DRAFT

ENVIRONMENTAL ASSESSMENT

ADMINISTRATIVE HEADQUARTERS AND VISITOR CENTER FACILITY ALLIGATOR RIVER NATIONAL WILDLIFE REFUGE

DARE COUNTY, NORTH CAROLINA



U. S. FISH AND WILDLIFE SERVICE ALLIGATOR RIVER NATIONAL WILDLIFE REFUGE MANTEO, NORTH CAROLINA

MARCH 2009

DRAFT

ENVIRONMENTAL ASSESSMENT

ADMINISTRATIVE HEADQUARTERS AND VISITOR CENTER FACILITY ALLIGATOR RIVER NATIONAL WILDLIFE REFUGE

DARE COUNTY, NORTH CAROLINA

Prepared by:

U.S. Fish and Wildlife Service Alligator River National Wildlife Refuge Post Office Box 1969 Manteo, North Carolina 27954 Phone: 252.473.1131

FAX: 252.473.1131

March 2009

TABLE OF CONTENTS

SECTION 1.0 – PURPOSE AND NEED FOR PROPOSED ACTION	1
SECTION 1.1 – INTRODUCTION	1
SECTION 1.2 – PROJECT AREA	1
SECTION 1.3 – PURPOSE OF THE PROPOSED ACTION	2
SECTION 1.4 – NEED FOR PROPOSED ACTION	2
SECTION 1.5 – REQUIRED DECISIONS	2
SECTION 1.6 – COORDINATION AND CONSULTATION	3
SECTION 2.0 – EVALUATION CRITERIA	2 2 2 3 3 3
SECTION 2.1 – ALTERNATIVE 1 - NO ACTION	3
SECTION 2.2 – ALTERNATIVE 2 - ROANOKE ISLAND SITE	3
SECTION 2.3 – ALTERNATIVE 3 - DARE COUNTY MAINLAND SITE	5
SECTION 2.4 – OTHER ALTERNATIVES CONSIDERED	6
SECTION 3.0 – AFFECTED ENVIRONMENT	6
SECTION 3.1 – ALTERNATIVE 1 - NO ACTION	6
SECTION 3.2 – ALTERNATIVE 2 - ROANOKE ISLAND SITE	6
SECTION 3.2.1 – PHYSICAL ENVIRONMENT	6
SECTION 3.2.2 – BIOLOGICAL ENVIRONMENT	6
A. Plant Communities	6
B. Wetlands	7
C. Fish and Shellfish Habitat and Essential Fish Habitat	7
D. Wildlife Habitat	7
E. Threatened and Endangered Species Habitat	7
SECTION 3.2.3 – CULTURAL AND RECREATIONAL RESOURCES	8
SECTION 3.2.3.1 – Cultural Resources	8
SECTION 3.2.3.2 – Recreational Resources	8
SECTION 3.2.4 – ECONOMIC AND SOCIAL RESOURCES	9
SECTION 3.2.4.1 – Economic Resources	. 9
SECTION 3.2.4.2 – Social Resources	10
SECTION 3.3 – ALTERNATIVE 3 - DARE COUNTY MAINLAND SITE	10
SECTION 3.3.1 – PHYSICAL ENVIRONMENT	10
SECTION 3.3.2 – BIOLOGICAL ENVIRONMENT	11
A. Plant Communities	11
B. Wetlands	11
C. Fish and Shellfish Habitat and Essential Fish Habitat	11
D. Wildlife Habitat	11
E. Threatened and Endangered Species Habitat	11
SECTION 3.3.3 – CULTURAL AND RECREATIONAL RESOURCES	11
SECTION 3.3.3.1 – Cultural Resources	12
SECTION 3.3.3.2 – Recreational Resources	12
SECTION 3.3.4 – ECONOMIC AND SOCIAL RESOURCES	12
SECTION 3.3.4.1 – Economic Resources	12
SECTION 3.3.4.2 – Social Resources	12
SECTION 4.0 – ENVIRONMENTAL CONSEQUENCES	12
SECTION 4.1 – ALTERNATIVE 1 - NO ACTION	12

SECTION 4.2 – ALTERNATIVE 2 - ROANOKE ISLAND SITE	.13
SECTION 4.2.1 – PHYSICAL ENVIRONMENT	13
SECTION 4.2.2 – BIOLOGICAL ENVIRONMENT	13
A. Plant Communities	13
B. Wetlands	14
C. Fish and Shellfish Habitat and Essential Fish Habitat	14
D. Wildlife Habitat	14
E. Threatened and Endangered Species Habitat	14
SECTION 4.2.3 – CULTURAL AND RECREATIONAL RESOURCES	14
SECTION 4.2.3.1 – Cultural Resources	14
SECTION 4.2.3.2 – Recreational Resources	15
SECTION 4.2.4 – ECONOMIC AND SOCIAL RESOURCES	15
SECTION 4.2.4.1 – Economic Resources	15
SECTION 4.2.4.2 – Social Resources	15
SECTION 4.3 – ALTERNATIVE 3 - DARE COUNTY MAINLAND SITE	15
SECTION 4.3.1 – PHYSICAL ENVIRONMENT	15
SECTION 4.3.2 – BIOLOGICAL ENVIRONMENT	16
A. Plant Communities	16
B. Wetlands	16
C. Fish and Shellfish Habitat and Essential Fish Habitat	17
D. Wildlife Habitat	17
E. Threatened and Endangered Species Habitat	17
SECTION 4.3.3 – CULTURAL AND RECREATIONAL RESOURCES	17
SECTION 4.3.3.1 – Cultural Resources	17
SECTION 4.3.3.2 – Recreational Resources	18
SECTION 4.3.4 – ECONOMIC AND SOCIAL RESOURCES	18
SECTION 4.3.4.1 – Economic Resources	18
SECTION 4.3.4.2 – Social Resources	18
SECTION 5.0 – EVALUATION OF ALTERNATIVES	18
SECTION 5.1 - ALTERNATIVE 1 - NO ACTION	18
SECTION 5.2 - ALTERNATIVE 2 - ROANOKE ISLAND SITE	19
SECTION 5.3 - ALTERNATIVE 3 - DARE COUNTY MAINLAND SITE	19
SECTION 6.0 – RATIONALE FOR PREFERRED ALTERNATIVE	19
SECTION 6.1 – CEQ ANALYSIS OF SIGNIFICANCE	20
SECTION 6.1.1 – CONTEXT	20
SECTION 6.1.2 – INTENSITY	20
SECTION 6.1.3 – BASIS FOR DETERMINING LEVEL OF IMPACTS	23
SECTION 7.0 – COMPATABILITY WITH MISSION, PURPOSE, AND OBJECTIVES	23
SECTION 8.0 – COMPLIANCE WITH LAWS, REGULATIONS, AND POLICIES	23
SECTION 9.0 – PREPARERS	24
SECTION 10.0 – AGENCIES AND PERSONS CONTACTED	24
SECTION 11.0 – LITERATURE CITED	25

LIST OF FIGURES

Figure 1. Proposed Roanoke Island location for the Administrative Headquarters and Visito Center Facility	f 4
Figure 2. Proposed Dare County mainland location for the Administrative Headquarters and Visitor Center Facility	5
Figure 3. Identified cultural/archaeological resource sites at the Roanoke Island site propose construction of the Administrative Headquarters and Visitor Center Facility	d for

APPENDICES

- Appendix A Roanoke Island Tract Acquisition Records
- Appendix B Conceptual Plans for the Administrative Headquarters and Visitor Center Facility
- Appendix C Jurisdictional Determination Letters from the North Carolina Division of Coastal Management and the U.S. Army Corps of Engineers
- Appendix D North Carolina Division of Coastal Management Consistency Determination Coordination
- Appendix E Section 7 Intra-Service Consultation for Federally Listed Species
- Appendix F Public Comments Received

THE ADMINISTRATIVE HEADQUARTERS AND VISITOR CENTER FACILITY ALLIGATOR RIVER NATIONAL WILDLIFE REFUGE

SECTION 1.0 – PURPOSE AND NEED FOR THE PROPOSED ACTION

SECTION 1.1 - INTRODUCTION

The Fish and Wildlife Service (Service) has determined that the existing headquarters facilities at the Alligator River National Wildlife Refuge Complex (Refuge) are not adequate for existing and expanding staff needs or the need for existing and expanding visitor contact facilities. Consequently, the Service is proposing that a new combined headquarters/visitor center for both the Alligator River NWR Complex and the North Carolina Coastal Plain National Wildlife Refuges Complex be constructed on property currently owned by the refuge. One of the sites considered for the facility is located at the northern end of Roanoke Island on a 34.71 (35) acre tract of property acquired in 1991 for that purpose. The administrative record for acquisition is provided in Appendix A. A second site at the intersection of U. S. Highway 64 and U. S. Highway 264 on Alligator River National Wildlife Refuge was considered based upon recommendations received during preparation of the refuge's Comprehensive Conservation Plan.

SECTION 1.2 – PROJECT AREA

Alligator River National Wildlife Refuge is located in Dare and Hyde Counties and Pea Island National Wildlife Refuge is located in Dare County. Pea Island National Wildlife Refuge was established in 1938, and Alligator River National Wildlife Refuge was established in 1984. Pea Island National Wildlife Refuge is an approximate 5,000-acre refuge located on a dynamic barrier island on North Carolina's Outer Banks, and it provides beach, dune, marsh, and maritime shrub habitat for many migrant bird species especially shorebirds and waterfowl as well as federally-listed endangered and threatened species such as the loggerhead sea turtle, green sea turtle, and piping plover. Alligator River National Wildlife Refuge consists of over 153,000 acres of riverine swamp, non-riverine swamp, pocosin, pine and hardwood forests, marsh, and agricultural land. The refuge provides valuable habitat for a variety of wildlife, including many neo-tropical migrant bird species, waterfowl, black bear, and several federally-listed endangered and threatened species such as the red wolf and red-cockaded woodpecker. For administrative purposes, both refuges are linked with Roanoke River, Pocosin Lakes, Mackay, and Currituck National Wildlife Refuges in the North Carolina Coastal Plain Refuges Complex.

The Alternative 2 project site is owned by the Service and is part of Alligator River National Wildlife Refuge. It is located on the north end of Roanoke Island in Dare County. It is a 35-acre upland tract bordered on the north by US Highway 64 Business, to the west by a relatively new subdivision, to the south by a tidal creek, known locally as Alder Creek, and to the east by federal property owned by the National Park Service. Across the highway is property owned by the Roanoke Island Historical Society and the National Park Service at the Fort Raleigh National Historic Site and the Cape Hatteras National Seashore Group administrative buildings.

The Alternative 3 project site is owned by the Service and is part of Alligator River National Wildlife Refuge. It is located at the intersection of U. S. Highway 64 and U. S. Highway 264. A

site south of the intersection and just east of U. S. Highway 264 was selected because of the pending upgrade of U. S. Highway 64 and the desire to avoid conflicts with that project. It is estimated that an approximate 10-15 acre area will be needed to construct the proposed facility at the appropriate elevation and with proper side slopes of fill material. As is all of the land in the area, the site consists of pond pine pocosin with a shrub understory and sawgrass marsh.

SECTION 1.3 – PURPOSE OF THE PROPOSED ACTION

This Environmental Assessment, prepared pursuant to the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), evaluates alternatives for the construction of an Administrative Headquarters and Visitor Center Facility on property under ownership and management of Alligator River National Wildlife Refuge.

Alternatives considered for this document include: (1) No Action, (2) New Construction on Roanoke Island Site, and (3) New Construction on the Dare County Mainland. Construction of the facility was identified in the Comprehensive Conservation Plans for Alligator River National Wildlife Refuge and for Pea Island National Wildlife Refuge and is likely to be funded through provisions of the American Recovery and Reinvestment Act of 2009.

SECTION 1.4 - NEED FOR PROPOSED ACTION

The proposed action is to construct a building on Service-owned land to house the administrative staff of the refuge complex and provide a visitor center adequate for accommodating thousands of visitors on an annual basis, training volunteers and interns, and conveying a natural resource conservation message to present and future generations. The building footprint will be approximately 12,000 square feet. Associated parking areas and an access road will be constructed. An architectural vision of the site layout and a conceptual floor plan are presented in Appendix B.

The refuge headquarters is currently located in office space leased by the General Services Administration (GSA). The facility does not provide adequate office space for current staff and has only very limited storage space for files and equipment. Similarly, there is not an adequate central meeting place for staff meetings, volunteer training, and visitors to the complex. Parking for staff and for the public is inadequate.

The proposed building will not only provide adequate office space, it will also provide a badly needed visitor center which will serve as a gateway, not only for adventure into Alligator River National Wildlife Refuge, but also to encourage the many visitors to the Outer Banks to venture inland to other local national wildlife refuges. As the world population increases there will be a growing responsibility to reach out to local, regional, and national communities about the importance of refuges as valuable pieces of the landscape puzzle that connects wildlife habitats and how they will be affected by factors attributable to climate change as expressed largely through rising sea level in our region.

SECTION 1.5 – REQUIRED DECISIONS

The Service, as the Federal project sponsor, will determine where the proposed facility will be constructed on Alligator River National Wildlife Refuge property after a thorough public review

of the project design, consideration of the environmental impact, and after fully considering all comments.

SECTION 1.6 – COORDINATION AND CONSULTATION

This project was coordinated through an Internal Scoping Team (Team). The Team comprised of Refuge staff, Cape Hatteras National Seashore staff, and Division of Ecological Services staff, was formed specifically to coordinate project design features and the environmental review process.

SECTION 2.0 – EVALUATION CRITERIA

The refuge established the following evaluation criteria to assist with developing the alternatives analysis for determining the location of the proposed Administrative Headquarters and Visitor Center Facility:

- The facility should be built on Alligator River National Wildlife Refuge property in Dare County;
- The facility should provide safe, all-weather road access;
- The facility should be conveniently located to facilitate managing Pea Island National Wildlife Refuge, Alligator River National Wildlife Refuge, and other coastal refuges within the North Carolina Coastal Plain National Wildlife Refuges Complex; and,
- The facility should have minimal impacts on wetlands, federally listed species and other wildlife, and archaeological/cultural resources.

SECTION 2.1 – ALTERNATIVE 1 - NO ACTION

Pursuant to the National Environmental Policy Act of 1969 and it's implementing regulations (40 CFR 1501.3), the Service is required to consider the no action alternative. Under this alternative, no action would be taken to construct the Administrative Headquarters and Visitor Center Facility. This alternative would mean that the Service would continue renting GSA office space for staff and it would not provide a visitor center facility. Likewise there would be no adequate facility for adding or training new staff, volunteers, and interns. Offsite arrangements would continue to be necessary for staff and safety meetings as well as conferences with other agencies and organizations. In a rapidly changing era marked by climate change, numerous educational opportunities in natural resource conservation would be missed.

SECTION 2.2 – ALTERNATIVE 2 – ROANOKE ISLAND SITE

Under this alternative, the Administrative Headquarters and Visitor Center Facility would be constructed on a 35-acre parcel of land, owned by Alligator River National Wildlife Refuge, on the south side of Highway 64 Business on the north end of Roanoke Island in Dare County, North Carolina (Figure 1). Conceptual plans are provided in Appendix B to provide reviewers with a feeling for the project layout, but these plans are not the final construction plans. The facility would consist of a 2-story building with the first floor occupying approximately 4,693 square feet for refuge administrative offices, approximately 5,636 square feet for a visitor center, and about 1,392 square feet for an environmental education center. The second floor would add about 5,406 square feet of administrative office space. The total first floor footprint would approximate 12,000 square feet. Both the visitor contact facility and the environmental education facility would be

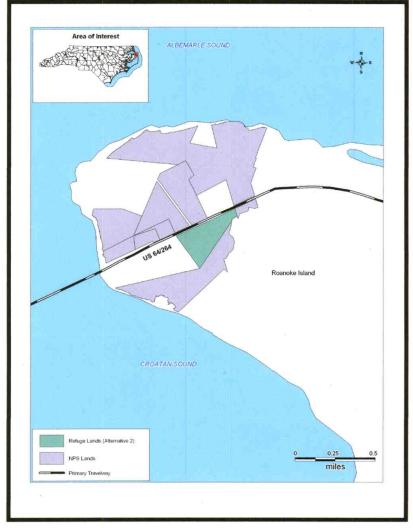
devoted largely to educational activities, but would provide a central location for staff meetings for the Alligator River National Wildlife Refuge Complex staff as well as the North Carolina Coastal Plain National Wildlife Refuges staff.

This alternative will require parking areas on the property. Preliminary estimates suggest that the facility would require about 135 parking spaces in about 3 different lots to accommodate staff and visitor parking.

An access road from U. S. Highway 64 Business would be required. Several possibilities exist for the road. Initial estimates suggest that the maximum length of the road would be between 0.1 up to 0.5 miles and would be no more than 30 feet wide. The road would be graveled or possibly paved and would meet all state and federal safety standards.

Figure 1. Alternative 2 proposed location for the Administrative Headquarters and Visitor Center Facility on the site at the north end of Roanoke Island on property owned by Alligator River

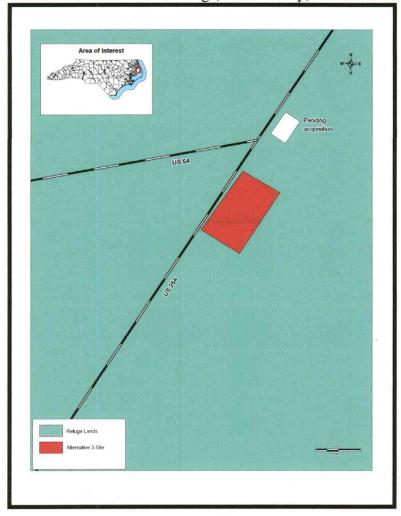
National Wildlife Refuge, Dare County, North Carolina.



SECTION 2.3 – ALTERNATIVE 3 – DARE COUNTY MAINLAND SITE

Comments received during preparation of the Comprehensive Conservation Plan (CCP) for Alligator River National Wildlife Refuge suggested that the Service purchase land for the Administrative Headquarters and Visitor Center Facility on the Dare County mainland. Due to funding limitations and the availability of a suitable tract of land of the appropriate size from a willing seller, the refuge could not pursue an alternative that addressed new land acquisition. Under this alternative, the facility would be constructed on a parcel of land already owned by Alligator River National Wildlife Refuge, at the intersection of U. S. Highway 64 and U. S. Highway 264 about 2 miles west of the community of Mann's Harbor in Dare County, North Carolina (Figure 2). This site was selected because it was recommended during the public commenting period for the CCP. The facility would consist of the same type of building as described under Alternative 2, and associated parking. The access road would be reduced to a driveway connection for access to the parking lots.

Figure 2. Alternative 3 proposed location for the Administrative Headquarters and Visitor Center Facility on the site at the intersection of U. S. Highway 64 and U. S. Highway 264 on property owned by Alligator River National Wildlife Refuge, Dare County, North Carolina.



SECTION 2.4 – OTHER ALTERNATIVES CONSIDERED

Private land, other federal properties, and state properties in Dare County were not considered due to limitation of access, wetlands, soils, and lack of funding available for purchasing other land. and because no properties were identified that would meet the Internal Scoping Team's evaluation criteria. Consequently, no additional alternatives were developed for this Draft Environmental Assessment.

SECTION 3.0 – AFFECTED ENVIRONMENT

SECTION 3.1 – ALTERNATIVE 1 - NO ACTION

Under the No Action alternative, meeting the administrative needs and promoting conservation awareness through outreach and education would continue as currently conducted. The Administrative Headquarters and Visitor Center Facility would not be built; therefore, physical or biological impacts to plant communities, wetlands, fish and shellfish habitat, essential fish habitat, and threatened and endangered species would not occur. Management issues, space for staff and safety meetings related to managing refuges, and coordination with other agencies and organizations would not change from current conditions.

SECTION 3.2 – ALTERNATIVE 2 – ROANOKE ISLAND SITE

SECTION 3.2.1 -- PHYSICAL ENVIRONMENT

Alligator River National Wildlife Refuge is located on the Albemarle-Pamlico peninsula and encompasses more than 153,000 acres of open water, riverine swamp, non-riverine swamp, pocosin wetlands, mixed pine/hardwood forests, agriculture lands, and marsh. The topography is generally very flat, ranging from practically sea level to about 2 feet above sea level on average. The natural hydrology is primarily sheet flow (surface flow or runoff of water over saturated soils) except for a few creeks. Prior to refuge ownership, the majority of the land was severely ditched and channelized to drain the wetlands for timber harvest and agriculture. The Roanoke Island Tract is approximately 6-8 feet above sea level and has a history of agricultural use and pasturing, but is currently forested.

Soil types on the 35-acre Roanoke Island tract include Baymeade (BaC) fine sand, a Leon fine sand (LeA), and Ponzer muck (PoA) (USDA Soil Conservation Service 1992). Baymeade soils are well drained and are higher in elevation than the Leon and Ponzer soils. The Leon fine sand is poorly drained soil type and is located in a long, relatively narrow pattern immediately south and down-slope from the Baymeade soils. The poorly drained Ponzer soils are found in the tidal creek floodplain south of the Leon soils. The facility will be constructed in the area with only Baymeade soils.

SECTION 3.2.2 – BIOLOGICAL ENVIRONMENT

A. Plant Communities

The Alternative 2 project area consists of woodlands. Historically, all or portions of this land have been timbered, farmed, and pastured. Today the dominant overstory vegetation is loblolly pine (*Pinus taeda*), sweetgum (*Liquidambar styraciflua*), red maple (*Acer rubrum*), blackgum (*Nyssa sylvatica*) and various oaks (*Quercus* spp.). The understory includes fetterbush (*Lyonia lucida*), wax myrtle (*Myrica cerifera*), American holly (*Ilex opaca*) dogwood (*Cornus florida*), sweetbay (*Magnolia virginiana*), red bay (*Persea borbonia*), a variety of greenbriers (*Smilax spp.*), cane (*Arundinaria spp.*), and vines, mostly muscadine (*Vitis spp.*). The dominant understory is dogwood, American holly, red bay, and fetterbush. The listing of species herein should not be interpreted as an all inclusive listing.

B. Wetlands

Although there are wetlands along the tidal creek on the south side of the tract, the Alternative 2 project area is located on nearly level, well drained soils where there are no wetlands. Except for the possibility of a minor road crossing for the access road over an intermittent stream, the proposed site for the facility does not affect jurisdictional wetlands based upon an on-site evaluation by the U.S. Army Corps of Engineers (Appendix C). The final location for the access road has not been decided at the time of preparation of this draft. However, the Service is committed to protecting wetlands and other access road alternatives will certainly be evaluated.

C. Fish and Shellfish Habitat and Essential Fish Habitat

The Alternative 2 project site is a terrestrial environment, and it does not support any fish or shellfish habitat or essential fish habitat. Runoff will be contained in storm water retention ponds to avoid degradation of the tidal creek which discharges into Croatan Sound.

D. Wildlife Habitat

Area refuges, including Pea Island and Alligator River National Wildlife Refuges, provide habitat for a variety of wildlife species; including migratory birds such as waterfowl, shorebirds, and neotropical migrant warblers. White-tailed deer (*Odocoileus virginianus*), and black bear (*Ursus americanus*) are abundant in natural settings. Managed impoundments and farmlands provide habitat for large concentrations of wintering swans, geese, and ducks. The Roanoke Island Tract is better characterized by describing the wildlife as consisting of birds and small mammals typical of an upland pine-dominated forest. Several species of neotropical migrant songbirds can be seen on the site during the year. The Alternative 2 project area is located in an area on the north end of Roanoke Island where it can serve as a critical gateway to all refuges in northeastern North Carolina. This site will provide Outer Banks visitors with valuable information about the rich natural resource heritage of the area.

E. Threatened and Endangered Species Habitat

The Intra-Service Section 7 Biological Evaluation for federally threatened and endangered species known from Dare County is included in Appendix E. Red wolves occur across Croatan Sound from the project area. The recently de-listed bald eagle (*Haliaeetus leucocephalus*), red-cockaded woodpecker (*Picoides borealis*), and American alligator (*Alligator mississippiensis*) also are known to occur within Alligator River National Wildlife Refuge, but none are known to be present in the vicinity of the Alternative 2 site. As of this time, sensitive joint vetch (*Aeschynomene*

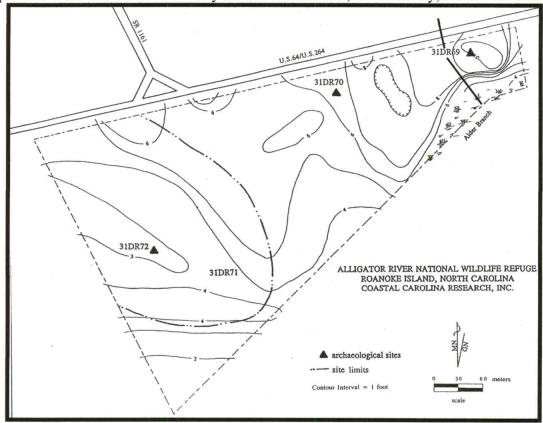
virginica) has not been documented either on the refuge or in Dare County. Other federally listed species may be found in the North Carolina Natural Heritage Program database but none of these species occur in habitat types of the Alternative 2 project site.

SECTION 3.2.3 – CULTURAL AND RECREATIONAL RESOURCES

SECTION 3.2.3.1 – Cultural Resources

The North Carolina State Historic Preservation Office's statewide inventory contains information on numerous prehistoric and historic archaeological sites in Dare County. A preliminary survey (Lautzenheiser & Eastman, 1992) found 4 potential sites within the property boundaries of the project site (Figure 3). One of these sites is not eligible for inclusion on the National Register of Historic Places (Kanaski, 2009 pers. comm.). The other three sites along with an appropriate buffer zone will be avoided by construction activities

Figure 3. Location of archaeological sites at the north end of Roanoke Island on property owned by Alligator River National Wildlife Refuge and proposed for development of the Administrative Headquarters and Visitor Center Facility under Alternative 2, Dare County, North Carolina.



SECTION 3.2.3.2 – Recreational Resources

Alligator River and Pea Island National Wildlife Refuges are open to the public for a number of recreational activities. Fishing opportunities are available year-round on most waters within and surrounding the refuges. Hunting for deer and small game is allowed on Alligator River National Wildlife Refuge, as well. State seasons and bag limits apply throughout the refuge for the species

listed in the Hunt Plan. Wildlife observation and photography opportunities also are available throughout all public areas of both refuges. The Alternative 2 project site is currently open to public use. Due to the relatively small size of the tract, species present, and its location, hunting does not occur on the project site. Fishing areas are not available on this site.

SECTION 3.2.4 – ECONOMIC AND SOCIAL RESOURCES

SECTION 3.2.4.1 - Economic Resources

Generally speaking, Dare County is considered a rural county in predominantly rural northeastern North Carolina with a total estimated population of 29,967 in 2000 (U.S. Census Bureau 2000). The county population increased 32 percent between 1990 and 2000. Kill Devil Hills is the largest town with a population of 5,897. Hotel and food service and retail trade industries are the largest employers in Dare County, employing 3,028 and 3,022 of 12,543 employees with an annual payroll of \$281.6 million in 2000 (U.S. Department of Commerce, County Business Patterns 2000). In 2000, the sectors employing the largest numbers of persons were in decreasing order as follows: hotel and food service, retail trade, construction, real estate, wholesale trade, professional services, administrative support, health care, manufacturing, and finance (U.S. Department of Commerce, County Business Patterns, 2000).

It is frequently projected through various media that several million tourists visit the Outer Banks of Currituck, Dare, and Hyde Counties each year. The tourism industry is based largely upon opportunities for outdoor related recreation as well as cultural and historical resources of the area. Aside from visiting the beach, cultural and historic resources are the primary attractions for tourists. Increasing numbers of tourists are adding local refuges to their lists of places to visit and attention is expanding to include all refuges within a couple of hours drive of Roanoke Island.

There have been numerous studies focusing on ecotourists and birdwatchers on national wildlife refuges and other areas within the United States. A study commissioned by the State of New Jersey demonstrated that the average visitor to view shorebirds during migration spent \$130 per day (New Jersey Department of Environmental Protection 2000). Birdwatchers on eight national wildlife refuges in New Jersey reported a range of expenditures from \$25 to \$41 per day (Kerlinger 1994).

Eco-tourists on Dauphin Island, Alabama, spent an average of \$60 per visitor per day (Kerlinger 1999). Similarly, birdwatchers from the local area in High Island, Texas, reported an average expenditure of \$46 per day, and nonresidents reported \$693 per trip (Eubanks et al. 1993). The average visitor to the Great Texas Coastal Birding Trail spent \$78 per day (Eubanks and Stoll 1999). Studies at the Santa Ana National Wildlife Refuge in south Texas demonstrated a range of expenditures from \$88 to \$145 per day on nature-based tourist activities. The Laguna Atascosa National Wildlife Refuge in south Texas reported a range of \$83 to \$117 per day (U.S. Environmental Protection Agency 1997). Birdwatchers to the Salton Sea National Wildlife Refuge in California spent an average of \$57 per day (National Audubon Society 1998).

Closer to home, the Fish and Wildlife Service surveyed participants engaged in wildlife-dependent recreation in North Carolina during 2001. The survey documented an average expenditure of \$69 per day by anglers, \$74 per day for hunters and \$199 per day for wildlife observers and photographers (U.S. Fish and Wildlife Service 2001). The Partnership for the Sounds sponsored a study of the

economic impact of its facilities. The study demonstrated that the average visitor spent \$108 per visit, with a range of \$64 to \$333 per day (Vogelsong 2001). A similar study of visitors at the Chincoteague National Wildlife Refuge in Virginia also showed a range of expenditures from \$62 to \$101 per day (U.S. Environmental Protection Agency 1997). In 2006, a study was conducted on eight national wildlife refuges in eastern North Carolina and southeastern Virginia (Alligator River, Pea Island, Mackay Island, Roanoke River, Pocosin Lakes, Back Bay, Great Dismal Swamp, and Mattamuskeet). Results of this study indicated "travel parties spent an average of \$150.06 directly associated with their refuge visit." (Vogelsong, 2006).

With improved facilities and staffing, the proposed facility will be an asset to the economic life of the community. Ecotourism, hunting, fishing, wildlife observation and photography, and environmental education and interpretation are increasingly being seen as a desirable industry. As the population increases and the number of places left to enjoy wildlife decreases, the refuge may become even more important to the local community. It can benefit the community directly by providing recreational and educational opportunities for the local population and visitors, and indirectly by attracting tourists from outside the county, state, or nation.

SECTION 3.2.4.2 – Social Resources

The Alternative 2 project site is easily accessible via U. S. Highway 64 Business from the historic Town of Manteo and other local tourist attractions, and is within an hours drive of the Walter B. Jones, Sr., Center for the Sounds and Pocosin Lakes National Wildlife Refuge office (located at the on the corner of U. S. Highway 64 and N. C. Highway 94 in Columbia). The site is located across the highway from property owned by the Roanoke Island Historical Association and the Fort Raleigh National Historic Site owned by the National Park Service. The Fort Raleigh National Historic Site is the location for the longest continuous outdoor drama in the nation, *The Lost Colony*. *The Lost Colony* is viewed by thousands of tourists and locals every summer.

SECTION 3.3 – ALTERNATIVE 3 – DARE COUNTY MAINLAND SITE

SECTION 3.3.1 -- PHYSICAL ENVIRONMENT

The project site for this alternative is located on the Dare County mainland at the intersection of U. S. Highway 64 and U. S. Highway 264 as shown in Figure 2. The property is within the boundary of Alligator River National Wildlife Refuge and is owned by the refuge. Much of the text in Section 3.2.1 is appropriate for this alternative. However, this project site is much flatter, lower in elevation, and wetter than the Roanoke Island tract. Sheet flow and flow through man-made ditches and canals are the primary means of water movement. Elevation at the project site ranges from 0 to 0.5 feet above sea level, disregarding the elevated causeway created for the highways. The site is dominated by pond pine, shrub, and marsh. The proposed facility will require about 10 - 15 acres for the building, parking, and driveway connection.

The only soil type on this site is Pungo muck (PuA) (USDA Soil Conservation Service 1992). Pungo muck soils are very poorly drained soils that are predominantly organic. These organic deposits are often between 5 to 8 feet deep and even deeper in some locations. Physical and chemical properties of these soil types render them as unsuitable for most uses other than wildlife habitat.

This site alternative is expected to be substantially higher in costs to that of the Alternative 2 site due to the soil type present, wetlands, water supply, and waste disposal. The nature of the soil type requires special construction techniques as was evident from the highway upgrade from 2 to 4 lanes between the intersections of U. S. Highways 64/264 to Mann's Harbor. Increases in construction costs could result in a loss of funding for the proposed facility.

SECTION 3.3.2 - BIOLOGICAL ENVIRONMENT

A. Plant Communities

The Alternative 3 project site is predominantly pond pine (*Pinus serotina*) with a dense shrub understory. Dominant shrub species include red bay (*Persea borbonia*), wax myrtle (*Myrica cerifera*), with some salt meadow bush (*Baccharis halimifolia*). The pond pine is very stunted suggesting that the peat soils are deep. This habitat is transitioning to sawgrass (*Cladium jamaicense*) marsh at a very rapid rate. Some sawgrass is encroaching into the project site and surrounds the site on the east, southeast, and south. Given recent transition rates the project site will likely be sawgrass marsh within the next 5 years. *Phragmites spp.* occurs in the swale beside the road and underneath the electric power transmission line.

B. Wetlands

The entire project site and surrounding areas would be considered jurisdictional wetlands. Except for the elevated roadbed there are no uplands in the vicinity of the project site.

C. Fish and Shellfish Habitat and Essential Fish Habitat

The text in Section 3.2.2.C provides an overall summary of fisheries resources except that estuarine/marine fisheries are dependent upon wetlands for maintaining water quality and detrital export.

D. Wildlife Habitat

The text in Section 3.2.2.D and elsewhere provides an overall summary of wildlife habitat on the refuge in general. Habitat at the project site would be classified as forested wetland (pond pine pocosin) and emergent marsh. These are the only habitat types that would be affected by the proposed project.

E. Threatened and Endangered Species Habitat

The text in Section 3.2.2.E provides an overall summary of federally listed species on the refuge in general. Because the red wolf is known to use the area, it is possible that one or more could be seen on or near the project site. Although the American alligator is listed in North Carolina as threatened by similarity of appearance, it has not been observed on the project site but could occur in the canal systems adjacent to the project site and could use the marsh for nest construction.

SECTION 3.3.3 - CULTURAL AND RECREATIONAL RESOURCES

SECTION 3.3.3.1 – Cultural Resources

The text in Section 3.2.3.1 provides an overall summary of the cultural and archaeological resources of the area. There is no visible evidence of any cultural or archaeological resources on the project site. Due to the soil type and wetness of the project area, it is believed that such sites are highly unlikely to have preserved any cultural or archaeological resources, thereby eliminating need for an intensive survey (Kanaski, 2009 pers comm.).

SECTION 3.3.3.2 – Recreational Resources

The text in Section 3.2.3.2 provides an overall summary of the recreational resources of the project site. This area is part of a relatively vast marsh complex extending down the Croatan Sound and Pamlico Sound shorelines to the community of Stumpy Point. The area would be conducive to hunting those species listed in the Alligator River National Wildlife Refuge Hunt Plan and especially those species occurring in marsh habitat. The entire site is open to the public for hunting, fishing, wildlife observation, wildlife photography, environmental education, and interpretation.

SECTION 3.3.4 – ECONOMIC AND SOCIAL RESOURCES

SECTION 3.3.4.1 – Economic Resources

The text in Section 3.2.4.1 provides an overall summary of the economic resources in Dare County. The same information would apply to the project site described in this alternative.

The cost of construction at this Alternative 3 site is expected to be considerably more expensive relative to costs of construction at the Alternative 2 site provided that all the facility's components can be constructed on the site. Increases in construction costs could result in a delay in the proposed construction or loss of funding altogether.

SECTION 3.3.4.2 - Social Resources

The text in Section 3.2.4.2 provides an overall summary of the economic resources in Dare County. The same information would apply to the project site described in this alternative.

The Alternative 3 project site is easily accessible via U. S. Highway 64 or U. S. Highway 264 from the surrounding communities of Mann's Harbor, Stumpy Point, and East Lake. Similarly it is less than a 1-hour drive from the Walter B. Jones, Sr., Center for the Sounds and Pocosin Lakes National Wildlife Refuge office (located at the on the corner of U. S. 64 and Highway 94 in Columbia), the Dare County Bombing Range, and about a 1.5 hour drive to Mattamuskeet National Wildlife Refuge.

SECTION 4.0 – ENVIRONMENTAL CONSEQUENCES

SECTION 4.1 - ALTERNATIVE 1 - NO ACTION

Under the No Action alternative, meeting the administrative needs and promoting conservation awareness through outreach and education would continue as currently conducted. The Administrative Headquarters and Visitor Center Facility would not be built; therefore, physical or biological impacts to plant communities, wetlands, fish and shellfish habitat, essential fish habitat, and threatened and endangered species would not occur. Management issues, space for staff and safety meetings related to managing refuges, and coordination with other agencies and organizations would not change from current conditions. Environmental consequences would be no greater or no less than they are with the current rented office space

SECTION 4.2 - ALTERNATIVE 2 - ROANOKE ISLAND SITE

SECTION 4.2.1 -- PHYSICAL ENVIRONMENT

Under Alternative 2, there will be a need for site preparation. This will involve land clearing, grading, and possibly using small amounts of fill to level some areas. All construction materials, including sand and gravel would be brought on to the site (although there will not likely be any wetlands impacted by the facility, see Appendix C). Due to the elevation and high permeability of the soil type at the construction site, surface water flow would not be substantially affected on the proposed project site. Cleared, graded, filled, or excavated areas would be limited to the parking area, building site, and stormwater retention ponds. It is expected that building and parking lot elevations would increase by 1-2 feet.

At the present time there are no municipal water supply lines running along U. S. Highway 64 Business. It is likely that the Service will have to drill a deep well and design a water treatment system into the facility. An alternative would be to work with Dare County to have municipal water lines extended to the area. However, extending the water distribution system would likely be prohibitively expensive.

A sewer system is not currently available at the proposed site and there are no municipal sewer lines running along U. S. Highway 64 Business. Although a final decision has not been made, septic plans include (1) a "peat fibre biofilter" (e.g., Puraflo) constructed on the proposed site, or (2) the Service treating sewage from the proposed facilities in a septic field on the property owned by Alligator River National Wildlife Refuge. Septic design for the proposed project would meet or exceed local and State regulations, minimizing any negative impacts to the soils and water quality on and around the site.

SECTION 4.2.2 -- BIOLOGICAL ENVIRONMENT

A. Plant Communities

The access road, parking area, stormwater retention ponds, and the facility's building would be located in an upland forest system dominated by loblolly pine in the 50-75 year age class. One option considered for the access road would require crossing the headwaters for Alder Creek, but this option has not been finalized and is not likely to be selected for environmental, safety, and economic reasons. The project will require clearing enough of the area to permit construction. The disturbed area will be kept to a minimum and the remaining portion of the refuge property at this site will remain as forested habitat. Concerted efforts will be made to limit the amount of tree

and understory removal to protect the habitat values of the site to the maximum extent possible and to increase the aesthetics of the facility.

B. Wetlands

Coordination with U. S. Army Corps of Engineers confirmed jurisdictional wetlands along Alder Creek. Much of the property for the project site is outside of these wetlands associated with the creek. Wetland impacts from the proposed project will depend upon project feature location on the tract of land. For example, buildings and parking areas can and will be located entirely on upland sites. An access road beginning on National Park Service property (assuming they would grant a right-of-way) at the intersection with the road leading into Fort Raleigh would involve jurisdictional wetlands and would require permitting. As stated in Section 4.2.2.A this route for the access road is not likely to be selected. The memorandum included in Appendix C states that a final jurisdictional determination will be completed prior to finalizing project design.

C. Fish and Shellfish Habitat and Essential Fish Habitat

The proposed project site is a terrestrial environment, and it does not support any fish or shellfish habitat or essential fish habitat. A Sediment and Erosion Control Plan along with stormwater retention ponds will eliminate the effects of runoff from the site.

D. Wildlife Habitat

The proposed facility will result in complete or partial clearing of approximately 10 acres of the 35-acre project site. Construction of the building, parking lots, access road, and stormwater retention ponds will permanently impact some small mammal, bird, and possibly reptile and amphibian habitats. Substantial effects to the wildlife community on the project site are not expected to occur because of the small size of the facility relative to the overall tract and a project design to minimize disturbance, especially in surrounding habitats on and off the site.

E. Threatened and Endangered Species Habitat

None of the species discussed in Section 3.2.2.E are known to occur on the project site. Site visits by the Refuge Biologist have not detected presence of any of these species. The Intra-Service Section 7 Biological Evaluation, dated March 12, 2009 is included in Appendix D. The Division of Ecological Services response will be included in the Final Environmental Assessment.

SECTION 4.2.3 -- CULTURAL AND RECREATIONAL RESOURCES

SECTION 4.2.3.1 – Cultural Resources

A preliminary survey of the site at the time of purchase revealed 4 sites with potential for further study. These sites are shown on Figure 3 as 31DR69, 31DR70, 31DR71, and 31DR72. subsequent analysis showed that Site 31DR70 is not eligible for listing in the National Register of Historic Places. Current consultation between the Service's Regional Historic Preservation Officer/Regional Archaeologist and the State Historic Preservation Officer is in progress. Results of this consultation will be included in the Final Environmental Assessment as an appendix. However, the facility will be designed and situated on the project site to avoid disturbance to these

sites. Therefore, there should be no or minimal impacts to the sites.

SECTION 4.2.3.2 – Recreational Resources

The project area is located in area on the north end of Roanoke Island that is becoming increasingly residential. Although the area is not technically closed to hunting, proximity to residential neighborhoods and local government restrictions prevent hunting in the area. However, the site is available and open to other types of wildlife dependent outdoor recreation subject to refuge regulations and hours of operation. It is anticipated that these uses will continue and may be enhanced through development of interpretive trails on the property.

SECTION 4.2.4 -- ECONOMIC AND SOCIAL RESOURCES

SECTION 4.2.4.1 – Economic Resources

Under the Alternative 2, the facility would maintain regular hours of operations. In addition, the facility's hours of operation would be extended to accommodate scheduled activities or to coordinate with seasonal and/or public interests. Hours may be expanded to accommodate public visitation during special events, especially during local festivals or other activities. Negative economic impacts related to the operation of the proposed facility are not expected to occur. To the contrary, the facility is expected to benefit local economic resources.

SECTION 4.2.4.2 – Social Resources

Under Alternative 2, access to the facility could result in small increases in traffic on U. S. Highway 64 Business. It is conceivable that such an increase could affect noise levels and the surrounding local traffic flow. However, the increase in traffic flow for the proposed facility will be very minor relative to the changes in traffic flow resulting from subdivision development occurring in the vicinity of the project area and seasonal traffic flow to Fort Raleigh and *The Lost Colony* outdoor drama. Parking for the facility is being planned to safely accommodate staff and visitors.

Under Alternative 2, the facility grounds would be kept in accordance with Service policies and standards with regard to general maintenance and appearance. All structures and signs would be approved by the Alligator River National Wildlife Refuge and would conform to the Service sign policies. Signs and fencing would be used to discourage trespassing and other criminal activity.

The project site is within an area on the north end of Roanoke Island that has been treated for Gypsy moth infestations in past years. Pesticide use on the property would follow current Service regulations and policies. Pesticide use on the adjacent federal land and other private lands will not be affected by the construction or operation of the proposed facility.

SECTION 4.3 – ALTERNATIVE 3 – DARE COUNTY MAINLAND SITE

SECTION 4.3.1 -- PHYSICAL ENVIRONMENT

Some aspects of this alternative are similar to that described in Section 4.2.1. However site preparation would be very different for this project site. As with Alternative 2, this alternative will

involve land clearing but once the land is cleared site preparation becomes very different. A solid base must be established for the substrate to support the weight of a building, road, or parking lots. This base can be established by mucking out the peat soils and then backfilling with suitable fill material, driving pilings into the substrate until they meet acceptable resistance and then filling over them with a special "floating concrete, or inserting wicks into the peat substrate to wick the moisture to the surface and away from the project site and then backfilling as the substrate subsides.

After the subsidence of the substrate stabilizes and backfilling restores original elevations, filling for the facility structures and amenities can occur. When accounting for the effects of rising sea level over the project life, it is anticipated that there will be a need to increase the elevation of the tract by 6-8 feet. Overall, it is anticipated that the facility will directly impact at least 10 acres of emergent marsh wetlands. All construction materials, including sand and gravel would be brought on to the site.

At the present time there are no municipal water supply lines running along either U. S. Highway 64 or U. S. Highway 264. It is likely that the Service will have to drill a deep well and design a water treatment system into the facility. An alternative would be to work with Dare County to have municipal water lines extended to the area. However, extending the water distribution system would likely be prohibitively expensive.

A sewer system is not currently available at the proposed site and there are no municipal sewer lines running along either U. S. Highway 64 or U. S. Highway 264. Although a final decision has not been made, septic plans include (1) a "peat fibre biofilter" (e.g., Puraflo) constructed on the proposed site, or (2) the Service treating sewage from the proposed facilities in an above ground septic field on the property owned by Alligator River National Wildlife Refuge. It is conceivable that a Tertiary Treatment Plant with a canal discharge or spray irrigation would need to be considered. Septic design for the proposed project would meet or exceed local and State regulations, minimizing any negative impacts to the soils and water quality on and around the site. However, the extent of wetland impact would likely increase, depending upon the type of sewage treatment used.

SECTION 4.3.2 -- BIOLOGICAL ENVIRONMENT

A. Plant Communities

The driveway connection, parking area, stormwater retention ponds, and the facility's building would be located entirely in a relatively uniform pond pine pocosin system with a dense shrub understory and pockets of sawgrass. The project will require clearing enough of the area to permit construction which is likely to be at least 10 acres. At the present time, the primary disturbance to the area is by prescribed fire and storm induced wind tides. The disturbed area will be kept to a minimum and the remaining portion of the refuge property at this site will remain as marsh or pocosin habitat. Concerted efforts will be made to protect the fish and wildlife habitat values of areas adjacent to the site to the maximum extent possible and to increase the aesthetics of the facility.

B. Wetlands

Based upon the jurisdictional determination by a U.S. Army Corps of Engineers representative, the entire site and surrounding areas fall into the category of jurisdictional wetlands and would require an individual Clean Water Act Section 404 permit and Section 401 Water Quality Certification from the State of North Carolina. Special construction techniques as described in Section 4.3.1 would be required for this site due to the extensive depth of the peat soils and wetness of the area. It is possible that additional jurisdictional wetlands could be impacted depending upon the types of water supply waste disposal systems that are determined to be most suitable for the site. It is anticipated that the project as designed will convert at least 10 acres of wetland habitat to upland, human dominated land use.

C. Fish and Shellfish Habitat and Essential Fish Habitat

The alternative would result in a direct loss of at least 10 acres of coastal wetlands adjacent to estuarine habitat and possibly up to 15 acres. Some ditch and canal filling would likely be necessary for accessing the site. Some water quality degradation in surrounding waters could be expected as a result of runoff and waste disposal.

D. Wildlife Habitat

The proposed facility will result in complete or partial clearing of about 10-15 acres of pond pine pocosin and emergent marsh habitat for the project site. Construction of the building, parking lots, access road, and stormwater retention ponds will permanently impact small mammal, marsh bird, passerine bird, reptile, and amphibian habitats. Substantial effects to the wildlife community on the project site are expected to occur because of the need to completely convert the site to an upland, human-dominated land use. Although this area may be considered small relative to the overall refuge acreage, the highest and best use of habitats found on these soil types is wildlife habitat. The facility at this site would alter the refuge approach to prescribed fire at the site and would add an additional interface for wild fire suppression.

E. Threatened and Endangered Species Habitat

Although none of the species discussed in Section 3.2.2.E are known to inhabit the project site, it is likely that the red wolf could use the site and the American alligator could be found in canals adjacent to the site. The alligator could use the marsh as nesting habitat. Site visits by the Refuge Biologist did not detect presence of any of these species. Overall, the project could have impacts on some species but is not likely to adversely affect or threaten the continued existence of any of the listed species. The Intra-Service Section 7 Biological Evaluation, dated March 12, 2009, are included in Appendix D. The Division of Ecological Services response will be included in the Final Environmental Assessment.

SECTION 4.3.3 -- CULTURAL AND RECREATIONAL RESOURCES

SECTION 4.3.3.1 – Cultural Resources

Current consultation between the Service's Regional Historic Preservation Officer/Regional Archaeologist and the State Historic Preservation Officer is in progress. Results of this consultation will be included in the Final Environmental Assessment as an appendix. There is no visible evidence of any cultural or archaeological resources on the project site. Due to the soil

type and wetness of the project area it is believed that such sites are highly unlikely to have preserved any cultural or archaeological resources, thereby eliminating need for a intensive survey (Kanaski, 2009 pers. comm.). If the current consultation and survey should reveal sites, the actual construction site location can be adjusted to avoid impacts.

SECTION 4.3.3.2 – Recreational Resources

The project area is located at intersection of U. S. Highway 64 and U. S. Highway 264. Primary recreational uses of the area include hunting, birdwatching, and photography. The site is available and open to all types of wildlife dependent outdoor recreation subject to refuge regulations and hours of operation. Although project development will remove about 10-15 acres of marsh habitat and convert it to a different use, the new use will be supportive of displaced uses. It is anticipated that these wildlife dependent uses will continue on adjacent refuge land and may be enhanced through development of interpretive elevated boardwalk trails on the property.

SECTION 4.3.4 -- ECONOMIC AND SOCIAL RESOURCES

SECTION 4.3.4.1 – Economic Resources

Environmental consequences on economic resources are expected to be very similar to those described in Section 4.2.4.1. Under either alternative, the facility would maintain regular hours of operations and would schedule additional time after hours as determined by demand. In either location the facility is expected to benefit local economic resources. However, this location could interfere with or be negatively affected by other refuge activities or operations, such as the use of prescribed fire.

SECTION 4.3.4.2 – Social Resources

Under this alternative, access to the facility could result in small increases in traffic congestion at the intersection of U. S. Highway 64 and U. S. Highway 264. It is conceivable that such an increase could affect noise levels and the surrounding local traffic flow. However, the increase in traffic flow and noise because of the proposed facility will be very minor relative to the changes in traffic flow resulting from upgrading U. S. Highway 64 to a 4-lane facility along the entire length and in the vicinity of the project area. Disturbance to the human environment is not likely to be a problem as the nearest community is about 3 miles away at Mann's Harbor. Parking for the facility is being planned to safely accommodate staff and visitors.

Under Alternative 3, the facility grounds would be kept in accordance with Service policies and standards with regard to general maintenance and appearance. All structures and signs would be approved by the Alligator River National Wildlife Refuge and would conform to the Service sign policies. Signs and fencing would be used to discourage trespassing and other criminal activity.

SECTION 5.0 – EVALUATION OF ALTERNATIVES

SECTION 5.1 – ALTERNATIVE 1 - NO ACTION

Under the No Action alternative, refuge management, fulfilling needs for environmental education, and meeting the public demand for conservation activities would continue with current facilities and conditions. The Alligator River National Wildlife Refuge Complex activities would continue in their current capacity. The Administrative Headquarters and Visitor Center Facility would not be built; therefore, physical or biological impacts to plant communities, wetlands, fish and shellfish habitat, essential fish habitat, threatened and endangered species, other wildlife, or cultural, economic, and social resources would not occur. Management issues, demands on staff, and demands for more educational and recreational opportunities by the public will continue to increase in complexity from current conditions. For these reasons, this alternative was deemed inadequate to fulfill the purpose and need of the proposed action.

SECTION 5.2 – ALTERNATIVE 2 – ROANOKE ISLAND SITE

It is evident from this analysis that Alternative 2 is the least environmentally damaging alternative. Assuming that the access road is planned for a location that does not cross the Alder Creek drainage, there will be no wetland impacts associated with the project and only minimal land clearing. Construction of the facility can occur at this project site and the overall integrity of the property can be protected through careful design and construction techniques. Cultural resources can be avoided. Overall, the Alternative 2 site will be adequate to fulfill the purpose and need of the proposed action. Consequently, Alternative 2 is the Service's preferred alternative.

SECTION 5.3 - ALTERNATIVE 3 - DARE COUNTY MAINLAND SITE

The alternative (Alternative 3) to construct the facility on refuge land at the intersection of U. S. Highway 64 and U. S. Highway 264 would satisfy all evaluation criteria established by the Internal Scoping Team except for impacts on wetlands. Because of the type of wetlands, proximity to estuarine/marine resources, and wildlife species present, the refuge believes that the highest and best use of this land is wildlife habitat now and in the future. The refuge prescribed fire and fire suppression plans for this site have been completed and it is evident that this location would be vulnerable to wildfire.

A major concern for developing the facility at this site is the extent of wetland involvement. It is estimated that about 10-15 acres of forested and emergent marsh wetlands would be filled and converted to an upland use. The added expense of stabilizing the peat soils and backfilling as well as elevating the site to protect the facility from storm tides and rising sea level would increase the cost far beyond available funds. For these reasons, this site alternative was deemed inadequate to fulfill the purpose and need of the proposed action.

SECTION 6.0 – RATIONALE FOR SELECTING THE PREFERRED ALTERNATIVE

The preferred alternative would construct an Administrative Headquarters and Visitor Center Facility on property owned by Alligator River National Wildlife Refuge on the south side of U. S. Highway 64 Business, on the north end of Roanoke Island, in Dare County, North Carolina. The proposed facility will include administrative office space, a visitor center, and an environmental education center with the least impact on natural resources and the human environment. The preferred alternative also satisfies the evaluation criteria established by the Internal Scoping Team,

and it would not affect other refuge activities or facilities. The site described in Alternative 2 will involve the least overall habitat disturbance and will have no impact on wetlands or water quality in nearby aquatic systems.

SECTION 6.1 - CEQ ANALYSIS OF SIGNIFICANCE

This document provides information and analyses which will be used to determine whether an Environmental Impact Statement will be prepared or a Finding of No Significant Impact (FONSI) will be issued. This Environmental Assessment represents the basis for determining whether the proposed action would significantly impact the human environment. A federal action which significantly impacts the human environment, in either a positive or negative manner, requires the preparation of an Environmental Impact Statement. Under Council on Environmental Quality (CEQ) regulations (40 CFR 1508.27), the determination of "significantly" requires consideration of both context and intensity.

SECTION 6.1.1 - CONTEXT

The level of significance for an action varies within the setting, or context, in which the action occurs (Eccleston, 1999, p. 183). Context recognizes that in addition to the intensity of project impacts, the setting, potentially affected resources, and location in which an environmental disturbance occurs must all be evaluated in determining the significance of the action. Context may be considered as a measure of the existing conditions, or the environmental baseline, within which the action would occur.

The proposed action would occur on Alligator River National Wildlife Refuge. The refuge is managed by the Service for the purpose of conserving, protecting, and enhancing fish, wildlife, and plants and their habitats and to administer lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife, and plant resources and their habitats to benefit present and future generations of Americans. Therefore, it is in the context of fulfilling the mission of the National Wildlife Refuge System and the purpose for which Alligator River National Wildlife Refuge was established, that providing adequate office facilities, having adequate facilities for staff meetings and conferences, and presenting appropriate educational materials to the public will enhance the refuge's ability to deliver an effective conservation message to the public.

Although the geographical context may not be considered to be national, the regional and local context is significant. However, it should be noted that the refuges in northeastern North Carolina do have visitors from across the nation as well as international visitors. The proposed Administrative Headquarters and Visitor Center Facility and associated grounds would affect about 10 acres of the 35-acre tract, and represents less than one-tenth of one percent of the more than 153,000 acres of Alligator River National Wildlife Refuge. Furthermore, human activities on adjacent private and federal properties would not be affected by the construction and operation of the proposed facility. Therefore, when the entire refuge, state, region, or nation is considered, any impacts, either positive or negative, would be small in geographical extent.

SECTION 6.1.2 – INTENSITY

Intensity, as defined by the CEQ, refers to the severity of impact. The CEQ regulations (40 CFR

§1508.27(b)) list ten factors that should be considered in evaluating the intensity of a proposal's impacts. The role of these ten factors in determining the intensity of a proposal's impacts are discussed by Eccleston (1999, pp. 184-186). Each of the ten points is considered below.

First, the magnitude of both beneficial and negative impacts should be considered. The Service anticipates minimal, if any, additional impacts to public access to the refuge as a result of the proposed construction and operation of the facility. The preferred alternative site location is small relative to the refuge, is already closed to hunting, and it does not offer optimal conditions or habitat for wildlife watching. There will be some who perceive the negative impacts associated with the tree removal and ground disturbance for the facility and associated amenities as significant, but such perceptions are likely based on personal agendas and misconceptions as to the purpose of the refuge and the facility. Public outreach programs by the Service and local support groups should address and minimize most of these misconceptions. There will be positive benefits to visitors of the facility by providing greater opportunities to educate and inform them of the conservation of our fish and wildlife resources and promote overall environmental education.

Second, there should be a consideration of the impact on public safety. The Facility will be secured, maintained, and managed by the Alligator River National Wildlife Refuge, which imposes regulations and carries out functions to ensure public safety. The proposed action would not add or detract from existing public safety regulations. The educational aspects of the facility will enable visitors to have a safer visit to each of the refuges through informing them of issues ranging from insect-borne diseases, bear safety, weather safety, or accessibility, to name a few.

Third, there should be consideration of impacts on historic and cultural sites, parklands, farmland, wetlands, scenic rivers and ecologically critical areas. The proposed facility will be within a National Wildlife Refuge and close to previously located historic/cultural resource sites. The proposed action would not limit access to these sites, nor would it impair the public appreciation of their significance. All aspects of the facility have been located to avoid any disturbance to the known sites. Access to public lands at Alligator River National Wildlife Refuge is managed by the Service under various laws, regulations, and policies; thus, public access to the proposed facility would not be affected beyond current conditions. Public outreach programs and information at the proposed facility should help clarify any misconceptions and minimize any controversy associated with access to the refuge.

Fourth, intensity may be influenced by the level of controversy created among visitors of the Alligator River National Wildlife Refuge, the proposed facility, and local residents. Some segments of the public may be concerned about the disturbance and development in a relatively undeveloped area of Roanoke Island. However, development pressures have increased in the area over the last 5 years as two new subdivisions have been created on the east side and west side of the property. The facility will be constructed with the smallest footprint possible for achieving the project purpose over the long term. Approximately 60% - 80% of the site will remain in an undisturbed state except for the possibility of constructing low-impact interpretive trails. Public outreach programs and information about the proposed facility should help clarify misconceptions and alleviate controversy associated with the preferred alternative.

Fifth, intensity can be influenced by the degree to which possible effects on the human environment are highly uncertain or involve unique or unknown risks. The proposed facility will be open to the public during hours of operation. Overall, the Service anticipates minimal effects to

the human environment. The proposed action does not involve any unique or unknown risks.

Sixth, intensity can be influenced by the degree to which the action establishes a precedent for future actions with significant impacts or represents a decision in principle about a future consideration. As noted, the facility will be open to the public during hours of operation. Any future actions involving similar proposals would be subjected to full public review. While there will be future needs for renovations of the facility, there will not be a need for another similar facility on or nearby the project site. Therefore, the proposed action is not expected to set any precedents for future actions with significant effects or represent a decision in principle about a future consideration because the precedent for development in the area has already been established through development of three subdivisions and the National Park Service headquarters for Cape Hatteras National Seashore in close proximity to the project site.

Seventh, intensity may be increased if the action is related to other actions with individually insignificant but cumulatively significant impacts. A significant level of impacts exists if it is reasonable to anticipate a cumulative impact on the environment. The proposed facility will be additive (cumulative) to the facilities that have been, and will be, constructed for the operation and maintenance of Alligator River and Pea Island National Wildlife Refuges. However, it is the conclusion of the Service that the adverse impacts of this facility are small and, therefore, insignificant due to the existing impacts already resulting from operation and maintenance of the Alligator River National Wildlife Refuge Complex facilities and their respective purposes to conserve and protect fish and wildlife resources while promoting a sound conservation ethic in today's world.

Eighth, the intensity of impacts can be increased by the degree to which the action would adversely affect structures or other objects listed or eligible for listing, in the National Register of Historic Places or may cause the loss or destruction of significant scientific, cultural, or historic resources. Cultural and archaeological resource surveys have been completed for the project site. The facility has been designed and located on the tract of land to avoid any impacts to the identified sites or access to them. Consequently, the proposed action would not affect entities on the National Register of Historic Places or other cultural sites in either a positive or negative manner.

Ninth, intensity can be influenced by the degree to which the action may adversely affect federally listed species or habitat determined to be critical for the recovery of these species. Any impacts from the construction and operation of the facility are likely to be beneficial to endangered and threatened species. The proposed facility will provide educational and outreach opportunities for the general management and conservation of all wildlife species of the area, including state and federally listed species.

Tenth, intensity can be increased if the proposed action would violate a federal, state, or local law or regulation imposed for the protection of the environment. The facility is proposed to be constructed on federal land under the jurisdiction of the Service. The mission of the Service can be summarized as working with others to conserve, protect and enhance fish, wildlife, and plant resources and their habitats for the continuing benefit of the American people. The mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and, where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future

generations of Americans. The objectives of the Alligator River National Wildlife Refuge Complex are to provide habitat for migratory birds, including waterfowl and other birds; to protect and enhance a unique type of wetlands (pocosin, Atlantic white cedar); to provide opportunities for wildlife-oriented interpretation, outdoor recreation and environmental education; and, to protect and enhance habitat for those species which are classified as endangered, threatened or of special concern, including the federally-endangered red wolf. In seeking to adequately meet ever increasing administrative requirements and ensure the appropriate conservation and management of fish and wildlife resources for future generations, the proposed action to construct an Administrative Headquarters and Visitor Center Facility is consistent with the mission of the Service, purposes of refuges within the Alligator River National Wildlife Refuge Complex, and the refuges in the North Carolina Coastal Plain Refuges Complex. The proposed facility will not violate any federal, state, or local laws or requirements imposed for the protection of the environment. Through a separate process a Consistency Determination will be prepared and submitted to the North Carolina Division of Coastal Management for circulation and review by State agencies and local government.

The action does not produce a large change in the existing environment, but merely seeks to construct and operate an Administrative Headquarters and Visitor Center Facility for the purposes of enhancing the Service's ability to manage the natural resources it is charged with managing and promote a conservation ethic throughout society. The proposed action may limit some types of activities within a relatively small portion of the refuges, but all activities within each refuge are already strictly monitored by the Service with conserving wildlife and other natural resources being the primary objective.

SECTION 6.1.3 - BASIS FOR DETERMINING LEVEL OF IMPACTS

This Draft Environmental Assessment will be circulated for public review. All comments received will be included in an appendix. Based upon comments received during the formal public review process, the Service will determine whether the preferred alternative will have a significant impact on the environment (and require an Environmental Impact Statement or if the environmental review record can be concluded with a Finding of No Significant Impact (FONSI).

SECTION 7.0 – COMPATIBILITY WITH MISSION, PURPOSE, AND OBJECTIVES

The proposed action will fulfill the Service's Southeast Region goal by working with our partners to achieve our vision of a better place for fish and wildlife and the people who enjoy them. The proposed action will fulfill the Service's Mission to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people. The proposed action also will fulfill National Wildlife Refuge System objectives relative to establishing a conservation ethic in society through outreach and education.

SECTION 8.0 – COMPLIANCE WITH LAWS, REGULATIONS, & POLICIES

This Draft Environmental Assessment was prepared in accordance with the National Environmental Policy Act of 1969. It is consistent with the policy contained in the Service's

Manual (550 FW 3), and employs a systematic, interdisciplinary approach. The proposed action can be designed so as to not involve the disposal of fill material into waters of the United States. Therefore, authorization should not be required by Section 404 of the Clean Water Act of 1977, as amended. Likewise, a State water quality certification under Section 401 of that Act would not be required. The project will require preparation of a Consistency Determination and submittal of that document to the North Carolina Division of Coastal Management for circulation and review by State agencies and local government.

Other Federal and State issues reviewed for compliance for the proposed action include, but are not limited to, the Endangered Species Act of 1973, as amended; the National Wildlife Refuge System Improvement Act of 1997; Archeological and Historic Preservation Act of 1974; National Historic Preservation Act of 1966, as amended; Executive Order 11988 (Floodplain Management); and, Executive Order 11990 (Protection of Wetlands). Full compliance with relevant laws and regulations will be achieved upon review of this Draft Environmental Assessment by appropriate agencies and interested parties, and the signing of a Finding of No Significant Impact and Environmental Action Statement.

This Draft Environmental Assessment will be available for public review. All comments received in response to the Draft Environmental Assessment will be addressed in the appendices. This Draft Environmental Assessment will be modified as necessary based upon the type and extent of comments received.

SECTION 9.0 – PREPARERS

This Draft Environmental Assessment was prepared by Dennis Stewart, Wildlife Biologist, Alligator River National Wildlife Refuge.

SECTION 10.0 – AGENCIES AND PERSONS CONTACTED

U.S. Fish and Wildlife Service Internal Scoping Team:

Mike Bryant, Project Leader, Alligator River National Wildlife Refuge
Scott Lanier, Deputy Project Leader, Alligator River National Wildlife Refuge
Dennis Stewart, Wildlife Biologist, Alligator River National Wildlife Refuge
Buddy Fazio, Red Wolf Species Coordinator, Alligator River National Wildlife Refuge
Bonnie Strawser, Visitor Services Program Mgr., Alligator River National Wildlife Refuge

U.S. Fish and Wildlife Service, Southeast Region:

Richard S. Kanaski, Regional Archaeologist and Regional Historic Preservation Officer U.S. Army Corps of Engineers, Regulatory Division, Washington Field Office:

Tom Steffens, Project Manager

North Carolina Division of Coastal Management

John Cece

Stephen Rhynas, Consistency Coordinator

Dare County Planning Department

Ray Sturza

North Carolina Wildlife Resources Commission Chris Turner, Division of Wildlife Management Maria Dunn, Division of Inland Fisheries N. C. Department of Transportation Coastal Wildlife Refuge Society, Manteo, NC Roanoke Island Historical Association, Manteo, NC Roanoke Island Corridor Commission, Manteo, NC N. C. Aquarium on Roanoke Island, Manteo, NC Outer Banks Visitors Bureau Outer Banks Chamber of Commerce

SECTION 11.0 – LITERATURE CITED

- Eccleston, C. H. 1999. The NEPA Planning Process A comprehensive Guide with Emphasis on Efficiency. John Wiley and Sons. New York, NY. 396 pp.
- Eubanks, T., P. Kerlinger and R. H. Payne. 1993. High Island, Texas: A case study in avitourism. *Birding* 25(6):415-420).
- Eubanks, Ted and John Stoll. 1999. Avitourism in Texas: Two Studies of Birders in Texas and their Potential Support for the Proposed World Birding Center. Texas Parks and Wildlife, Contract No. 44467.
- Kanaski, R. S. 2009. Pers. comm. Regional Historic Preservation Officer & Regional Archaeologist, U. S. Fish & Wildlife Service Southeast Region, Savannah, GA
- Kerlinger, P. 1994. The Economic Impact of Birding Ecotourism on Communities Surrounding Eight National Wildlife Refuges. Washington, DC: National Fish and Wildlife Association.
- Kerlinger, P. 1999. Birding Tourism and Dauphin Island.
- Lautzenheiser, L. & J. M. Eastman. 1992. Archaeological Survey Proposed Visitors Center
 Alligator River National Wildlife Refuge, Roanoke Island, Dare County, North Carolina.
 U. S. Fish & Wildlife Service Contract Number 14-16-0004-92-069
- National Audubon Society. 1998. Campaign on HR 3267. National Audubon Society, New York, New York.
- New Jersey Department of Environmental Protection. 2000. *Wildlife-associated Recreation on the New Jersey Delaware Bayshore*. New Jersey Division of Fish and Wildlife, Trenton, New Jersey.
- North Carolina Department of Commerce. 2006. Economic Development Information System. Available on the internet at http://www.nccommerce.com/en/BusinessServices/LocateYourBusiness/EDISSearch/. Accessed March 7, 2009.

- North Carolina State Historic Preservation Office. 2003. North Carolina State Historic Preservation Office Assistance to Dare County. Available on the internet at http://www.hpo.dcr.state.nc.us/facts/Dare.htm. Accessed March 7, 2009.
- North Carolina State Historic Preservation Office. 2003. North Carolina Listings in the National Register of Historic Places by County as of January 1, 2001. Available of the internet at http://www.hpo.dcr.state.nc.us/nrlist.htm. Accessed March 7, 2009.
- U.S. Department of Agriculture, Soil Conservation Service. 1992. *Soil Survey of Dare County, North Carolina*. USDA Soil Conservation Service, Washington, DC.
- U.S. Department of Commerce, Bureau of the Census. 2000a. Small Area Income and Poverty Estimates Program, 2000: Model-Based Income and Poverty Estimates for Dare County, North Carolina. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Commerce, Bureau of the Census. 2000b. U.S.A. Counties 2000, General Profile: Dare County, North Carolina. Washington, DC: U.S. Government Printing Office.
- U.S. Environmental Protection Agency. 1997. Nature-based Tourism.
- U.S. Fish and Wildlife Service. 2001. National Survey of Fishing, Hunting, and Wildlife-Associated Recreation North Carolina. Washington, DC.
- Vogelsang, Hans. 2001. Assessing the Economic Impact of Ecotourism Developments on the Albemarle/Pamlico Region. Greenville, North Carolina: East Carolina University, Department of Recreation and Leisure Studies.

Vogelsong, Hans. 2006. Eastern North Carolina National Wildlife Refuge Visitor Use Study. Greenville, North Carolina: East Carolina University, Department of Recreation and Leisure Studies.

APPENDIX A

Roanoke Island Tract Acquisition Records

Rec 1/17/91 Fract 20 (Hogs site)
FIRMAN UNITED STATES GOVERNMENT

memorandum

DATE: NOV 4 1991

REPLY TO Acting Senior Realty Officer, FWS,

Atlanta, GA (ARW/RE)

SUBJECT: Title Vesting

LA-North Carolina Alligator River NWR Roanoke Island Historical Association, Inc. (20)

To: Refuge Manager, Alligator River National Wildlife Refuge

Enclosed is a copy of the Regional Solicitor's final title opinion advising that valid title to the subject tract is vested in the United States of America.

Paul R. Charette

Enclosure



IN REPLY REFER TO:

United States Department of the Interior

OFFICE OF THE SOLICITOR SOUTHEAST REGIONAL OFFICE

Richard B. Russell Federal Building 75 Spring Street, S.W. Atlanta, Georgia 30303

FWS.SE.0363

91-10-2131 BBG:bfh

LA-10

October 24, 1991

MEMORANDUM

TO:

Alan C. Bonsack, Senior Realty Officer, FWS,

Atlanta, GA (ARW/RE)

FROM:

Roger Sumner Babb, Regional Solicitor

Southeast Region

SUBJECT:

Final Title Opinion

File No.:

Tract No.: 20

Project: Alligator River NWR

County: Dare

State: North Carolina

Acreage: 34.71

Consideration: \$659,500.00 Estate Acquired: Fee Simple

Vendors: Roanoke Island Historical Association, Inc.

Deed Dated: 7/19/88

Filed: 8/2/88

Recorded in Book: 580

Page: 0338

Title Evidence No.: B 79070

Prepared by: Security Title Guarantee Corp. of Baltimore

An examination has been made of the title evidence and the related papers pertaining to certain land and interests therein which have been acquired under the authority of existing legislation. The land and estate acquired by the United States of America are more particularly described in the attached deed.

The attached final title evidence and accompanying data disclose valid title to be vested in the United States of America, subject to existing easements for public roads and highways, rights of way for railroads, pipelines and public utilities, the rights and easements noted in Schedule B of

the attached title evidence and any reservations contained in the deed and option, which rights, easements and reservations, if any, are in compliance with existing statutes and are such as the agency has advised will not interfere with the proposed use of the land.

Sincerely yours,

For: Roger Sumner Babb Regional Solicitor

Attachments

LA Ce-1-4" allignen Runer



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Raleigh Field Office Post Office Box 33726 Raleigh, North Carolina 27636-3726



DATE:

November 7, 1990

FROM:

Field Supervisor, Raleigh Field Office, Fish and Wildlife

Enhancement, FWS, Raleigh, North Carolina

SUBJECT:

Intra-Service Section 7 Consultation, Alligator River National

Wildlife Refuge Headquarters Site

To:

Charles R. Danner. Chief, Project Planning Branch, Division of

Realty, Refuges and Wildlife, FWS, Atlanta, Georgia

carl

ALL

As requested in your October 25, 1990 memorandum, I have completed the attached Section 7 evaluation form. I concur with your finding that the proposed acquisition is not likely to adversely affect Federally-listed species.

Le Mita Ganel

MEMORANDUM

Date:

October 25, 1990

To:

Field Supervisor, Fish and Wildlife Enhancement

P.O. Box 33726

Raleigh, North Carolina 27636-3726

From:

Charles R. Danner, Chief, Project Planning Branch, Division of Realty,

Refuges and Wildlife, U.S. Fish and Wildlife Service, Region IV, 75

Spring Street SW, Room 1240, Atlanta, Georgia 30303

Subject:

Section 7 Consultation, Alligator River National Wildlife Refuge

Headquarters Site

The attached map provides the location of new lands proposed for acquisition for the Alligator River National Wildlife Refuge. This acquisition would involve the fee title purchase of approximately 34.71 acres of land to provide for a headquarters and interpretive/education center. It is requested that you complete the attached Section 7 Consultation for this proposed project. The Project Development Branch biologist coordinating the completion of compliance documentation for this project is Cal Garnett. Should you have any questions or desire any additional information, please contact Cal at FTS 841-3543.

Charles R. Danner

Attachments

SECTION 7 EVALUATION

REGION: Southeast Region

LOCATION (ATTACH MAP): eastern North Carolina on Roanoke Island, Dare County

LISTED SPECIES OR CRITICAL HABITAT CONSIDERED: None

NAME AND DESCRIPTION OF ACTION: Acquisition of 34.71 acres for the establishment of a headquarters and interpretive/education center for the Alligator River National Wildlife Refuge

OBJECTIVES OF THE ACTION: Acquisition of this land will provide a highly visible and easily accessible site for the administration of the refuge and to conduct educational activities

EXPLANATION OF IMPACT OF ACTION ON LISTED SPECIES OR CRITICAL HABITAT: None

RECOMMENDATIONS TO AVOID ADVERSE IMPACTS OR ENHANCE SPECIES CONSERVATION: While the 34.71-acre site does not include any critical habitat or support any threatened or endangered species, the acquisition of this land and the subsequent construction of the headquarters and interpretive/education center will enable the Service to better educate the general public about the plight of threatened and endangered species.

SECTION 7 EVALUATION

PROJECT LEADER PROJECT LEADER	DATE: 10/28/90	<i>2 ⊕</i>
MAY ADVERSELY AFFECT		
COMMENTS:		, d
FWE FIELD SUPERVISOR LA Mile	gut DATE: 11-7-90	8
MAY ADVERSELY AFFECT		
COMMENTS:		
ARD	DATE:	
MAY ADVERSELY AFFECT		SELY AFFECT
COMMENTS:		
ARD-FWE	DATE:	
MAY ADVERSELY AFFECT	NOT LIKELY TO ADVERS	SELY AFFECT
COMMENTS:		
REGIONAL DIRECTOR	DATE:	
NOT LIKELY TO ADVERSELY AFFECT		
COMMENTS:		

BIOLOGICAL OPINION____

Level I Survey Contaminant Survey Checklist of Proposed Real Estate Acquisitions

INSTRUCTIONS: Check for each category. Explain briefly where something other than "No", "None", or "Not Applicable" is checked. Discuss whether a Level II or III Survey will be recommended. Describe the distance if nearby is checked and whether there is a known potential pathway for contamination on site. Attach a legal description of the real estate property covered by this Survey.

Α.	Ba	ckground Information			
Bure	eau N	ame U.S. Fish and Wildlife Service			
Site	Name	Headquarters Site County Dare	Sta	te_North	Carolin
Date	of S	urvey _July 18, 1990			
B.	Site	Inspection Screen: On-site and nearby	ONSITE	NEARBY	NONE
	1.	Dumps, especially with drums, containers (Read labels if possible; do not open or handle! If no labels, note identifying characteristics)			
	2. 3.	Other debris: household, farm, industrial waste Fills: possible cover for dumps			<u>x</u> <u>x</u>
	4. 5.	Unusual chemical odors Storage tanks: petroleum products, pesticides,		-	<u>X</u>
	6.	etc. Buildings: Chemical storage, equipment repair, solvents			<u>X</u> .
	7.	Structures evidence of asbestos sprayed fire		-	_X
	8.	proofing, acoustical plaster Vegetation different from surrounding for no		-	_X
	9. 10.	apparent reason, e.g. bare ground "Sterile" or modified water bodies Oil soops steined ground disselect	-		_ <u>X</u>
		Oil seeps, stained ground, discolored stream banks			_X
	11.	Oil slicks on water, unusual colors in water			×

C.	13. 14. 15. 16.	Oiled or formerly oiled roads	x
	1.	Past uses which might indicate potential problems of any that are applicable.) Manufacturing, service stations, dry cleaning air strip, pipelines, rail lines, facilities with large electrical transformers or pumping equipment, petroleum production, landfills, scrap metal, auto, or battery recycling, military, labs, wood preserving, other describe None	.
	2.	Nearby land uses, especially upstream or upgradient have had waste to dump at site (see list under Past Identify: None _x	
	3.	Known contaminant sites in vicinity: NPL, state sites, candidate sites (check with EPA; State EPA counterpart)	Yes No _{X_}
	4.	Interviews on past use: owners, neighbors, County agents and any appropriate Federal authorities: Problems? None	Yes _x_No
	5.	Agricultural drainage history: surface, subsurface drains.	Yes No <u>x</u>
D.		ederal agency has <u>not</u> made a certification under secti (h) of CERCLA (Superfund). Applicable \underline{x}	
E.	A no	on-Federal entity has <u>not</u> made certification on the absontaminants.	
F.	A Le	evel II study is recommended.	Yes <u>x</u> No <u></u>

on this real estate, and there are no contamination.	knowledge no contaminants are present obvious signs of any effects of
Signed Roberth Croft Date July 18, 1990 On the basis of the information as the same of the sa	Print Name Robert L. Croft Title Project Development Biologist
On the basis of the information collected to creasonably conclude that there is a potential contaminants, to be present on this real esta	TOT COntominants
Signed	Print Name
H. Approving Official I concur with the above recommendation.	
Signecy Mill Milliamly Date	Print NameRegional Director

Fik: Hasit

January 31, 1991

Rec'dFEB 4 19:
Manager
Deputy
A.R. Assb. 28L
F. Thout JEW
Estard FEN

PD-North Carolina Alligator River NWR Correspondence

Mr. Roger N. Schecter, Director Department of Environment, Health, and Natural Resources Division of Coastal Management 225 North McDowell Street Raleigh, North Carolina 27602

Dear Mr. Schecter:

As required by the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.), a consistency determination was prepared by this agency for the acquisition of 34.71 acres on Roanoke Island, Dare County, North Carolina, to develop a headquarters and education/interpretive center for the Alligator River National Wildlife Refuge. Please find enclosed a copy of that consistency determination for your review.

Should you need additional information regarding this document, please contact Mr. Cal Garnett in our Project Development Branch at (404) 331-3543.

Sincerely yours,

James W. Pulliam, Jr. Regional Director

Enclosure

cc:

Alligator River NWR Associate Manager, RF-III, Atlanta, GA

CGarnett:Inm:1/25/91:CAMA.LTR

Consistency Determination

Proposed Action: Acquisition of 34.71 acres on Roanoke Island for the

development of a headquarters site and interpretive/education center for the Alligator River National Wildlife Refuge, Dare

County, North Carolina

Proponent:

U.S. Fish and Wildlife Service, Southeast Region,

Atlanta, Georgia

Project Description

The U.S. Fish and Wildlife Service (Service) is proposing to acquire in fee simple 34.71 acres from the Roanoke Historical Association, Inc., in Dare County, North Carolina. These lands are located on the north end of Roanoke Island with frontage on the south side of US Highway 64/264. The site is unimproved and is vegetated with coastal maritime forest. The purpose of this acquisition is:

- 1. the development of a headquarters facility for the Alligator River National Wildlife Refuge; and,
- 2. the development of a visitor contact/education/interpretive center to provide opportunities for wildlife-oriented interpretation and environmental education.

The specific actions required to effect the objectives listed above have not yet been determined. Prior to developing the site, the Service will prepare a comprehensive site plan which will be the subject of a separate consistency determination.

Consistency Determination

In accordance with the Federal Consistency requirements of Section 307 of the Coastal Zone Management Act of 1972, as amended, the project has been reviewed for consistency with the North Carolina Coastal Management Program. Based on that review it has been determined that the project is consistent to the maximum extent practicable with the program. The following information is provided to support this determination.

Areas of Environmental Concern

The 34.71-acre site is not located in any area of environmental concern and therefore would not require any permits for development pursuant to the North Carolina Coastal Area Management Act.

Dare County Land Use Plan

The 1987 Dare County Land Use Plan classifies the site and surrounding lands as conservation. The plan includes special development standards for the conservation class which are designed to protect the natural resources in these sensitive areas. Service acquisition of the lands in this proposal will effect permanent, long-term protection for the natural resources found there. As the Service develops the site plan for the construction of facilities on these lands, the special development standards will be fully considered to assure consistency with the Conservation classification in the Dare County Land Use Plan. As stated above, the site plan will be the subject of a separate consistency determination.

Conclusion

The stated objectives of the project (land acquisition for a headquarters and education/interpretive center) are compatible with the objectives of the Coastal Resources Commission. The acquisition of this land is also compatible with the Dare County Land Use Plan. The site plan for this land will be developed by the Service in such a manner to assure consistency with the North Carolina Coastal Management Program and the Dare County Land Use Plan. Therefore, I have determined that the proposed acquisition of the 34.71-acre site on Roanoke Island, Dare County, North Carolina, to develop a headquarters and education/interpretive center for the Alligator River National Wildlife Refuge is consistent with the North Carolina Coastal Management Program.

alles Ulliant G

James W. Pulliam, Jr. Regional Director Southeast Region

U.S. Fish and Wildlife Service

Atlanta, Georgia



State of North Carolina Department of Environment, Health, and Natural Resources

Division of Coastal Management

225 North McDowell Street • Raleigh, North Carolina 27602

James G. Martin, Governor William W. Cobey, Jr., Secretary April 15, 1991

Roger N. Schecter Director

Mr. James W. Pulliam, Jr., Regional Director USDI Fish and Wildlife Service 75 Spring Street, S.W. Atlanta, GA 30303

Dear Mr. Pulliam:

The State of North Carolina has completed its review of your consistency determination for the proposed acquisition of 34.74 acres on Roanoke Island for siting a headquarters and education/interpretive center for the Alligator River National Wildlife Refuge. We circulated the consistency determination dated 1/31/91 under the number CD91-02 for review coordination purposes.

Based upon our review we agree with your determination that the proposed activity is consistent with the North Carolina Coastal Management Program with the following conditions:

- 1. That potential effects of the proposed development on probable archaeological resources at the site be assessed prior to the initiation of construction activities. The NC Division of Archives and History recommends that a comprehensive survey be conducted by an experienced archaeologist to identify the presence and significance of archaeological remains at the site. They have determined that the site has a high probability for containing archaeological resources dating from prehistory to the Civil War and the late nineteenth century.
- 2. If more than one contiguous acre of land is planned to be disturbed during future development of facilities on the site, an erosion and sedimentation control plan must be approved by the NC Division of Land Resources.
- 3. Sanitary facilities will be required at any future facilities at the site. The NC Division of Environmental Health recommends that plans for wastewater disposal be developed early in the planning phases of the project. For additional information on these requirements, please contact Ms. Linda Sewell, Division of Environmental Health at (919) 733-2870.

Rec'd MAY 3 0 199
Manager J Deputy
A.R.Assb & T.I.Asst
Banger J SU
E.W.Bio

prelim. plready seteduled

- 4. Any future development proposed for this site must be consistent with the policies for development in the land use classes assigned the site in the Dare County Land Use Plan. Approximately half of the property is currently classified as Conservation and half (the eastern portion) is classified as Community Residential in the Plan. Specifically, development in Conservation classed land must be done in a demonstrably limited and cautious way. The Dare County plan sets forth the following special development standards for the Conservation class:
 - The proposed development will not destroy or irretrievably alter
 a) wetlands, b) frontal dunes, c)beaches, d)estuarine or
 impounded surface waters, e) prime wildlife habitat, f) unique
 natural areas, historic or archaeological sites.
 - 2. The proposed development will not encroach upon or be endangered by, a) areas of special flood hazard, b) oceanfront erosion areas, c) inlets and areas within range of their migration, d) estuarine erosion areas.
 - 3. The proposed development will not significantly affect the quality or reduce the value of, a) public or privately owned forest, park, gamelands, sanctuaries, or other non-intensive recreation areas, b) aquifers, or aquifer recharge areas, or public water supply watersheds or water supply areas.
 - 4. The proposed development will not require an increase in public utilities or services beyond that provided by the developer.

Should you have any questions about our concurrence of the conditions and recommendations listed above, please call Mr. Steve Benton, Division of Coastal Management, at (919) 733-2293. Thank you for your consideration of the North Carolina Coastal Management Program.

Sincerely,

for Roger N. Schecter

cc: Preston Pate, Assistant Director NC Division of Coastal Management

> Mr. John Dorney NC Division of Environmental Management

NC Division of Coastal Management, Elizabeth City Office

NC Division of Environmental Management, Washington Office

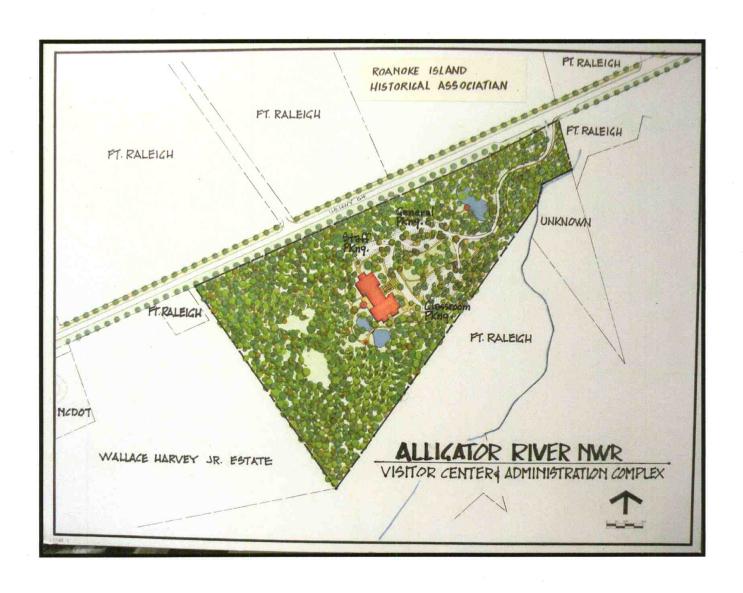
NC Division of Land Resources, Washington Office

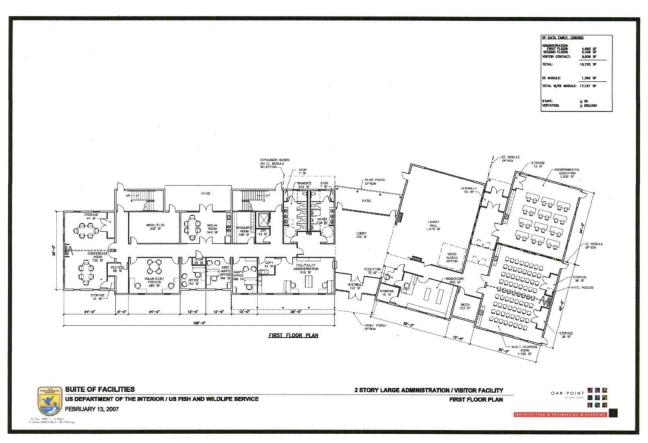
NC Division of Archives and History

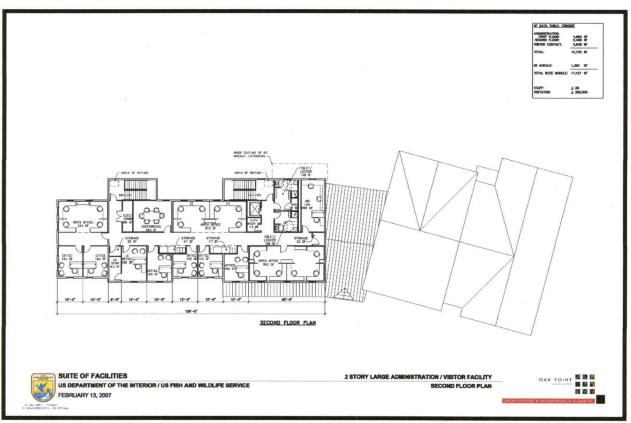
RF

APPENDIX B

Conceptual Plans for the Administrative Headquarters and Visitor Center Facility







APPENDIX C

Jurisdictional Determination Letters from the North Carolina Division of Coastal Management and the U.S. Army Corps of Engineers



"Steffens, Thomas A SAW" <Thomas.A.Steffens@saw02. usace.army.mil> 03/13/2009 04:48 PM

To <Dennis_Stewart@fws.gov>

cc "Steffens, Thomas A SAW"

<Thomas.A.Steffens@saw02.usace.army.mil>

hcc

Subject RE: Alligator River NWR Admin office & Visitor Center facility

Dennis,

Preliminary assessment of the two alternatives presented:

Alt 2- Provides the best overall alternative from the Corps regulatory point of view. The majority of the site appears to fall around the 5'contour with what appears to be a lower elevation in the ENE end of the property. The Baymede soils signature across the higher elevations supports the probable absence of hydric soils. Investigation by remote sensing (attached LIDAR) also supports a probable upland environment. It's my opinion that the parcel size is large enough to support your proposed project with few, if any, wetland impacts.

Alt 3- Provides the least likeliest alternative to be supported by either the Corps, the other resource agencies, and NGO's. The site is vegetated by a poor stand of pines, sawgrass and coastal marsh species. Pungo muck soils are typically indicative of hydric soils and probable wetland hydrology. Attached LIDAR supports lower elevations (+/- 2') and probable wetlands across the site. It's my opinion that the parcel would require extensive wetland impacts of the size that could only be reviewed under the Individual Permit process, typically an expensive and very time consuming process.

Unlike Alt-2, Alt-3's landscape position is not well suited for wastewater/septic treatment and I believe would be very probematic on this site.

Call or write if you have any questions or if I can be of further assistance.

Tom Steffens

----Original Message----

From: Dennis Stewart@fws.gov [mailto:Dennis Stewart@fws.gov]

Sent: Wednesday, March 11, 2009 2:58 PM

To: Steffens, Thomas A SAW

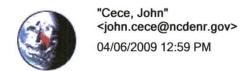
Subject: Alligator River NWR Admin office & Visitor Center facility

Tom,

The attached files show 2 locations considered for the new office and visitor center for Alligator River/Pea Island NWRs. The preferred alternative is the Roanoke Island tract as it should not involve wetlands. The other site at the intersection of US 64 & US 264 is all pocosin wetlands or sawgrass marsh on deep peat soils. The approximate footprint of disturbance is 10 acres for the buildings (12,000 sq ft plus a 2nd story that would add about 5,000 sq ft), parking lots, stormwater retention ponds, and access road.) The facility and amenities would be sited on Baymeade soils at the Roanoke Island site and Pungo muck at the 64/264 site. I would like to request input from your agency with regards to permitting issues that could be encountered for each site. The attached figures provide you with locations. If you have questions, please call.

Dennis Stewart Refuge Biologist (252) 473-1131 x231 (252) 475-0962 (cell)

(See attached file: Alt 2.jpg) (See attached file: Alt 3.jpg)



To "Dennis_Stewart@fws.gov" < Dennis_Stewart@fws.gov>

CC

bcc

Subject March 10 site visits

Dennis,

This email confirms that on March 10, 2009 I conducted site visits with you at two potential sites for the proposed Headquarters and Visitor Center; one site on Roanoke Island and a second site in Manns Harbor.

The first site, located on the northwest end of Roanoke Island, did not contain any Areas of Environmental Concern (AECs) as defined by the Division of Coastal Management's regulations. In other words, none of the Roanoke Island site would fall under the Division of Coastal Management's jurisdiction.

The second site located at the intersection of US 264 and US 64 in Manns Harbor contains Coastal Wetlands, an AEC regulated by the Division of Coastal Management. It appears that the construction of the Headquarters and Visitors Center at this location would probably involve the filling of some unknown quantity of Coastal Wetlands. Because proposed site plans were not available, I was not able to quantify the potential Coastal Wetland fill that might occur.

If you have any other questions, comments, or require additional information, please feel free to contact me.

Thanks.

John Cece Field Representative Division of Coastal Management 1367 US 17 South Elizabeth City, NC 27909 252-264-3901 x234

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties.

APPENDIX D

North Carolina Division of Coastal Management Consistency Determination Coordination

DRAFT

CONSISTENCY DETERMINATION

ADMINISTRATIVE HEADQUARTERS AND VISITOR CENTER FACILITY ALLIGATOR RIVER NATIONAL WILDLIFE REFUGE

DARE COUNTY, NORTH CAROLINA



U. S. FISH AND WILDLIFE SERVICE ALLIGATOR RIVER NATIONAL WILDLIFE REFUGE MANTEO, NORTH CAROLINA

MARCH 2009

CONSISTENCY DETERMINATION ADMINISTRATIVE HEADQUARTERS AND VISITOR CENTER FACILITY ALLIGATOR RIVER NATIONAL WILDLIFE REFUGE COMPLEX

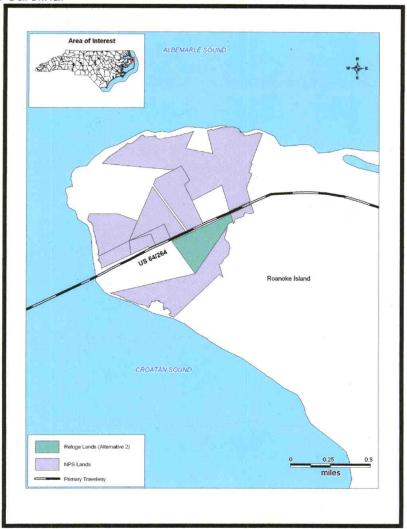
Project Description

The Alligator River National Wildlife Refuge Complex consists of two refuges. Alligator River National Wildlife Refuge is located in Dare and Hyde Counties and Pea Island National Wildlife Refuge is located in Dare County. Pea Island National Wildlife Refuge was established in 1938, and Alligator River National Wildlife Refuge was established in 1984. Pea Island National Wildlife Refuge is an approximate 5,000-acre refuge located on a dynamic barrier island on North Carolina's Outer Banks, and it provides beach, dune, marsh, and maritime shrub habitat for many migrant bird species especially shorebirds and waterfowl as well as federally-listed endangered and threatened species such as the loggerhead sea turtle, green sea turtle, and piping plover. Alligator River National Wildlife Refuge consists of over 153,000 acres of riverine swamp, non-riverine swamp, pocosin, pine and hardwood forests, marsh, and agricultural land. The refuge provides valuable habitat for a variety of wildlife, including many neo-tropical migrant bird species, waterfowl, black bear, and several federally-listed endangered and threatened species such as the red wolf and red-cockaded woodpecker.

The Alligator River complex is part of a larger refuge complex called the North Carolina Coastal Plain National Wildlife Refuges Complex. Refuges in the larger complex include Alligator River, Pea Island, Mackay Island, Currituck, Pocosin Lakes, and Roanoke River National Wildlife Refuges.

The preferred project site is located on the north end of Roanoke Island in Dare County (Figure 1). It is a 35-acre upland tract bordered on the north by US Highway 64 Business, to the west by a relatively new subdivision, to the south by a tidal creek, known locally as Alder Creek, and to the east by federal property owned by the National Park Service. Across the highway is property owned by the Roanoke Island Historical Society and the National Park Service at the Fort Raleigh National Historic Site and the Cape Hatteras National Seashore Group administrative buildings.

Figure 1. Proposed location for the Administrative Headquarters and Visitor Center Facility on the site at the north end of Roanoke Island on property owned by Alligator River National Wildlife Refuge, Dare County, North Carolina.



The U.S. Fish and Wildlife Service (Service) prepared a Comprehensive Conservation Plan (CCP) to guide the management of Alligator River National Wildlife Refuge in Dare and Hyde Counties, North Carolina. The plan outlines programs and corresponding resource needs for the next 15 years, as mandated by the National Wildlife Refuge System Improvement Act of 1997. Among the needs identified, construction of an adequate facility for administrative offices and a visitor center surfaced frequently. Although the property was purchased in 1991 for the purpose of constructing the needed facility, funding has never been provided. With passage of the American Recovery and Reinvestment Act of 2009, funding is likely to become available.

This Environmental Assessment, prepared pursuant to the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), evaluates alternatives

for the construction of a Administrative Headquarters and Visitor Center Facility on property that was purchased and added to Alligator River National Wildlife Refuge.

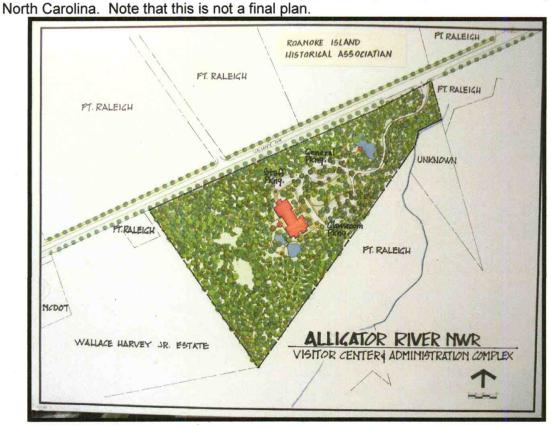
Alternatives considered for this document include: (1) No Action, (2) New Construction on Roanoke Island Site, and (3) New Construction on the Dare County Mainland. Alternative 2 is the Service's preferred alternative. The Draft Environmental Assessment was submitted for review and comment in March, 2009. Alternative 2, the preferred alternative, advances the refuge program considerably and will provide far more capabilities for conveying a conservation message into a future era marked by climate change. Also, construction at the preferred site is far more achievable than the Alternative 3 project site in terms of technical feasibility and expense of site preparation because of deep organic soils and wetness.

Dare County Land Use Plan

The existing land use is classified as conservation in the Dare County Land Use Plan. Strict interpretation of the description for the conservation designation makes it difficult to declare the project as consistent with that land classification. Basically, the conservation classification would allow residential development but discourages other types of development not considered to be "traditional accessory uses". At the time the description of the conservation classification was written, it was not possible to visualize all present and future uses that may or may not maintain the spirit and intent of the classification as well as the integrity of the lands protected by such a designation.

There will be impacts from the proposed facility. However, it is the Service's opinion that the proposed facility will not detract from the purpose of the conservation designation and, through careful design and construction, will not impair the integrity of the habitat on the 35-acre tract. Figure 2 illustrates a conceptual approach for designing and constructing the facility while minimizing and avoiding impacts to the maximum extent possible. Providing an adequate administrative center, visitor center, and environmental education center will enable the Service's ability to convey a more effective conservation message to visitors from around the state, nation, and world. For these reasons, the Service believes that the proposed facility is fully consistent with the spirit and intent of the conservation classification in the Dare County Land Use Plan.

Figure 2. A landscape concept for the proposed Administrative Headquarters and Visitor Center Facility at the Alligator River National Wildlife Refuge Complex in Dare County,



Coastal Management Program Objectives and Policies

Projects within Areas of Environmental Concern

Pursuant to 15A NCAC 07H .0205, management objectives have been established for conservation of coastal wetlands for the purpose of preserving and perpetuating their biological, social, economic and aesthetic values. To fulfill these objectives, uses which are not water-dependent are not allowed in coastal wetlands pursuant to 15A NCAC 07H .0208(a)(1). Coastal wetlands are defined by administrative code as those salt marshes or other marshes subject to regular or occasional flooding by tides, including wind tides and includes some, if not all of 10 species of plants. There will be no coastal wetlands impacted by this project. From this information we have concluded that the proposed Administrative Headquarters and Visitor Center Facility is consistent with the management objectives of 15A NCAC 07H .0205.

Pursuant to 15A NCAC 07H .0206, management objectives have been established for conservation of estuarine waters for the purpose of preserving and perpetuating their biological, social, economic and aesthetic values. To fulfill

these objectives, uses which are not water-dependent are not allowed in estuarine waters pursuant to 15A NCAC 07H .O208(a)(1). Estuarine waters are defined to include all of the waters of the Atlantic Ocean within the boundary of North Carolina and all of the waters of the bays, sounds, rivers, and tributaries thereto seaward of the dividing line between coastal fishing waters and inland fishing waters. There will be no estuarine waters impacted by this project. Based upon the information provided in the statutes and administrative codes, there are no features in the design of this project that would be inconsistent with the management objectives of 15A NCAC 07H .0206.

Pursuant to 15A NCAC 07H .0207, management objectives have been established for development of public trust areas for the purpose of protecting public rights for navigation, recreation, and management of public trust areas for the purpose of saving and perpetuating their biological, economic and aesthetic values. To fulfill these objectives, uses which are not water-dependent are not allowed in public trust areas pursuant to 15A NCA C 07H .0208(a)(I). Public trust areas are defined as waters of the Atlantic Ocean and lands thereunder from the mean high water mark to the seaward limit of the State jurisdiction, including all natural bodies of water subject to measurable lunar tides and lands thereunder to the mean high water mark. These public trust areas include all navigable water bodies and lands thereunder to the mean high water level or mean water level as the case may be. There are no features in the design of this project that would affect public trust areas. We have determined that the facility will not directly impact waters of the State of North Carolina and therefore will not impact public trust areas. Based on the above information the proposed project is consistent with management objectives of 15A NCAC 07H.0207.

Pursuant to 15A NCAC 07H .0209, management objectives have been established to ensure that coastal shoreline development is compatible with the dynamic nature of shorelines, and North Carolina's objectives for conserving and managing the important natural feature's of the estuarine and ocean systems. Coastal shorelines are defined as estuarine shorelines and public trust shorelines. Estuarine shoreline areas of environmental concern are those nonocean shorelines extending from the normal high water level or normal water level along the estuarine waters, estuary sounds, bays, fresh and brackish waters, and public trust areas for a distance 75 feet landward. There are no features of the proposed project falling within the boundaries of any area of environmental concern. Therefore, Service believes that the proposed facility will not have any impact on either the public trust or the estuarine shoreline areas of environmental concern. We further believe the project is fully consistent with the management objectives of 15A NCAC 07H .0209.

Pursuant to 15A NCAC 07H .0303, management objectives have been established to ensure that development in ocean hazard areas is compatible with the goals of eliminating unreasonable danger to life while achieving a balance between the financial, safety, and social factors involved in development of these

areas. Ocean hazard areas include ocean erodible areas, where there exists a substantial possibility of excessive erosion and significant shoreline fluctuation; high hazard flood areas; inlet hazard areas; and un-vegetated beach areas. The proposed project is not located within or in reasonable proximity to any ocean hazard areas as defined at 15A NCAC 07H .034. No further analysis is required regarding the proposed project's consistency with the objective of 15A NCAC 07H .0303.

Pursuant to 15A NCAC 07H .0505, management objectives have been established to both protect habitats necessary for survival of threatened and endangered plants and animals, and minimize land use impacts that might jeopardize these habitats. Since the refuge is home to federally listed species such as the red wolf, red cockaded woodpecker, and Southern bald eagle, an Intra-Service Section 7 Evaluation was prepared by the refuge and reviewed by the U. S. Fish & Wildlife Service, Division of Ecological Services. The American alligator, although listed as Threatened by Similarity of Appearance in North Carolina, was included in the evaluation. The conclusion from this evaluation was that the proposed facility is not likely to have an adverse effect on any listed species, including the American alligator. Based on this determination, the proposed project is consistent with the management objectives of 15A NCAC 07H .0505.

Pursuant to 15A NCAC 07H .0506, management objectives have been established to protect the features of designated coastal complex natural areas for the purpose of safeguarding these areas' biological relationships, and educational, scientific and aesthetic values. The facility does not contain any design feature that would be inconsistent with the management objectives of 15A NCAC 07H .0506.

Pursuant to 15A NCAC 07H .0507, management objectives have been established to protect unique coastal geologic formations for the purpose of preserving the formation's physical components that serve as important scientific and educational sites, or as valuable scenic resources. Aside from considering the barrier island system as a unique geologic formation, the only designated unique coastal geologic formation in the area is Jockey's Ridge (15A NCAC 07H .0507[c][3]). Jockey's Ridge is located within the Town of Nags Head over 5 miles from the proposed project site. Therefore, construction of the facility will have no effect to this designated, unique coastal geologic formation and it is consistent with the management objectives of 15A NCAC 07H .0507.

Pursuant to 15A NCAC 07H .0509, management objectives have been established to conserve significant coastal archeological resources for the purpose of preserving their value as scientific, educational, and aesthetic resources. Based upon coordination with Mr. Rick Kanaski, USFWS Region 4 Archaeologist who has coordinated the project with the State Historic Preservation Office (SHPO), there are no cultural or archaeological resources

that would be affected by proposed facility. The tract of land has 4 identified cultural resource sites, and all project features will be planned to avoid disturbance to these sites. Prior to construction a final survey and coordination with the SHPO will ensure the continued integrity of known sites and will further examine the possibility of new, presently unknown sites. Therefore the proposed facility is consistent with the management objectives of 15A NCAC 07H .0509.

Pursuant to 15A NCAC 07H .0510, management objectives have been established to conserve significant coastal historic architectural resources for the purpose of preserving their value as scientific, educational, and aesthetic resources. Based upon coordination with Mr. Rick Kanaski, USFWS Region 4 Archaeologist who has coordinated the project with the State Historic Preservation Office, there are no historic architectural resources that would be affected by proposed facility. Architects involved with project design are attempting to design the project with a theme consistent with existing architectural features found in the Town of Manteo. Therefore the proposed facility is consistent with the management objectives of 15A NCAC 07H .0509.

Pursuant to 15A NCAC 07H .0600, management objectives have been established for all AECs for the purpose of preventing pollution of shellfish waters, maintaining aircraft safety, and preventing noise pollution resulting from airspace activity. The proposed facility at the preferred project site will not effect any of these resources; therefore the facility is consistent with the management objectives of 15A NCAC 07H .0600.

Projects Outside Areas of Environmental Concern

Pursuant to 15A NCAC 07M .0301, it is the policy of North Carolina to foster, improve, enhance, and ensure optimum access to the public beaches and waters of the 20 coastal counties concurrent with needs of private property owners and protection of important coastal natural resources on public beaches and water. Construction, operation, and maintenance of the proposed facility will have no effect on public beaches of the area, but will promote a conservation ethic regarding use of those beaches and adjacent natural resources. Therefore, the facility is consistent with the pubic access policy outlined at 15 NCAC 07M .0301.

Pursuant to 15A NCAC 07M .0401, it is the policy of North Carolina that development of energy resources and facilities shall avoid significant adverse impacts upon vital coastal resources or uses, and public trust or access areas. To foster compliance with this policy, Impact Assessments are required for Major Energy Facilities as defined at 15A NCAC 07M .0402(b). Neither the refuge nor the Administrative Headquarters and Visitor Center Facility meet the definition of a Major Energy Facility. However, the facility will be designed to meet the criteria of being a "green" facility. Therefore, no further action is required regarding the consistency of the CCP with the energy policy outlined at 15 NCAC 07M .0401.

Pursuant to 15A NCAC 07M .0501, it is the policy of North Carolina that all state

agencies coordinate activities in coastal areas for the purpose of reducing the damage from coastal disasters. In accordance with this policy, local governments must include disaster planning activities in their land use plans, temporary emergency housing must be located outside of hazardous areas, and building repair and reconstruction activities must comply with the standards of the Guidelines for Areas of Environmental Concern, North Carolina Building Code (including wind resistant standards), the National Flood Insurance Program, and local reconstruction plans. The Service recognizes that the site elevation (6-8 feet above sea level) will require special design considerations. The facility and all associated structures will conform with all federal, state, and local building codes and flood insurance guidelines. Based on the above information, the facility is consistent with the guidelines and policies of 15A NCAC 07M .0501.

Pursuant to 15A NCAC 07M .0601, it is the policy of North Carolina that floating structures used for residential or commercial purposes not infringe upon public trust rights nor discharge into public trust waters. The facility does not involve construction or use of a floating structure; therefore, no further action is required regarding the consistency of the proposed project with the floating structure policy outlined at 15A NCAC 07M .0601

Pursuant to 15A NCAC 07M .0701, it is the policy of North Carolina that adverse impacts to coastal lands and waters will be mitigated through proper planning, site selection, compliance with development standards, and creation or restoration of coastal resources. For a project requiring mitigation to be approved, pursuant to 15A NCAC 07M .0703 the following conditions must be met: there must be no reasonable and prudent alternatives to the project design or site; the entire project must be dependent upon close proximity to public trust waters and coastal wetlands; the public benefits must clearly outweigh the long range adverse effects to the environment; and all reasonable means and measures to lessen the impacts of the project are incorporated into the project design. No adverse impacts to coastal lands or waters are anticipated; therefore, no further action is required regarding the consistency of the proposed facility with mitigation guidelines and policies outlined at 15 NCAC 07M .0701.

Pursuant to 15A NCAC 07M .0801, it is the policy of North Carolina that no land or water use shall cause the degradation of water quality so as to impair traditional uses of coastal water such as fishing, swimming, hunting, boating, and commerce. Because all waters of the State within the coastal area have potential for uses requiring optimal water quality pursuant 15A NCAC 07M .0802(c) methods must be adopted to control development so as to eliminate harmful runoff which may impact the sounds and rivers of the coastal areas. No adverse impacts to water quality are anticipated; therefore, no further action is required regarding the consistency of the proposed facility with mitigation guidelines and policies outlined at 15 NCAC 07M .0801. Minimizing the footprint of the project on the site, strategic placement of stormwater retention ponds around parking lots, and incorporation of stringent sediment and erosion control techniques as defined in the Sediment and Erosion Control

Management Plan will ensure compliance.

Pursuant to 15A NCAC 07M .0901, it is the policy of North Carolina that use of aircraft for the purpose of managing and protecting coastal resources, detecting violations of environmental rules and laws, and performing public health, safety and welfare services is of vital public interest. To insure access to airspace, pursuant to 15A NCAC 07M .0901 access corridors free of special use airspace designations shall be preserved along the length of the barrier island and laterally at intervals not to exceed 25 miles for the purpose of providing unobstructed access to the coastline, and development of aviation related projects shall, to the maximum extent practicable facilitate use of aircraft by local, state, and federal government agencies. The proposed facility is not aviation related, nor is it proposing an aircraft access corridor; therefore, no further action is required regarding consistency with the aircraft usage policy outlined at 15 NCAC 07M .0901,

North Carolina Dredge and Fill Law

The proposed facility will not result in any excavation or filling within any estuarine waters, tidelands, or State-owned lakes, or other public trust waters. Therefore, no further action is required regarding compliance with NCGS 113.229

Required State and Local Permits

Storm water and Sediment/Erosion control permits will be obtained as projects are developed and there will be strict compliance with all provisions of those permits/plans.

Conclusion

Although the proposed facility was discussed in the CCP, we recognize that it is a general planning document and does provide adequate details for certain types of projects as defined by Section 113A-103(5)(a) and Section 113A-103(5)(b) of the North Carolina General Statutes. Consequently, we are submitting this Consistency Determination for your consideration. The refuge staff is committed to working cooperatively with all State and Federal agencies to ensure full compliance with law, regulation, and policy at all times. Consequently, we have determined that the construction of the Administrative Headquarters and Visitor Center Facility in uplands on the north end of Roanoke Island is fully consistent with the enforceable policies of North Carolina's federally approved Coastal Management Program. This finding is consistent with the determination made by the Division of Coastal Management in 1991 when the property was purchased for the expressed purpose of building the facility. If you have questions please contact Dennis Stewart, Refuge Biologist at (252) 473-1131 ext. 231.

APPENDIX E

Intra-Service Section 7 Evaluation for Federally Listed Species

REGION 4 INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM

Originating Person: Dennis Stewart, Refuge Biologist

Telephone Number: (252)473-1131 ext. 231 E-Mail: dennis stewart@fws.gov

Date: March 12, 2009

PROJECT NAME (Grant Title/Number): Administrative Headquarters and Visitor Center

Facility for the Alligator River National Wildlife Refuge Complex

I. Service Program:

____Ecological Services
___Federal Aid
Clean Vessel Act

___Coastal Wetlands
Endangered Species Section 6

Partners for Fish and Wildlife

__Sport Fish Restoration Wildlife Restoration

___Fisheries

X Refuges/Wildlife

II. State/Agency: North Carolina/USFWS

III. Station Name: Alligator River National Wildlife Refuge Complex

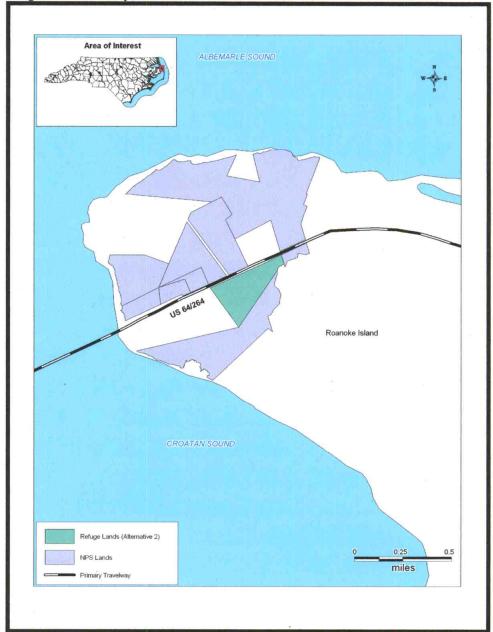
IV. Description of Proposed Action (attach additional pages as needed):

The Fish and Wildlife Service (Service) has determined that the existing headquarters facilities at Alligator River National Wildlife Refuge (Refuge) are not adequate for existing and expanding staff needs or the need for existing and expanding visitor contact facilities. Consequently, the Service is proposing that a new combined headquarters/visitor's contact station for both the Alligator River NWR Complex and the North Carolina Coastal Refuges Complex be constructed at the northern end of Roanoke Island on a 35-acre tract of property acquired in 1991 for the expressed purpose of building such a facility.

The preferred project site is located in the north end of Roanoke Island in Dare County as shown in Figure 1. The 35 acre upland tract is bordered on the north by US Highway 64 Business, to the west by a relatively new subdivision, to the south by a tidal creek, and to the east by federal property owned by the National Park Service. Across the highway is property owned by the National Park Service at the Fort Raleigh National Historic Site and the Cape Hatteras National Seashore Group administrative buildings.

Figure 1. Proposed location for the Administrative Headquarters and Visitor Center Facility on the site at the north end of Roanoke Island on property owned by Alligator River National Wildlife Perform Dans County North Constitute

Wildlife Refuge, Dare County, North Carolina.



The proposed action is to construct a building on Service owned land to house the administrative staff of the refuge complex and provide a visitor contact station adequate for accommodating thousands of visitors on an annual basis, training volunteers and interns, and conveying a natural resource conservation message to present and future generations. The building footprint will be approximately 12,000 square feet in size and there will be associated parking areas and an access road will be constructed. The facility will be near the administrative offices of Cape Hatteras National Seashore and the Fort Raleigh National Historic Site.

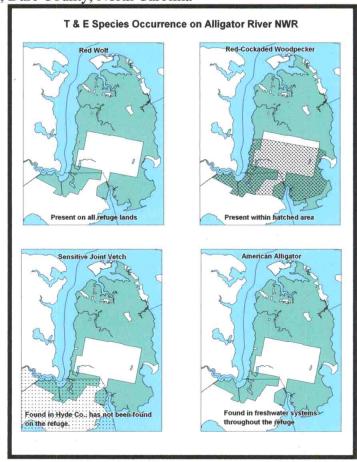
The refuge headquarters is currently in office space leased by the General Services Administration (GSA) and the facility does not provide adequate office space for current staff and has only very limited storage space for files and equipment. Similarly, there is no adequate central meeting place for staff meetings, volunteers training, and visitors of the complex.

The proposed building will not only provide adequate office space, it will also provide a badly needed visitor center which will serve as a gateway, not only for adventure into Alligator River National Wildlife Refuge, but also to encourage the many visitors to the Outer Banks to venture inland to other local national wildlife refuges. There will be a growing responsibility to reach out to local and national communities about the importance of refuges as a valuable piece of the landscape puzzle that connects wildlife habitats and how they will be affected by factors such as climate change.

V. Pertinent Species and Habitat:

A. Include species/habitat occurrence map: The maps in Figure 2 illustrate the distribution of federally listed species on the mainland portion of Alligator River National Wildlife Refuge. The preferred project site does not have any of these species residing or as transients in the area.

Figure 2. Locations for federally listed species at Alligator River National Wildlife Refuge, Dare County, North Carolina



B Complete the following table:

STATUS ¹
E
Е
TSA
T
-

¹STATUS: E=endangered, T=threatened, PE=proposed endangered, PT=proposed threatened, CH=critical habitat, PCH=proposed critical habitat, C=candidate species

VI. Location (attach map):

- **A.** Ecoregion Number and Name: Southeast Region: Ecosystem Area II, No. 34 Roanoke/Tar/Neuse/Cape Fear Ecosystem
- B. County and State: Dare and Hyde Counties, North Carolina
- C. Section, township and range (or latitude and longitude):

35.930° 75.713°

- D. Distance (miles) and direction to nearest town: 2.5 miles northwest of Manteo
- E. Species/habitat occurrence: Historically, red wolves have been observed in the general areas on the Dare County mainland and other habitat to the south and west. There are no sightings or other locations of red wolves on the project site. All known RCW cavities are located primarily on the south end of the mainland portion of the refuge south of the Dare County Bombing Range. Although the loblolly pines on the project site are mature enough to serve as cavity trees, there are no known RCW clusters within 25-30 air miles of the project site. There have been recent American alligator sightings in the general areas throughout the mainland canals of the refuge and surrounding waters. There have been no sightings of the alligator on or in the vicinity of the preferred project site. As of this time, sensitive joint vetch has not been documented either on the refuge or in Dare County.

VII. Determination of Effects:

A. Explanation of effects of the action on species and critical habitats in item V. (attach additional pages as needed)

SPECIES/CRITICAL HABITAT	IMPACT TO SPECIES/CRITICAL HABITAT
Red wolf (Canis rufus)	Not likely to adversely affect species. No critical habitat designated.
Red-cockaded woodpecker (Picoides borealis)	Not likely to adversely affect. No critical habitat designated.
American alligator (Alligator mississippiensis)	Not likely to adversely affect species. No critical habitat designated.
Sensitive joint vetch (Aeschynomene virginica)	Not likely to adversely affect. No critical habitat designated.

B. Explanation of actions to be implemented to reduce adverse effects:

SPECIES/CRITICAL HABITAT	ACTIONS TO MITIGATE/MIMIZE IMPACTS
Red wolf (Canis rufus)	The species does not occur on the project site.
Red-cockaded woodpecker (Picoides borealis)	If an RCW cavity tree is identified it will be marked and a buffer will be created around the tree or trees.
American alligator (alligator mississippiensis)	Sediment and erosion control practices will be used to prevent and control runoff into adjacent water bodies
Sensitive joint vetch (Aeschynomene virginica)	The species is not known to occur either on the refuge or in Dare County. In the event that it is located, the area will either be avoided or other protective measures will be taken.

VIII. Effect Determination and Response Requested:

SPECIES/CRITICAL HABITAT		rminat	tion 1	Response requested
		NA	AA	
Red wolf (Canis rufus)	ř	X		Concurrence
Red-cockaded woodpecker (Picoides borealis)		X		Concurrence
American alligator (Alligator mississippiensis)	<	X		Concurrence
Sensitive joint vetch (Aeschynomene virginica)		X		Concurrence

Determination/Response Requested:

NE = no effect. This determination is appropriate when the proposed action will not diretly, indirectly or cumulatively impact, either positively or negatively, any listed, proposed, candidate species or designated/proposed critical habitat. Response Requested is optional but A Concurrence is recommended for a complete Administrative Record.

NA= not likely to adversely affect. This determination is appropriate when the proposed action is not likely to adversely impact any listed, proposed, candidate species or designated/proposed critical habitat or there may be beneficial effects to these resources. Response Requested is A Concurrence.

AA= likely to adversely affect. This determination is appropriate when the proposed action is likely to adversely impact any listed, proposed, candidate species or designated/proposed critical habitat. Response Requested for listed species is A Formal Consultation. Response Requested for proposed or candidate species is A Conference.

Signature (originating station)

Title

Data

1X. Reviewing Ecological Services Office Evaluation:	
A. Concurrence Nonconcurrence	
B. Formal consultation required	
C. Conference required	
D. Informal conference required	
E. Remarks (attach additional pages as needed):	
3/13/9	
Signature Date	
Field Spavison Ralaish, ES	
Title	

APPENDIX F

Public Comments Received