document will summarize impacts and whether or not such impacts may constitute an impairment of park resources or values. An impact will be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

1. necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park,
2. key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
3. identified as a specific goal in the park’s general management plan or other relevant NPS planning documents.

The National Park Service has determined that implementation of the NPS Selected Alternative will not constitute an impairment to Fire Island National Seashore resources and values. This conclusion is based on a thorough analysis of the environmental impacts described in the Fire Island Lighthouse First Order Fresnel Lens Return and Display EA/AoE, the public comments received, relevant scientific studies, and the professional judgment of the decision-maker guided by the direction in NPS Management Policies (2006). Overall, the selected alternative results in benefits to park resources and values, opportunities for their enjoyment, and does not result in their impairment.

## **PUBLIC INVOLVEMENT**

On March 27, 2007, a press release announcing that the EA/AoE that coincides with Fire Island National Seashore’s plans to return the original first order Fresnel lens to the Fire Island Light Station would be available for public review was distributed by e-mail, fax and regular mail, and was posted on the park's web page at [http://www.nps.gov/fiis/parknews/upload/FINS\\_PressRelease07-06\\_FresnelLensPublicMeeting\\_3-27-2006.pdf](http://www.nps.gov/fiis/parknews/upload/FINS_PressRelease07-06_FresnelLensPublicMeeting_3-27-2006.pdf) ("Public Meeting to Review Fire Island National Seashore’s Environmental Assessment for the Return of Fresnel Lens.")

Prior to the release of this notice, a digital copy of the EA/AoE was created and posted on the park's web site at [http://www.nps.gov/fiis/parkmgmt/upload/EA\\_FresnelLensBuilding\\_3-2007.pdf](http://www.nps.gov/fiis/parkmgmt/upload/EA_FresnelLensBuilding_3-2007.pdf). Printed

copies of the EA/AoE were physically delivered to the following locations to be made available for public review: the Fire Island Lighthouse, park headquarters in Patchogue, and the Babylon Public Library, West Islip Library, Bay Shore- Brightwaters Public Library, Sayville Library, Patchogue- Medford Library, South Country Library in Bellport, and the Mastics-Moriches- Shirley Community Library.

The project was also entered into the park's PEPC site at <http://parkplanning.nps.gov/projectHome.cfm?parkId=227&projectId=15647>.

A public meeting was scheduled for Sunday, April 15, 2007, from 2:00 – 4:00 p.m. at the Fire Island Lighthouse, to discuss any issues associated with the Seashore's plans. The meeting was cancelled due to an impending storm, and the following press release was distributed: [http://www.nps.gov/fiis/parknews/upload/FINS\\_PressRelease07-10\\_FresnelLensPublicMeetingPostponed\\_4-15-2007.pdf](http://www.nps.gov/fiis/parknews/upload/FINS_PressRelease07-10_FresnelLensPublicMeetingPostponed_4-15-2007.pdf). On April 16, 2007 another press release was distributed to announce the rescheduled public meeting on April 21. [http://www.nps.gov/fiis/parknews/upload/FINS\\_PressRelease07-11\\_FresnelLensPublicMeetingRescheduled\\_4-16-2007.pdf](http://www.nps.gov/fiis/parknews/upload/FINS_PressRelease07-11_FresnelLensPublicMeetingRescheduled_4-16-2007.pdf)

Comments on the project were accepted through April 30, 2007, either addressed to Superintendent Reynolds at Fire Island National Seashore Headquarters, 120 Laurel Street, Patchogue, NY 11772, submitted during the public meeting, or posted electronically at <http://parkplanning.nps.gov>.

Both *Newsday* and the *New York Times*, as well as several small local papers, carried articles about the project and the opportunity for public comment.

During the 30-day public comment and review period, four individual comments were received. The New York SHPO supports the installation and interpretation of the Lens, the U.S. Fish and Wildlife Service concurred with the park's determination. Public review and comments were supportive of the project and did not result in any changes to the information and findings presented in the EA/AoE or NPS Selected Alternative.

## **FINDING OF NO SIGNIFICANT IMPACT**

The NPS has NPS Selected Alternative B: Construct New Compatible Structure for implementation. The NPS Selected Alternative is described on pages 14-17 of the EA/AoE. The NPS Selected Alternative will not constitute an action that normally requires preparation of an environmental impact statement (EIS). The NPS Selected Alternative will not have a significant effect on the human environment. Negative environmental impacts that could occur are minor or moderate in intensity. There are no significant impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the study area. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the NPS Selected Alternative will not violate any federal, state, or local environmental protection law.

Based on the foregoing, it has been determined that an EIS is not required for this action and thus will not be prepared.

**Recommended:** \_\_\_\_\_  
Michael T. Reynolds, Superintendent Date  
Fire Island National Seashore

**Approved:** \_\_\_\_\_  
John Latschar, Acting Regional Director Date  
National Park Service, Northeast Region