



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE
Southeast Regional Office
Atlanta Federal Center
1924 Building
100 Alabama St., S.W.
Atlanta, Georgia 30303

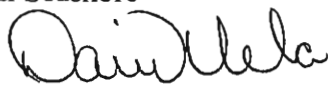


SER-PC

DEC 29 2008

Memorandum

To: Superintendent, Cape Hatteras National Seashore

From: Regional Director, Southeast Region 

Subject: Finding of No Significant Impact and Statement of Findings for Floodplains, Relocation of the Bodie Island U.S. Coast Guard Station Complex, Cape Hatteras National Seashore

The attached Finding of No Significant Impact and Statement of Findings for Floodplains for the Relocation of the Bodie Island U.S. Coast Guard Station Complex at Cape Hatteras National Seashore are approved.

Attachment



Relocation of the Bodie Island U.S. Coast Guard Station Complex Finding of No Significant Impact

INTRODUCTION

The National Park Service (NPS) proposed to relocate the Bodie Island United States (U.S.) Coast Guard Station Complex (the Complex) at Cape Hatteras National Seashore (the Seashore) from its current location to a nearby site on Bodie Island to protect the structures from encroachment of the Atlantic Ocean and shoreline erosion. The Complex is comprised of three historic structures: 1879 U.S. Life-Saving (USLS) Station, 1916 Boat House, and 1925 U.S. Coast Guard (USCG) Station. Each of these is locally significant as representative of the architecture and operations of the USLS Service and USCG on the Outer Banks of North Carolina (NC). The Complex is listed on the National Register of Historic Places (NRHP). Since NPS policy is to allow natural shoreline processes to occur unimpeded on barrier islands and North Carolina law does not allow hardening shorelines, relocation of these historic structures is the only means by which they can be protected from the Atlantic Ocean within the next 5 years.

Relocation of the Complex was being proposed with the intent of meeting the following objectives:

- protecting the structures from encroachment of the Atlantic Ocean and shoreline erosion;
- protecting the historic and structural integrity of the structures;
- minimizing the distance from the sites upon which the structures were originally constructed;
- maintaining the historic relationship of the structures to the Ocean and the other maritime life-saving structures built along the coastline;
- maintaining the historic use of the structures;
- avoiding or minimizing adverse impacts to cultural and natural resources, including direct adverse impacts to archeological resources and wetlands; and
- avoiding or minimizing adverse impacts to park operations and visitor experience of the Seashore.

An Environmental Assessment (EA) was prepared in November 2008 to report on issues and concerns about the proposed relocation of the Complex; to provide an opportunity for public comment on alternatives; and as a necessary step in determining the impact of these alternatives on the Seashore. The EA includes correspondence letters between the NPS and other Federal, State, and local governments with interest and responsibility for the protection of specific cultural and natural resources, including the

management of coastal areas and species of special concern (see Appendices A and B). The EA also includes a draft Statement of Findings for Floodplains (Appendix C). Alternative B was identified in the EA as the preferred alternative. It was selected after a careful review of resource and visitor impacts and public comment.

This document records 1) a Finding of No Significant Impact (FONSI) as required by the National Environmental Policy Act of 1969 (NEPA) and 2) a determination of no impairment as required by the NPS Organic Act of 1916.

SELECTED ALTERNATIVE

Based on the analysis presented in the EA, the NPS has selected the preferred alternative (Alternative B) for implementation. Under this alternative, all three historic structures will be relocated to a nearby site on Bodie Island. Support facilities (e.g., walkways, parking areas, septic mound systems and other utilities) will be installed to facilitate use of the buildings for park operations. The relocation site is located west of the Coquina Beach parking area and the intersection of North Carolina Highway 12 (NC 12) and Lighthouse Bay Drive, approximately 0.6 linear miles south of the site currently occupied by the Complex.

Relocation of the NPS Bodie Island Law Enforcement Office to the Bodie Island Maintenance Area will be necessary to allow for relocation of the USLS Station and Boat House. The Law Enforcement operation will return to the USLS Station and Boat House as quickly as possible following relocation of these structures. The USCG Station is currently not in use. The structure will be used in support of park operations in the future.

The USLS Station and Boat House are currently on wood piling foundation, while the USCG Station is currently located on a concrete foundation. All three structures will be released from their foundations to be transported to the relocation site. The concrete foundation of the USCG Station and the wood pilings for the USLS Station and Boat House will remain on-site because these components are considered culturally significant features of the historic structures. The access roads, parking areas, and concrete walkways will remain on-site to be considered for use as potential staging areas for a future action (see “Widening and Repaving of NC 12” section in Chapter 4 of the EA for details) and potentially removed as mitigation for floodplain impacts resulting from that action. Septic systems will be removed or closed in accordance with applicable State and Federal regulations. The site will be revegetated. The 0.3-mile long stretch of the dune located immediately east of the Complex will not be repaired unless dune blow-out results in sand accumulation on NC 12 that impedes vehicular passage. The NPS will work with the North Carolina Department of Transportation (NCDOT) to restore normal traffic passage on NC 12.

The relocated structures will be secured on wood pilings at a finished floor height above the base flood elevation of 10 feet, in accordance with the National Flood Insurance Program V zone construction standards. Support facilities (e.g., walkways, parking areas, septic mound systems and other utilities) will be installed to facilitate use of the structures for park operations. The building configuration proposed was designed with the primary objectives of maintaining the historic groupings and orientation of the structures to each other and the Ocean, facilitate park operations using these structures, and avoid impacts to wetlands. The USCG Station will be relocated to a site immediately north of the Lighthouse Bay Drive, while the USLS Station and Boat House will be relocated to a site immediately south of the Lighthouse Bay Drive. This arrangement mimics the historic arrangement and alignments of the structures as they were in 1925, following the construction of the USCG Station building.

MITIGATING MEASURES

The following are mitigation measures related to construction activities to be employed under the preferred alternative (Alternative B). Additional detail is provided in the EA (Chapter 2: The Alternatives).

- Construction zones will be identified and fenced to define the construction zone and confine activity to the minimum area required for construction.
- Standard erosion control measures will be used to minimize any potential soil erosion.
- Excavated soil will be used in the construction project; excess soil will be stored in approved areas and silt fence will be installed to minimize migration of soils.
- Silt fencing will be installed around the mound septic systems and maintained for one year or until the site was adequately vegetated to hold the soils in place.
- Silt fencing fabric will be inspected and maintained as frequently as needed to avoid introduction into any wetlands or flowing water bodies.
- Vegetation impacts and potential compaction and erosion of bare soils will be minimized by conserving topsoil in windrows and supplemented with scarification, mulching, seeding, and/or planting with species native to the immediate area.
- Construction equipment will be checked frequently and repaired if necessary to minimize leakage of petrochemicals.
- Should construction unearth previously undiscovered archeological resources, work will be stopped in the area of any discovery and the Seashore will consult with the State Historic Preservation Officer (SHPO)/Tribal Historic Preservation Officer and the Advisory Council on Historic Preservation (ACHP), as necessary, according to §36 CFR 800.13, Post Review Discoveries.
- The NPS will ensure that all contractors and subcontractors are informed of the penalties for illegally collecting artifacts, intentionally damaging archeological sites or historic properties, or failure to report previously unknown archeological resources are uncovered during construction.
- The flow of vehicle traffic on the road will be maintained as much as possible during the construction period, and construction delays will normally be limited to 30 minutes. Visitors will be informed of construction activities and associated delays.
- Contractors will coordinate with park staff to reduce disruption in normal park activities.

OTHER ALTERNATIVES ANALYZED IN THE ENVIRONMENTAL ASSESSMENT

One other alternative was considered, Alternative A: No Action. Under this alternative, the three structures would remain at their current locations and in their current conditions. The three structures would be maintained in good condition to the maximum extent possible because of their uniqueness as representative architectural styles in a complete set of historically significant structures. In accordance with the Seashore's General Management Plan (GMP) and NPS Director's Order #28: *Cultural Resource Management Guidelines*, all feasible measures would be implemented to avoid impairment and minimize adverse effects on their integrity. Additional detail is provided in the EA (Chapter 2: The Alternatives).

Implementation of Alternative A (No-Action) would have a major, adverse impact (with respect to NEPA) and adverse effect (with respect to Section 106 of the National Historic Preservation Act [NHPA]) on one, two, or all three historic structures. There would also be short- and long-term, minor to

moderate, adverse impacts on geologic resources, soils, and park operations. There would be no impact on floodplains, vegetation, fire fuels, wildlife and wildlife habitat, or lightscapes. The cumulative impacts would range from none to long-term, major, and adverse. For these reasons, Alternative A was not selected.

ALTERNATIVES DISMISSED

The NPS considered and dismissed from further analysis several alternatives before development of the range of reasonable alternatives for full impact analysis. Brief descriptions of these preliminary alternatives, and reasons for dismissal, are outlined below. Additional detail is provided in the EA (Chapter 2: The Alternatives).

1. *Whalebone Junction Intersection.*

- a. West side. Relocation of the three historic structures to this location would require clearing and filling of marshlands and wetlands to create additional parking and other driving surfaces to support use of the structures. Direct adverse impacts to marshlands and wetlands protected by the North Carolina (NC) Division of Coastal Management, NPS, and U.S. Army Corps of Engineers would result. Since Alternative B will allow for the avoidance of impacts to marshlands and wetlands, relocating the structures to the west side of NC 12 near the Whalebone Junction intersection was considered but dismissed.
- b. East side. Relocation of the three historic structures to this site would substantially alter the visual landscape. The three historic structures, the Whalebone Junction Information Station, and Whalebone Junction traffic would become highly visible to occupants of the nearby housing in South Nags Head. Placement of the structures in this context would not allow for the maintenance of the historic setting in which these structures were originally constructed. There are no existing utilities to support the intended use of the structures for park operations, and utility hookup would require disturbance of the NC 12 highway corridor to allow access to the nearby utility lines servicing the Whalebone Junction Information Station. For these reasons, this alternative was considered but dismissed.

2. *Bodie Island Firing Range/Old Ground Water Tank Area.* The site does not currently have any utility services (e.g., water, electric, phone, septic) and would require archeology for each corridor of the land disturbance. Installation of utility lines would result in an unknown acreage of direct, adverse impacts to wetlands. The existing access road would need to be widened and would require the filling of at least 2.5 acres of wetlands. Direct adverse impacts to marshlands and wetlands protected by the NC Division of Coastal Management, NPS, and U.S. Army Corps of Engineers would result. Since Alternative B will allow for the avoidance of impacts to marshlands and wetlands, relocating the structures to the Bodie Island firing range/old ground water tank area was considered but dismissed.

3. *Bodie Island Light Station (Outside the Historic District).* Relocation of the structures to the Bodie Island Light Station area would result in adverse effects on the cultural landscape and viewsheds associated with the Bodie Island Lighthouse Historic District and diminish the Complex's historic relationship to the Ocean. Wetlands are prevalent at this site, and sufficient upland acreage is unavailable to allow for the relocation of the structures to this site in their historic configuration without clearing and filling wetlands. For these reasons, this alternative was considered but dismissed.

4. *Oregon Inlet Campground.* Relocation of the structures to the Oregon Inlet Campground would not reduce the threat of loss associated with beach erosion and threat of dune deterioration. Placement and use of the structures for the Bodie Island District Law Enforcement office would conflict with

traffic, circulation, and visitor use of the Campground. For these reasons, this alternative was considered but dismissed.

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).

Section 101(b) of the National Environmental Policy Act identifies six criteria to help determine the Environmentally Preferred Alternative. The act directs that Federal plans should:

1. *Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;*
2. *Assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surrounding;*
3. *Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequence;*
4. *Preserve important historical, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment which supports diversity and variety of individual choice;*
5. *Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and*
6. *Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.*

Under Alternative A, the NPS would continue to have difficulty fulfilling its role as trustee of the environment for succeeding generations, since the historic structures would continue to be threatened by the encroaching Atlantic Ocean and the dune would continue to be mechanically rebuilt as needed. The site would become increasingly unsafe and unattractive, as conditions continued to deteriorate. Loose structural elements would potentially create an unsafe condition for park visitors or park operations. The three historic structures would continue to deteriorate and potentially be abandoned if deemed unsafe to the Bodie Island District Law Enforcement operation to continue using the USLS Station and Boat House.

Under Alternative B, relocation of the historic structures allows for planning using best management practices for sustainable design, construction, and operation. Relocation of the historic structures to a site with a lower risk of loss or damage due to dune breakage and overwash reduces the threats to the Seashore's Bodie Island Law Enforcement operation providing emergency response to public health and safety issues. The historic structures will be relocated to a site where continued dune repair and maintenance activities will not be necessary. The relocated structures will be secured on wood pilings and their associated support facilities have been designed to minimize the area of new impact to the

floodplain on Bodie Island. The planning and design of support facilities adjacent to the relocated structures will be rehabilitated and used for park operations in a way that is not consumptive.

Alternative B best meets the criteria for the environmentally preferred alternative. Alternative B also was selected as the NPS preferred alternative.

WHY THE 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 10 criteria. A discussion on why the selected alternative (Alternative B) will not have a significant effect on the human environment follows each criterion.

1. *Impacts that may have both beneficial and adverse. A significant effect may exist even if the agency believes that on balance the effect will be beneficial.*

Implementation of Alternative B will result in short- and long-term, minor, adverse impact (with respect to NEPA) and no adverse effect (with respect to Section 106 of NHPA) on all three historic structures. There will be short- and long-term, minor, beneficial impact on geologic resources because natural shoreline conditions will be restored and natural shoreline processes will continue to occur without interference. Short- and long-term, minor, beneficial impacts to fire fuel loads on Bodie Island will result from the establishment and maintenance of fire buffer zones surrounding the historic structures. Short- and long-term, negligible to moderate, adverse impacts on soils, floodplains, vegetation, wildlife and wildlife habitat, and lightscares will result. Although there will be a short-term, moderate, adverse impact on park operations, the long-term impact will be major and beneficial. The cumulative impacts will range from long-term, moderate, and adverse to long-term, moderate, and beneficial.

Analysis of potential impacts of Alternative B did not identify any major adverse impacts to these resources. Therefore, implementation of Alternative B will not result in impairment of any park resource or value.

2. *Degree of effect on public health or safety.*

Public health and safety will be unaffected by the relocation of the Complex.

3. *Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.*

Cultural Resources: Relocation of the historic structures will have no effect on museum collections, archeological resources, or cultural landscapes. Relocation of the historic structures will result in short- and long-term, minor, adverse impact (with respect to NEPA) and no adverse effect (with respect to Section 106 of NHPA) on all three historic structures and their historic district. See criterion 8, below, for further information.

Park Lands: No other Federal, State, or local park lands occur in the vicinity of the project area.

Prime or Unique Farmlands: Prime and unique farmlands do not occur in the vicinity of the project area.

Wetlands: Discussions of wetlands in this EA refer to NPS wetlands. Wetlands are abundant and extensive on Bodie Island. The preferred alternative (Alternative B) was selected as the alternative for implementation, in part, because adverse impacts to wetlands were avoided.

The NPS will clearly identify any wetlands within 50 feet of the vegetation clearing limits. Erosion and sedimentation controls will be placed where needed to protect wetlands and dunes. Silt fencing

will be installed to protect wetlands within 50 feet of the construction corridor limits. The NPS will oversee all construction activities.

Wild or Scenic Rivers: No wild or scenic rivers occur in the vicinity of the project area.

Ecologically Critical Areas: The proposed relocation of the structures will have no impact on the Seashore's designation as a Globally Important Bird Area. The proposed relocation of the structures will have no impact on the designation of any registered Significant Natural Heritage Areas in the vicinity of the project area.

4. *Degree to which effects on the quality of the human environment are likely to be highly controversial.*

The impacts of relocating the Complex are not controversial.

5. *Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks.*

Potential impacts resulting from the relocation of the Complex are not highly uncertain and do not involve unique or unknown risks.

6. *Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*

In 1955 the NPS relocated the USLS Station and Boat House from their original locations to their current locations because they were threatened by beach erosion. Relocation of the Complex does not establish a precedent for future actions and does not represent a decision in principle about a future consideration. Relocation of the Complex is consistent with the objectives of Seashore's *General Management Plan / Development Concept Plan / Environmental Assessment* (NPS 1984); *Statement for Management* (NPS 1985); and *Resources Management Plan* (NPS 1996). Relocation of the Complex is supported by the North Carolina SHPO and specific conditions for implementation were included in their letter dated November 19, 2008 (attached).

7. *Whether the action is related to other actions with individually insignificant impacts but cumulatively significant effects.*

Impacts resulting from the relocation of the Complex which were predicted to be greater than negligible in intensity were on historic structures, geologic resources, soils, floodplains, vegetation, fire fuels, wildlife and wildlife habitat, lightscapes, and park operations. As described in the EA, cumulative impacts were determined by combining the impacts of the alternatives with other past, present, and reasonably foreseeable future actions. Current and reasonably foreseeable future actions include:

Restoration of the USCG Station and USLS Station: Preservation and restoration treatment plans exist for the interiors of each of the three historic structures comprising the Complex (NPS 2006b and 2006c).

Widening and Repaving NC 12: The NPS and the Eastern Federal Lands Highway Division (EFLHD) of the Federal Highway Administration (FHWA) propose to repave the 5.28 mile-long segment of NC 12 from Whalebone Junction to the site currently occupied by the USCG Station, as well as repave numerous pull-offs and replace four corrugated metal pipe culverts also present within this road segment within the next 5 years. Widening of NC 12 on Bodie Island would result in the establishment of AASHTO standard bicycle-safe, paved, road shoulders.

Widening and Repaving Lighthouse Bay Drive: The NPS is considering widening and repaving Lighthouse Bay Drive within the next 10 to 15 years to remedy safety concerns. Lighthouse Bay Drive provides the only road to the Bodie Island Lighthouse. Widening would result in a 28 foot-wide paved surface, comprised of two 12 foot-wide lanes, each with 5 foot-wide shoulders to accommodate bicycle traffic.

Replacement of Water Main: Replacement of the underground water line on the east side of NC 12 within the project area by the NPS is planned to occur within the next five years from the NPS' Bodie Island Maintenance Facility to Oregon Inlet Fishing Center. Replacement of the water main would result in either the abandonment of the existing water main or the removal of the existing line coupled with installation of a new main. Water line service along Lighthouse Bay Drive to the Complex and the Bodie Island Lighthouse would also potentially be replaced and the new line installed along Lighthouse Bay Drive.

The selected action (preferred alternative), along with past, present, and reasonably foreseeable future actions, will have no significant cumulative effects on any resource analyzed in the EA.

8. *Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on NRHP or may cause loss or destruction of significant scientific, cultural, or historical resources.*

Relocation of the Complex will not result in the loss or destruction of significant scientific, cultural, or historical resources.

Although relocation of historic structures would be considered an adverse effect in most cases, the SHPO determined that relocation of the Complex will not adversely affect these historic structures. Two of the three structures comprising the Complex have previously been relocated in 1955 by the NPS, and all three structures are in eminent danger of irreparable damage at their current location. Relocation of these structures is not precedent setting and is considered necessary to reduce the potential for irreparable damage. The NPS and SHPO concurred on specific conditions for implementing the selected alternative (Alternative B) included in their letter dated November 19, 2008, (attached).

Necessary documentation will be completed pursuant to Section 106 of the NHPA and the ACHP Regulations for Compliance with Section 106 at 36 CFR 800. The structures will be fully documented in their current locations and condition, with special emphasis on their location in relationship to each other. Documentation of the structures at the relocation site will be completed. Copies of all documentation, National Register materials, and rehabilitation plans will be provided to the SHPO for review and comment.

Relocation of the structures will not result in the removal of the Complex from the NRHP, provided that the NPS notifies and requests the approval of the Keeper of the National Register to retain the structures on the National Register prior to relocating the structures. The National Register will be amended.

9. *Degree to which the action may adversely affect an endangered or threatened species or its critical habitat.*

The North Carolina Natural Heritage Program (NC NHP) identified that seven plant and 23 wildlife species of concern historically or are currently present within the project area. In a letter (dated March 28, 2007) and an email correspondence (dated August 1, 2008), the USFWS confirmed that the proposed relocation of the Complex will have no effect on federally-protected species in the vicinity of the project area.

The NPS will conduct a survey for all species of special concern during the preparation and implementation of relocation and construction activities to avoid unnecessary impacts. If any species of special concern are found, the NPS will contact the USFWS and NC NHP, as appropriate.

10. *Whether the action threatens a violation of Federal, State, or local environmental law.*

Applicable Federal, State, and local laws and requirements were considered in the development of the relocation site plan design, construction activities, mitigative actions, and maintenance planning. This action does not violate any Federal, State, or local environmental protection laws.

APPROPRIATE USE, UNACCEPTABLE IMPACTS, AND IMPAIRMENT

The preferred alternative does not constitute an action that normally requires preparation of an Environmental Impact Statement (EIS). The preferred alternative will not have a significant effect on the human environment. Adverse environmental impacts that could occur are minor and temporary in effect. There are no unmitigated adverse impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the NRHP, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risk, cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any Federal, State, or local environmental protection law.

Implementation of Alternative B will not result in impairment of any park resource or value.

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

PUBLIC INVOLVEMENT

The EA was made available for public review and comment during a 30-day period ending December 1, 2008. During this public comment period, an open-house public meeting was held at the First Flight Centennial Pavilion at Wright Brothers National Memorial in Kill Devil Hills, NC, on November 13, 2008, to discuss the proposed relocation and seek public comment.

Correspondence received during the public comment period included letters, electronic mail, comments on the NPS Planning, Environment, and Public Comment website, and verbal comments made by meeting attendees. Correspondence from three individuals and 11 State government agencies was received. The correspondence contained 23 comments, in support or opposition to the proposed relocation, and 2 State agencies had no comments. All correspondence received during the public comment period may be viewed at the Seashore's headquarters during regular business hours.

Some correspondence letters contained multiple comments. Each comment was identified as substantive or non-substantive, according to criteria in the Council on Environmental Quality regulations (40 CFR 1500). These criteria state that substantive comments raise an issue regarding law or regulation, agency procedure or performance, compliance with State objectives, validity of impact analyses, or other matters of practical or procedural importance. Non-substantive comments offer opinions or provide information not directly related to the issues or impact analysis. Non-substantive comments were acknowledged and considered, but did not require responses.

The majority of comments received were non-substantive (15 of the 23 total comments). Of the 15 non-substantive comments, 13 were in general support of relocating the structures, one was in opposition to relocation of the structures, and one was a comment on snowmobile use in a different National Park Unit. The remaining non-substantive comments included supportive statements on the adequacy of developing appropriate project objectives, summarizing relevant information, development of an action alternative to meet the stated objectives, analysis of environmental consequences, and for the future restoration and reuse of the structures at the relocation site.

Eight substantive comments were received, each of which addressed the preferred alternative (Alternative B). No suggestions for new alternatives or alternative elements were provided. One comment on each of the following substantive comments on Alternative B was received:

- Finding of no adverse effect on historic structures by the SHPO;
- Documentation requirements for structures on the NRHP;

- Finding of no adverse effect on historic structures by the SHPO;
- Documentation requirements for structures on the National Register of Historic Places;
- National Register of Historic Places amendment and/or re-nomination recommendation resulting from the implementation of the selected alternative (Alternative B), the relocation of the Complex;
- Continued cooperation and opportunity to review and comment on all documentation, National Register materials, and rehabilitation plans for the historic structures comprising the Complex;
- Compliance with the conditions described in the SHPO comment letter;
- Need for an erosion and sediment control plan;
- Compliance with the mitigation measures described in the EA;
- Finding of consistency with the Dare County 1994 Land Use Plan; and
- Finding of consistency with North Carolina's coastal management program.

Comment analysis also helped the NPS identify and EA text where clarification was helpful or factual errors needed correction. If editorial clarifications or factual changes were required, the text changes are reflected in the Errata (attachment to this FONSI) for the EA.

CONCLUSION

As described above, the preferred alternative does not constitute an action meeting the criteria that normally require preparation of an environmental impact statement (EIS). The preferred alternative will not have a significant effect on the human environment. Environmental impacts that could occur are limited in context and intensity, with generally adverse impacts that are localized, short- to long-term, and range from negligible to moderate. There are no unmitigated adverse effects on public health and 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 region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action 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 project and thus will not be prepared.

Recommended: Michael B. Murray 12/04/08
Michael B. Murray, Superintendent Date
Cape Hatteras National Seashore

Approved: David Vela 12-23-08
David Vela, Regional Director Date
National Park Service, Southeast Region

Relocation of the Bodie Island U.S. Coast Guard Station Complex

Environmental Assessment

Errata

The following changes have been made to the *Relocation of the Bodie Island U.S. Coast Guard Station Complex Environmental Assessment* for Cape Hatteras National Seashore (November 2008) to correct minor statements of fact, update information, and disclose minor adjustments to the preferred alternative and impact analysis. Additions to the text are identified by underlines and deletions are marked by strikeout unless otherwise noted.

FINDING OF NO ADVERSE EFFECT ON HISTORIC STRUCTURES

Relocation of the Complex (Alternative B, the selected alternative) was described in the EA as having an adverse effect on historic structures. In their letter dated November 19, 2008 (attached), the SHPO determined that the relocation of the Complex will have no adverse effect on these historic structures, provided that the NPS complies with the conditions described in their letter. The NPS concurs with these conditions and will work closely with the SHPO to fully comply.

For clarification, the following editorial corrections have been made:

A. Summary

The Complex is currently located north of Coquina Beach on Bodie Island. The relocation site is located west of the Coquina Beach parking area and the intersection of NC 12 and Lighthouse Bay Drive, approximately 0.6 linear miles south of the site currently occupied by the Complex. Although relocation of the structures would reduce the potential for impairment of the Seashore's cultural resource integrity, relocation of historic structures would be considered an adverse effect in most cases, the North Carolina SHPO determined that relocation of the Complex will not adversely affect these historic structures. Relocation of the structures would not result in the removal of the Complex from the NRHP, provided that the NPS notifies and requests the approval of the Keeper of the National Register to retain the structures on the National Register prior to relocating the structures. The National Register would be amended. Mitigation of this adverse effect would be achieved by maintaining historic orientation, arrangement, and uses at the relocation site. Relocation of the structures would result in negligible to minor, adverse impacts to some natural resources in the short-and long-term.

b. ALTERNATIVE B (NPS Preferred Alternative), page 18

Necessary documentation would be completed pursuant to Section 106 of the NHPA and the ACHP Regulations for Compliance with Section 106 at 36 CFR 800. The structures would be fully documented in their current locations and condition, with special emphasis on their location in relationship to each other. Documentation of the structures at the relocation site would be completed. Copies of all documentation, National Register materials, and rehabilitation plans would be provided to the SHPO for review and comment.

Relocation of the structures would not result in the removal of the Complex from the NRHP, provided that the NPS notifies and requests the approval of the Keeper of the National Register to retain the structures on the National Register prior to relocating the structures. The National Register would be amended.

c. Impacts of Alternative B (NPS Preferred Alternative), page 54

Under Alternative B, the three historic structures would be relocated to a site located approximately 0.6 miles south of their current locations. Regardless of the distance and orientations of the structures, relocating them constitutes a ~~moderate~~ minor, adverse impact (with respect to NEPA) on these historic structures. However, the historic arrangement and orientation of the structures to each other and the Ocean would be maintained. The historic structures would be used in a manner consistent with their historic use.

d. Impacts of Alternative B (NPS Preferred Alternative), page 55

The overall impact to historic structures would be ~~moderate~~ minor and adverse in the short- and long-term with respect to NEPA.

e. Section 106 Summary, page 55

After applying the ACHP criteria of adverse effects (36 CFR 800.5 Assessment of Adverse Effects), the NPS and SHPO concludes that relocation of the structures would have ~~an~~ no adverse effect on the historic structures. Since two of the three structures have previously been relocated and that all three structures are in eminent danger of irreparable damage at their current location, relocation of these structures is not precedent setting and is considered necessary to reduce the potential for irreparable damage.

Necessary documentation would be completed pursuant to Section 106 of the NHPA and the ACHP Regulations for Compliance with Section 106 at 36 CFR 800. The structures would be fully documented in their current locations and condition, with special emphasis on their location in relationship to each other. Documentation of the structures at the relocation site would be completed. Copies of all documentation, National Register materials, and rehabilitation plans would be provided to the SHPO for review and comment.

Relocation of the structures would not result in the removal of the Complex from the NRHP, provided that the NPS notifies and requests the approval of the Keeper of the National Register to retain the structures on the National Register prior to relocating the structures. The National Register would be amended.

~~Maintenance of the historic arrangement, orientation, and uses are mitigating measures. The ACHP has been notified of this adverse effect and mitigating measures that would result from the implementation of Alternative B. The ACHP has agreed to these conditions (D. Stover, pers. comm.), and the National Register information for these structures would be amended.~~

f. Cumulative Impacts, page 55

Present and reasonably foreseeable future actions have and would contribute to cumulative impacts to historic structures at and around the project area. The widening and repaving of NC and Lighthouse Bay Drive would have no effect on the Complex. The future restoration of the Complex would have a long-term, major, beneficial impact on these historic structures and result in a no adverse effect finding under Section 106. Therefore, Alternative B would contribute ~~a noticeable~~ an imperceptible, adverse increment to the long-term, major,

beneficial impact with respect to NEPA and have no adverse effect with respect to Section 106 on historic structures.

g. CONCLUSION, Alternative B (NPS Preferred), page 69

Implementation of Alternative B would result in short- and long-term, ~~moderate~~ minor, adverse impact (with respect to NEPA) and ~~an~~ no adverse effect (with respect to Section 106 of NHPA) on all three historic structures.

h. Table 1: Summary of Environmental Consequences, page 70

Impact Topic	Alternative A (No-Action)	Alternative B (NPS Preferred)
Historic Structures	<p><i>NEPA:</i> Short- and long-term, major, adverse impact. Impairment of <u>the Seashore's</u> cultural resources would result if the 1879 USLS Station was irreparably damaged.</p> <p><i>Section 106:</i> Adverse effect.</p> <p><i>Cumulative impact:</i> None</p>	<p><i>NEPA:</i> Short- and long-term, moderate <u>minor</u>, adverse impact <i>Section 106:</i> Adverse effect. <u>No adverse effect.</u></p> <p><i>Cumulative impact:</i> Would contribute a noticeable <u>an imperceptible</u>, adverse increment to the long-term, major, beneficial cumulative impact with respect to NEPA and no adverse effect with respect to Section 106.</p>



North Carolina Department of Cultural Resources
State Historic Preservation Office
Peter H. Sandbeck, Administrator

Michael F. Bailey, Governor
Joshua C. Evans, Secretary
Julia J. Goss, Deputy Secretary

Office of Archives and History
Division of Historical Resources
David Brown, Director

November 19, 2008

Darrell L. Echols
Deputy Superintendent – OBG
1401 National Park Drive
Manteo, NC 27954

RE: EA for proposed relocation of US Coast Guard Station, US Life-Saving Station, and
Boat House on Bodie Island, Dare County, CH 07-0512

Dear Superintendent Echols:

We have received the above referenced Environmental Assessment (EA) from the State Clearinghouse and a Consistency Review request from the Division of Coastal Management for the same project. The following comments are offered in response to both requests for review.

The move of National Register-listed properties would in most cases constitute an adverse effect on the historic properties. However, having reviewed the materials provided in the EA and in our files, recognizing that the historic buildings have been moved several times in the past and that they are in eminent danger at their current location, we believe that the proposed relocation will not adversely affect the historic buildings. This determination of a finding of no adverse effect is based upon the following conditions being carried out:

- The buildings will be fully documented in their current location and condition, with special emphasis given to their location in relationship to one another.
- Because of the move, the complex will be removed from the National Register of Historic Places. The National Park Service shall ensure that the buildings are immediately re-nominated to the Register through the appropriate mechanisms for amendment and/or nomination at the new location.
- The Life Saving Station shall be rehabilitated for reuse and the Coast Guard Station "mothballed" until such time as it can be rehabilitated for reuse.
- The National Park Service shall provide copies of all documentation, National Register materials, and rehabilitation plans to the State Historic Preservation Office for review and comment as such materials, plans and documentation are available.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

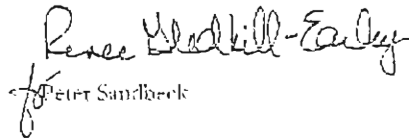
Location: 100 East Jones Street, Raleigh, NC 27601

Mailing Address: 4617 Mail Service Center, Raleigh, NC 27601-4617

Telephone/Fax: (919) 837-6371/837-6399

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,


Peter Sandbeck

cc: SCH
Stephen Rynas, DCM
Doug Stewart, NPS

**Statement of Findings
for Floodplains**

for

Relocation of

Bodie Island U.S. Coast Guard Station Complex

Cape Hatteras National Seashore

Nags Head, Buxton, and Ocracoke, North Carolina

Recommended:

Michael B. Munay
Superintendent, Cape Hatteras National Seashore

11/16/08
Date

Concurred:

Fung W. Rosenblat
acting Chief, Water Resources Division

12-05-08
Date

Approved:

Daniel Lela
Southeast Regional Director

12-23-08
Date

Introduction

Executive Order 11988 (Floodplain Management) requires the National Park Service (NPS) and other federal agencies to evaluate the likely impacts of actions in floodplains. The objectives of the Executive Order (E.O. 11988) is to avoid, as much as possible, the short- and long-term adverse impacts associated with occupancy, modification, or destruction of floodplains and to avoid indirect support of development and new construction in such areas where there is a practicable alternative. NPS Director's Order (DO) #77-2: *Floodplain Management* provides NPS procedures for complying with E.O. 11988. This Statement of Findings (SOF) has been prepared in accordance with the guidelines in NPS DO #77-2. The purpose of this SOF is to present the rationale for the proposed relocation of the Bodie Island Complex in the floodplain area and to document the anticipated effects on these resources.

Cape Hatteras National Seashore (CAHA) has prepared and made available an environmental assessment (EA) for proposed relocation of the Bodie Island United States (US) Coast Guard Station Complex (the Complex). The Complex is comprised of three historic structures: 1879 U.S. Life-Saving Station (USLS Station), 1916 Boat House, and 1925 U.S. Coast Guard Station (USCG Station).

The project area is located in a high hazard area is classified as a Class III Action, according to DO #77-2. Avoidance of impacts to floodplains is not possible because the three historic structures are currently located in the 100-year floodplain of Bodie Island. Relocation of these historic structures to a site in the 100-year floodplain is consistent with the historic setting and context for these types of structures.

Relocation of the Complex is being proposed with the intent of meeting the following objectives:

- Protecting the structures from encroachment of the Atlantic Ocean and shoreline erosion;
- Protecting the historic and structural integrity of the structures;
- Minimizing the distance from the sites upon which the structures were originally constructed;
- Maintaining the historic relationship of the structures to the Ocean and the other maritime life-saving structures built along the coastline;
- Maintaining the historic use of the structures;
- Avoiding or minimizing adverse impacts to cultural and natural resources, including direct adverse impacts to archeological resources and wetlands; and
- Avoiding or minimizing adverse impacts to park operations and visitor experience of the Seashore.

Since NPS policy is to allow natural shoreline processes to occur unimpeded on barrier islands and North Carolina law does not allow hardening shorelines, relocation of these historic structures is the only means by which they can be protected from the Atlantic Ocean within the next five years.

Proposed Action

Under this alternative, all three historic structures would be relocated to a nearby site on Bodie Island (Figure C1 and C2). The relocation site is located west of the Coquina Beach parking area and the intersection of North Carolina Highway 12 (NC 12) and Lighthouse Bay Drive, approximately 0.6 linear miles south of the site currently occupied by the Complex.

The building configuration proposed was designed with the primary objectives of maintaining the historic groupings and orientation of the structures to each other and the Ocean, facilitate park operations using these structures, and avoid wetland impacts. The USCG Station would be relocated to a site immediately north of the Lighthouse Bay Drive, while the USLS Station and Boat House would be relocated to a site immediately south of the Lighthouse Bay Drive. This arrangement mimics the historic arrangement and alignments of the structures as they were in 1925, following the construction of the USCG Station building.

The USLS Station and Boat House are currently on wood piling foundations, while the USCG Station is currently located on a concrete foundation. All three structures would be released from their foundations to be transported to the relocation site. The concrete foundation of the USCG Station and the wood pilings for the USLS Station and Boat House would remain on-site because these components are considered culturally significant features of the historic structures. The access roads, parking areas, and concrete walkways would remain on-site to be considered for use as potential staging areas for a future action (see "Widening and Repaving of NC 12" section in Chapter 4 of the EA for details) and potentially removed as mitigation for floodplain impacts resulting from that action. Septic systems would be removed or closed in accordance with applicable state and federal regulations. The site would be revegetated. The 0.3-mile long stretch of the dune located immediately east of the Complex would not be repaired unless dune blow-out results in sand accumulation on NC 12 that impedes vehicular passage. The NPS would work with NCDOT to restore normal traffic passage on NC 12.

The relocated structures would be secured on wood pilings at a finished floor height above the base flood elevation of 10 feet, in accordance with the National Flood Insurance Program V zone construction standards. Support facilities (e.g., walkways, parking areas, septic mound systems and other utilities) would be installed to facilitate use of the structures for park operations.

Relocation of the NPS Bodie Island Law Enforcement Office to the Bodie Island Maintenance Area would be necessary to allow for relocation of the USLS Station and Boat House. The Law Enforcement operation would return to the USLS Station and Boat House as quickly as possible following relocation of these structures. The USCG Station is currently not in use, but would be used in support of park operations in the future.

Of the two alternatives analyzed in the *Relocation of the Bodie Island USCG Complex Environmental Assessment* (November 2008), Alternative B was identified as the Preferred Alternative primarily because it would best allow for the protection of the three historic structures while avoiding wetland impacts and minimizing adverse impacts on other natural resources. Alternative B would best restore natural shoreline conditions and allow natural shoreline processes to continue without interference (Section 4.8.1.1, NPS Management Policies, 2006).

The proposed relocation of the three historic structures in a high hazard area is classified as a Class III Action, according to DO #77-2. Avoidance of impacts to floodplains is not possible because the entire project area is within the 100-year floodplain. Minimization of floodplain impacts was accomplished through design by minimizing the footprint of the structures at their relocation sites by elevating the structures on wood pilings above the base flood elevation for the site, use of porous pavers for new parking areas, and use of pervious materials for ADA-compliant walkways. The net result of relocating these historic structures and creating new pervious parking areas is on 0.35 acre of the 100-year floodplain in the project area. Of the 0.35 acres impacted, 0.14 acre would be treated with porous pavers to allow for some infiltration of precipitation and natural function of the floodplain. A negligible acreage of ADA-compliant walkways would be constructed using pervious materials. Floodplain impacts for the

No Action Alternative (Alternative A) and the action alternative (Alternative B) were analyzed in the EA and are summarized below in Table 1.

Table 1. Floodplain Impact Summary

STRUCTURE	ALTERNATIVE A NO ACTION	ALTERNATIVE B PREFERRED
Remain at Currently Occupied Site		
<i>U.S. Coast Guard Station</i>		
Building Footprint	2,185 sq. ft. concrete	2,185 sq. ft. concrete
Septic System	1,400 sq. ft. tank and field	1,400 sq. ft. tank and field
Parking Area	2,000 sq. ft. asphalt	2,000 sq. ft. asphalt
Driveway	23,760 sq. ft. asphalt	23,760 sq. ft. asphalt
Walkway	90 sq. ft. concrete	90 sq. ft. concrete
<i>U.S. Life-Saving Station</i>		
Building Footprint	11 sq. ft. wood pilings	11 sq. ft. wood pilings
Septic System	720 sq. ft. tank and field	720 sq. ft. tank and field
Parking Area	1,220 sq. ft. asphalt	1,220 sq. ft. asphalt
Driveway	2,200 sq. ft. asphalt	2,200 sq. ft. asphalt
Walkway	290 sq. ft. concrete	290 sq. ft. concrete
<i>Boat House</i>		
Building Footprint	9 sq. ft. wood pilings	9 sq. ft. wood pilings
<i>Sub-total</i>	<i>33,885 sq. ft. (0.78 acre)</i>	<i>33,885 sq. ft. (0.78 acre)</i>
New Construction at Relocation Site		
<i>U.S. Coast Guard Station</i>		
Building Footprint	NA	18 sq. ft. wood pilings
Septic System		5,000 sq. ft. mound system
Parking Area		4,000 sq. ft. porous pavers
Driveway		100 sq. ft. porous pavers
Walkway		50 sq. ft. pervious materials
<i>U.S. Life-Saving Station</i>		
Building Footprint	NA	11 sq. ft. wood pilings
Septic System		3,750 sq. ft. mound system
Parking Area		2,000 sq. ft. porous pavers
Driveway		100 sq. ft. porous pavers
Walkway		50 sq. ft. pervious materials
<i>Boat House</i>		
Building Footprint	NA	9 sq. ft. wood pilings
<i>Sub-total</i>	<i>0</i>	<i>15,088 sq. ft. (0.35 acre)</i>
NET RESULT	0	+15,088 sq. ft. (0.35 acre), of which 6,200 sq. ft. (0.14 acre) is treated with porous pavers

Minimization of impact on the 100-year floodplain in the project area would be achieved by relocating the USCG Station from its concrete foundation to elevation upon a wood piling foundation. The 2,185 sq. ft. concrete foundation upon which the USCG Station currently resides is historically significant and would remain in place.

The 0.68 acre of other impervious surfaces (e.g., asphalt parking area, asphalt driveway entrance, concrete walkways) at the abandoned site would be used as a staging area for other construction projects in the vicinity, including the widening and repaving of NC 12. Once these other projects are completed, the 0.68 acre of other impervious surfaces would potentially be removed as a mitigation for floodplain impacts resulting from a future action (see “Widening and Repaving of NC 12” section in Chapter 4 of the EA for details).

At the relocation site, driveways and parking areas would be constructed using porous pavers. Of the 0.35 acre of floodplain impact at the relocation site, 0.14 acre would be surfaced with porous pavers. ADA-compliant walkways would be constructed using pervious materials.

Mitigation would also be provided by incorporating methods for protecting human safety and protection of investment.

Site Description

Elevations in the immediate vicinity of the project corridor range from sea level to 35 feet above sea level. A single, narrow dune is located between the Atlantic Ocean and NC 12. The peak of the dune elevation immediately northeast of the USLS Station is among the highest dune peaks in the project area. This dune line is broken in various places and is only 9 feet high in certain segments. The three historic structures are currently situated at approximately 9 feet above sea level.

The relocation site is located approximately 0.10 miles west of the dune line. The maximum dune height near the relocation site is approximately 21 feet above sea level. The relocation site is located at 5 to 6 feet above sea level. The relocated structures would be set upon wood pilings with a finished floor height above the base flood elevation of 10 feet.

Due to the low topography, the entire project area on Bodie Island is located within the 100-year flood zone, is subject to inundation during extreme storm events, and where base flood elevations range between 10 and 11 feet. Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps show that the project area is within 100-year-flood floodplain (Figures C3-C5). The current location of these buildings is within the “VE” flood zone, the coastal flood zone where there is a velocity hazard and the base flood elevation is 11 feet above sea level. The relocation site is within the “AE” flood zone where the base flood elevation is 10 feet above sea level.

Justification for the Use of Floodplains

The purpose of this project is to relocate the USCG Station and Life-Saving Station from their current location in an area of severe storm surge and dune breach to a nearby site that offers more protection from the surrounding environment. Currently, the buildings are located only 75 feet from the Atlantic Ocean at high tide. The proposed relocation site would position the buildings approximately 1,000 feet from the Atlantic Ocean at high tide, thereby reducing its potential for being swallowed by the Ocean in a storm. The relocation site is located approximately 750 feet from the first line of natural stable vegetation, and meets the NCDRC setback requirement (650 feet).

The historic setting of these structures is within the 100-year floodplain and within a short line of sight of the Atlantic Ocean. Relocating the structures outside of the 100-year floodplain or short visual distance of the Atlantic Ocean would remove them from their historic context and affect their National Register status.

Investigation of Alternate Sites

Careful consideration of five potential relocation sites demonstrates due diligence in attempting to achieve avoidance of wetland impacts and minimization of impacts to floodplains. In addition to the relocation site identified in the NPS Preferred Alternative (Alternative B), five other potential sites were considered and ultimately dismissed. Brief descriptions of these potential alternative sites, and reasons for their dismissal from further analysis, are outlined below. Additional detail is provided in Chapter 2 of the *Relocation of the Bodie Island U.S. Coast Guard Station Complex Environmental Assessment* (November 2008).

1. Whalebone Junction Intersection
 - a. West Side of NC 12. Relocation of the three historic structures to this previously disturbed site in the 100-year floodplain would require substantial expansion of the parking area, which would result in the direct loss and impacts to NPS, USACE, and North Carolina coastal wetlands. The USACE would not support relocation of the structures to the west side of NC 12 since implementation of the NPS Preferred Alternative (Alternative B) would result in avoidance of wetland impacts. Therefore, the alternative of relocating the structures to the west side of NC 12 at the Whalebone Junction Intersection was considered but dismissed.
 - b. East Side of NC 12. Relocation of the three historic structures to this previously disturbed site in the 100-year floodplain would require substantial vegetation clearing on the Seashore boundary with privately owned properties in the town of South Nags Head. Placement of the structures in this context would not be respectful of the historic setting in which these structures were originally constructed. Additionally, clearing of wetland vegetation and filling of wetlands would be required. The USACE would not support relocation of the structures to the east side of NC 12 since implementation of the NPS Preferred Alternative (Alternative B) would result in avoidance of wetland impacts. Therefore, the alternative of relocating the structures to the east side of NC 12 at the Whalebone Junction Intersection was considered but dismissed.
2. Bodie Island Firing Range / Old Ground Water Tank Area. Relocation of the three historic structures to this previously disturbed site in the 100-year floodplain would result in the filling of at least 2.5 acres of wetlands and additional direct, adverse impacts to wetlands. The USACE would not support relocation of the structures to this site since implementation of the NPS Preferred Alternative (Alternative B) would result in avoidance of wetland impacts. Therefore, the alternative of relocating the structures to the Bodie Island Firing Range / Old Ground Water Tank Area was considered but dismissed.
3. Bodie Island Light Station (Outside the Historic District). Relocation of the three historic structures to this previously disturbed site in the 100-year floodplain would result in adverse effects on the cultural landscape and viewsheds associated with the Bodie Island Lighthouse Historic District, diminishment of the Complex's historic relationship to the Ocean, and potential for adverse impacts on wetlands resulting from filling. Therefore, the alternative of relocating the structures to an area near the Bodie Island Light Station was considered but dismissed.

4. Oregon Inlet Campground. Relocation of the three historic structures to this previously disturbed site in the 100-year floodplain would not reduce the threat of their loss associated with beach erosion and threat of dune deterioration. Placement and use of the structures for the Bodie Island District Law Enforcement office would conflict with traffic, circulation, and visitor use of the Campground. Therefore, the alternative of relocating the structures to the Oregon Inlet Campground was considered but dismissed.

Impacts to Floodplain Functions and Values

Implementation of the Preferred Alternative (Alternative B) would result in short-term impacts to the 100-year floodplain surrounding the structures at their current site. Preparation of the structures for relocation is expected to result in temporary disturbance of soils. All site activities would be limited to a 0.15 acre (or less) at the site currently occupied by the USLS Station and Boat House site, and activities would be limited to 0.9 acre (or less) at the site currently occupied by the USCG Station. The building foundations would remain on-site because these components are considered culturally significant features of the historic structures. The access roads, parking areas, and concrete walkways would remain on-site to be considered for use as potential staging areas for a future action (see "Widening and Repaving of NC 12" section in Chapter 4 of the EA for details) and potentially removed as mitigation for floodplain impacts resulting from that action. The 100-year floodplain would continue to be occupied by these structures, a total of 29,435 sq. ft. (0.68 acre) at the USCG Station and a total of 4,450 sq. ft. (0.10 acre) at the USLS Station / Boat House site.

Preparation activities at the relocation site would temporarily impact 0.38 acre north of Lighthouse Bay Drive and 0.38 acre south of Lighthouse Bay Drive. These activities include vegetation clearing and grubbing; installation of pilings to support the buildings; modification of existing underground utilities to provide service to the relocated buildings; establishment of two mound septic systems; installation of the structures and porous pavers as the parking area surface. The long-term impact area associated with relocation of the buildings (e.g., walkways, parking areas, septic mound systems and other utilities) is 0.21 acre north of Lighthouse Bay Drive and 0.14 acre south of Lighthouse Bay Drive. Overall, the new impact to floodplain functions and values in the short-term would be minor, adverse and occur on 1.81 acres. The long-term impacts to the floodplain functions and values of relocating the three historic structures and establishment of support facilities would be negligible, adverse, and limited to a total area of 0.35 acre.

Relocation of the historic structures and establishment of support facilities would result in 0.35 acre of new impact to the 100-year floodplain. Present and reasonably foreseeable future actions have and would contribute to cumulative impacts to floodplain functions and values in and around the project area. Replacement of the underground water main along NC 12, repaving and widening NC 12, and widening of Lighthouse Bay Drive would collectively have a long-term, moderate, and adverse cumulative impact on floodplains. By using the abandoned Complex access roads and parking areas as staging areas for these other projects, there is no need to create new staging areas. In the long-term, impacts to the 100-year floodplain on Bodie Island resulting from the relocation of the Complex and implementation of these other proposed actions would be offset by the potential removal of the support facilities (e.g., access roads, parking areas, walkways) and potential restoration of 0.68 acre of the 100-year floodplain.

Minimization of Harm or Risks to Life and Property

Mitigation would be provided by incorporating methods for protecting human safety and protection of investment. Minimization of harm or risk to life and property was accomplished by proposing to relocate

the structures on pilings and establishing that the base floor height would be above the base flood elevation of 10 feet.

The protection of human health and safety and property is paramount for the NPS on North Carolina's Outer Banks. Cape Hatteras National Seashore is one of the three parks (Fort Raleigh National Historic Site and the Wright Brothers National Memorial) collectively managed by NPS staff at the Outer Banks Group Office in Manteo, NC. The NPS – Outer Banks Group annually updates its Hurricane Plan (NPS 2008), which describes the Incident Command System (ICS) priorities, procedures, and timelines for the protection of human safety, property, and park resources and values in the event of a hurricane or other emergency.

The 2008 Hurricane Plan details actions to be taken at the beginning of hurricane season (June 1), at critical intervals from 96 hours prior to storm force winds through landfall of a hurricane, recovery, and re-entry. As early as 96 hours prior to storm force winds, the Superintendent activates the ICS and the following would occur on Bodie Island:

- Visitors would be informed of weather conditions, park status, and recommended actions. Hurricane watch notices are posted at all visitor centers, campground kiosks, and on the Seashore's website.
- Visitors are advised to leave the island or be prepared for short notice evacuation. Ocracoke must be evacuated prior to termination of ferry services or prior to onset of gale-force winds.
- Normal park operations and visitor facilities (e.g., visitor centers, campgrounds, swim beaches) close.
- Concessionaires and local businesses are notified of the Seashore status.
- All non-assigned personnel are released by noon to permit daylight evacuation.
- All non-essential vehicles and equipment are secured.

Since the three historic structures and their support facilities can not be assured of protection from all future damage related to flood/storm events, the NPS would tolerate risk to these structures and facilities, and would simply repair or reconstruct when damage occurs. In the event of storm damage of the structures, the NPS would collect and properly dispose of debris that could not be recycled. The NPS would close the structures while evaluating the need for repair or relocation of the structures and support facilities (e.g., septic systems, access roads, parking areas). The need to repair or relocate the structures or support facilities would be evaluated in consultation with other Federal and state agencies prior to repair or relocation of damaged structures or facilities. The decision to repair or relocate structures or facilities would be made by the NPS. If the NPS decides to repair or relocate damaged structures or facilities, these activities would be planned and implemented in accordance with applicable Federal and state regulations. In the event that the NPS decides not to repair or relocate the structures or facilities, restoration of the site would be undertaken in accordance with applicable Federal and state regulations.

Compliance

National Environmental Policy Act

An environmental assessment has been prepared for the proposed project pursuant to the National Environmental Policy Act (NEPA) and a Finding of No Significant Impact (FONSI) is expected to be signed by the Regional Director.

Coastal Zone Management Act and North Carolina's Coastal Area Management Act

The Coastal Zone Management Act of 1972 was enacted by Congress to protect the coastal environment from growing demands associated with residential, recreational, commercial, and industrial uses (e.g., State and Federal offshore oil and gas development). The provisions of this Act help States develop coastal management programs to manage and balance competing uses of the coastal zone. A request for concurrence on a Federal Consistency Determination has been requested from the State of North Carolina (see Appendix B). In a letter dated December 1, 2008, the North Carolina Division of Coastal Management concurred that the proposed relocation of the Complex was consistent to the maximum extent possible with the Coastal Zone Management Act and applicable components of North Carolina's Coastal Area Management Act.

The Relocation of the Bodie Island U.S. Coast Guard Station Complex Environmental Assessment (November 2008), Statement of Findings for Floodplains, and the FONSI, when signed, would complete the requirements for NEPA for this project.

Conclusion

The protection of people and property is of high priority to the NPS. The proposed relocation of the three historic structures (1879 USLS Station, 1916 Boat House, and 1925 USCG Station) and the proposed floodplain mitigative actions would occur on NPS land. The NPS concludes that there is no other practicable alternative for the proposed relocation of these structures. The proposed relocation of these buildings is necessary to protect these historic structures.

Implementation of the Preferred Alternative (Alternative B) would result in short-term impact to 1.81 acres of 100-year floodplain in the project area. Of these 1.81 acres impacted in the short-term, 0.35 acres of the 100-year floodplain would be impacted in the long-term. Relocation of the three historic structures and establishment of support facilities would not affect flood storage capacity of Bodie Island as a whole or the flood storage capacity in the vicinity of the project area.

Mitigation for the proposed relocation does include good design through sustainable design principles, appropriate siting, best management practices during and after construction, as well as implementation of non-structural methods through flood warning and evacuation procedures.

The NPS finds the proposal to be consistent with Executive Order 11988. The NPS finds that this proposed action is consistent with the policies and procedures of NPS Special Directive 93-4 (Floodplain Management Guidelines).

References

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Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service, Office of Biological Services, Washington, D.C.

Division of Coastal Management, North Carolina Department of Environment and Natural Resources. 1999. NC-CREWS: North Carolina Coastal Region Evaluation of Wetland Significance, A Report of the Strategic Plan for Improving Coastal Management in North Carolina. North Carolina Department of Environment and Natural Resources, Division of Coastal Management, Raleigh, NC.

National Park Service. 1993. Special Directive 93-4: Floodplain Management Guideline. Washington, D.C.

_____. 2008. 2008 Hurricane Plan: National Park Service, Outer Banks Group.

Riggs, S. R., D. V. Ames, S. J. Culver, D. J. Mallinson, D. R. Corbett, and J. P. Walsh. *In preparation*. In the eye of a human hurricane: Oregon Inlet, Pea Island, and the northern islands of the Outer Banks of North Carolina. East Carolina University, Greenville, N.C.



Figure C1. Project area map, showing the current locations and relocation site the USCG Station and Life-Saving Station on Bodie Island, NC.



Bodie Island U.S. Coast Guard Station Complex

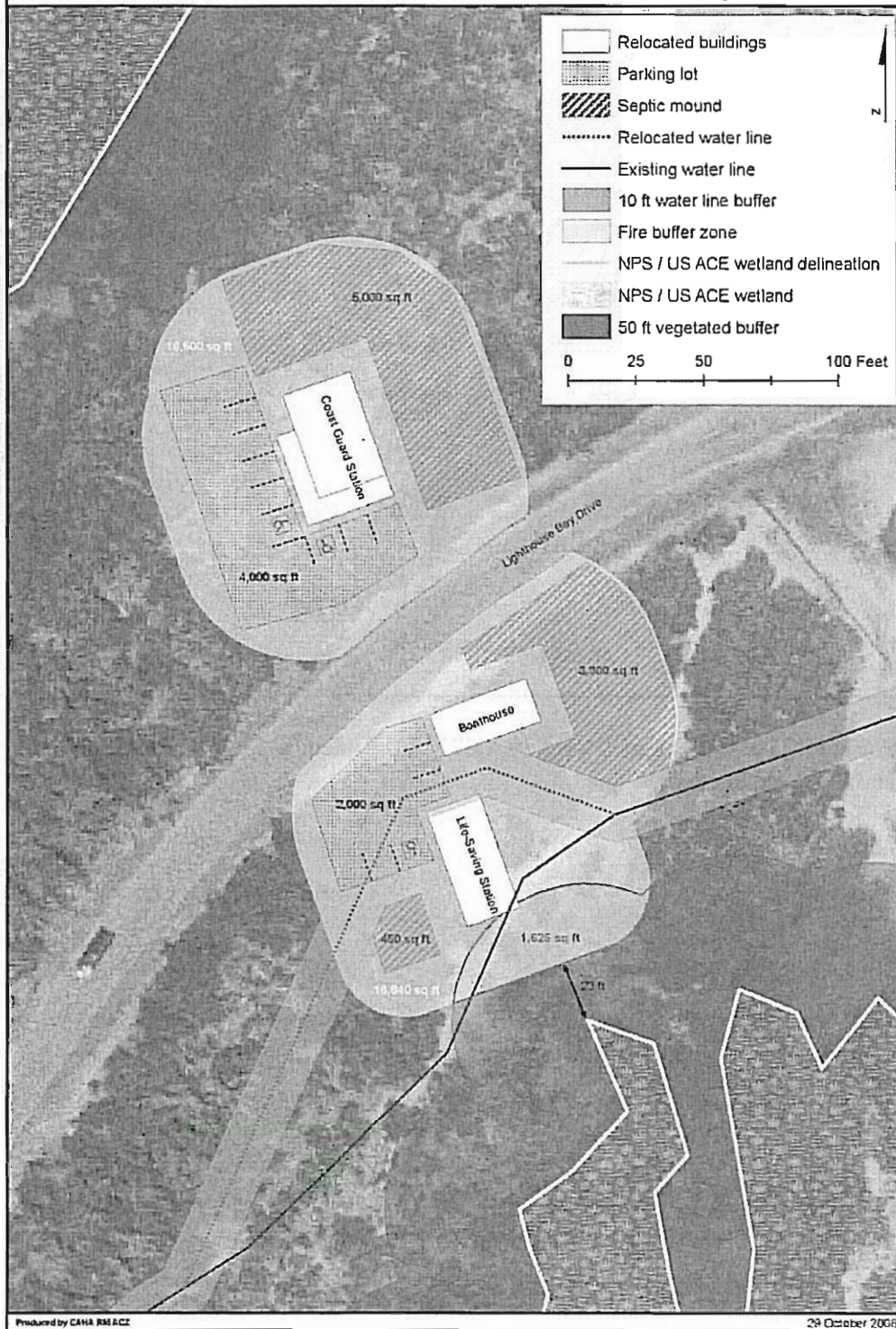


Figure C2. Relocation site plan.

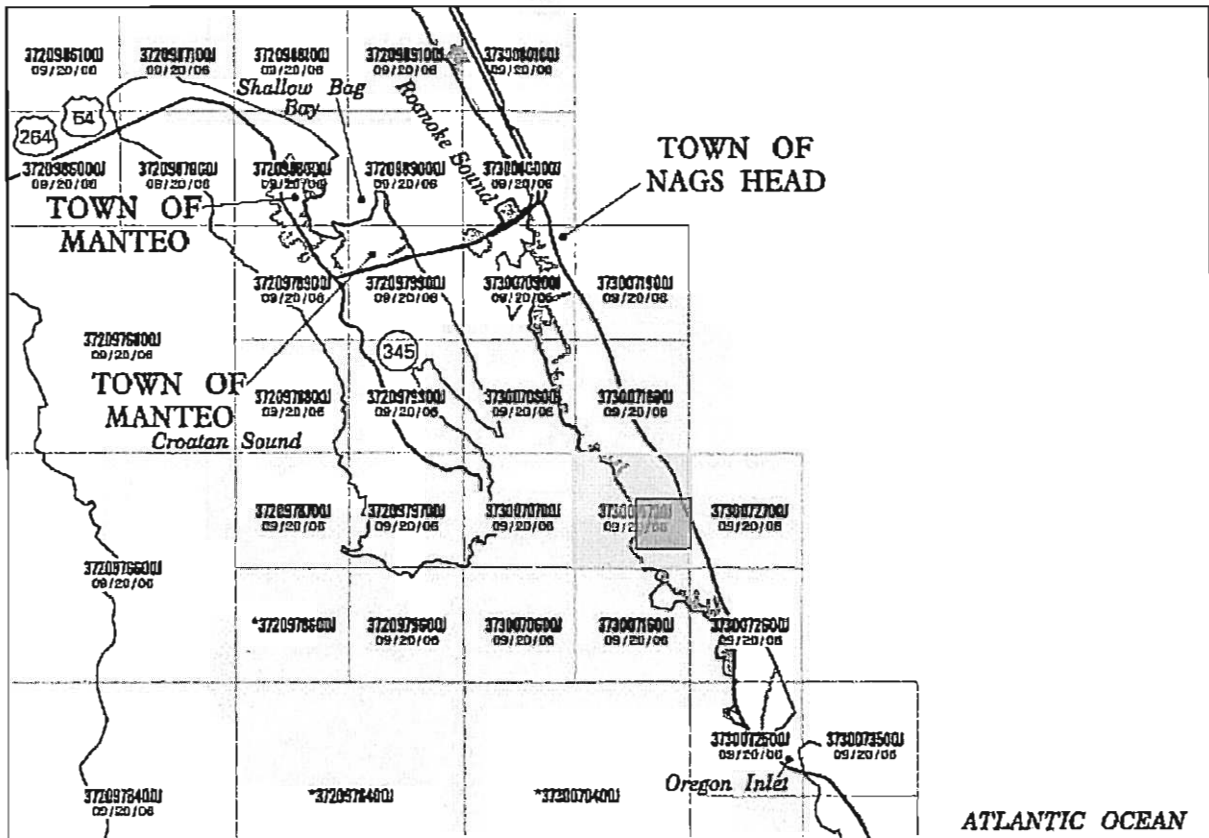
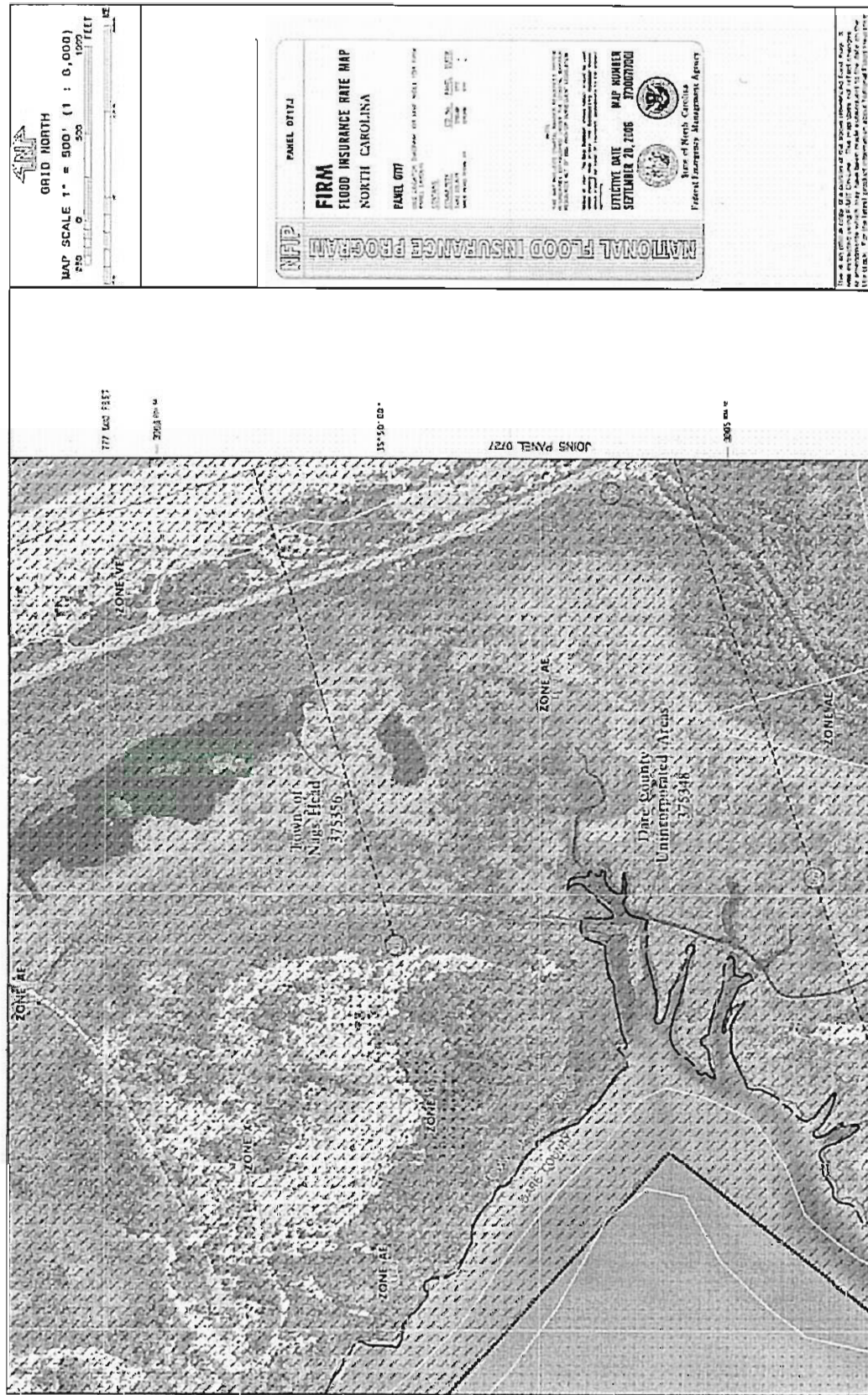


Figure C3. FEMA Flood Insurance Maps (Panel 3730071700J [dated 09/20/06]) for the project area on Bodie Island, NC (red shaded).



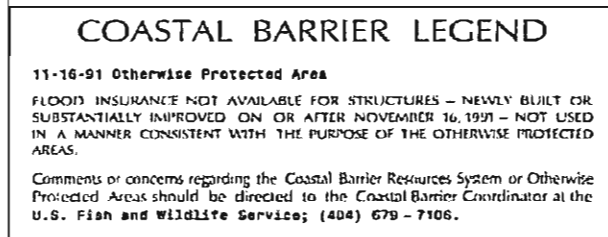
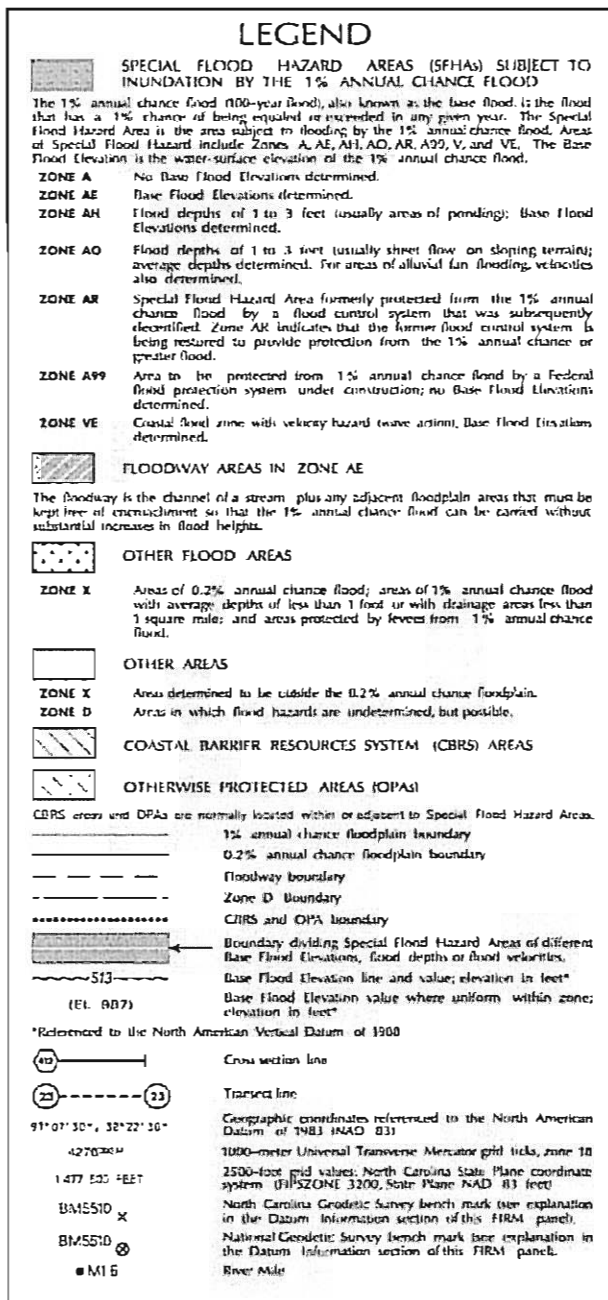


Figure C5. FEMA Flood Insurance Map legend.