

Appendix C

Erin Victory/TCI



Refuge upland

Wilderness Review

Introduction

A wilderness review is the process used to determine whether or not to recommend lands or waters in the National Wildlife Refuge System (System) to the United States Congress (Congress) for designation as wilderness. Planning policy for the System (602 FW 3) mandates conducting wilderness reviews every 15 years through the Comprehensive Conservation Planning (CCP) process. Section 610 FW 4 of the Service's Wilderness Stewardship Policy provides guidance on the wilderness review process.

The wilderness review process has three phases: inventory, study, and recommendation. After first identifying lands and waters that meet the minimum criteria for wilderness, the resulting wilderness study areas (WSA) are further evaluated to determine if they merit recommendation from the Service to the Secretary of the Interior for inclusion in the National Wilderness Preservation System (NWPS).

Areas recommended for designation are managed to maintain wilderness character in accordance with management goals, objectives, and strategies outlined in the final CCP until Congress legislatively designates an area or the CCP is amended to modify or remove the wilderness proposal. A brief discussion of wilderness inventory, study, and recommendation follows.

Wilderness Inventory

The wilderness inventory consists of identifying areas that minimally meet the requirements for wilderness as defined in the Wilderness Act of 1964 (Wilderness Act).

The definition of wilderness is in section 2(c) of the Wilderness Act: "A wilderness, in contrast with those areas where man and his works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain. In this act, an area of wilderness is further defined to mean an area of undeveloped federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historic value."

Wilderness Study

During the study phase, lands and waters qualifying for wilderness as a result of the inventory are studied to analyze values (ecological, recreational, cultural, spiritual), resources (e.g., wildlife, water, vegetation, minerals, soils), public uses, and refuge management activities within the area. The analysis includes evaluation of whether the WSA can be effectively managed to preserve its wilderness character.

An "All Wilderness Alternative" and a "No Wilderness Alternative" is analyzed for each WSA to compare the benefits and impacts of managing the area as wilderness as opposed to managing the area under an alternate set of goals, objectives, and strategies that do not involve wilderness designation. The environmental analysis addresses benefits and impacts to wilderness values and other resources under each management alternative. The study evaluates how each alternative will:

- Achieve the purposes of the Wilderness Act and the NWPS;
- Affect achieving refuge or planning unit purpose(s);

- Affect that refuge's contribution toward achieving the Refuge System mission;
- Affect maintaining and, where appropriate, restoring biological integrity, diversity, and environmental health at various landscape scales; and
- Meet other legal and policy mandates.

The findings of the study help determine whether to recommend the area for designation as wilderness. The information, analysis, and decisions in the CCP and associated NEPA document provide the rationale for wilderness suitability determinations and the basic source of information throughout the public, executive, and legislative review processes that follow.

Wilderness Recommendation

There is no requirement to recommend a WSA for congressional designation as wilderness. The final CCP and record of decision document the U.S. Fish and Wildlife Service (Service) determination on a WSA's suitability (or unsuitability) for wilderness and decision to recommend (or not recommend) an area for designation.

For a WSA recommended suitable for designation, additional steps will be required including preparing a wilderness study report that presents the results of the wilderness review and a Legislative Environmental Impact Statement (LEIS). Once these documents are prepared, they are transmitted, along with the CCP, through the Secretary of Interior to the President of United States, and ultimately to the United States Congress for approval.

Wilderness Inventory of Nomans Land Island NWR

The wilderness inventory is a broad look at the CCP planning area to identify WSAs. WSAs are roadless areas within the refuge boundaries that meet the minimum criteria for wilderness identified in Sect. 2. (c) of the Wilderness Act. A WSA must meet the minimum size criteria (or be a roadless island), appear natural, and provide outstanding opportunities for solitude or primitive recreation. Other supplemental values are evaluated, but not required.

The Wilderness inventory was conducted by Service staff and reviewed by the CCP Planning Team comprised of agency personnel representing the Service, Massachusetts Division of Fish and Wildlife and the Wampanoag Tribe of Gay Head (Aquinnah). The inventory process and application of the wilderness criteria is described in the following sections and summarized in Table C-1.

Evaluation of Size Criteria

The initial step to identify roadless areas and roadless islands in a planning area requires gathering land status maps, land use and road inventory data, satellite imagery, aerial photographs, and personal observations of areas within refuge boundaries. Lands and waters currently owned by the Service in fee title are evaluated. "Roadless" refers to the absence of improved roads suitable and maintained for public travel by means of motorized vehicles primarily intended for highway use.

An inventory unit meets the size criteria for a WSA if any one of the following standards applies (610 FW 4.8).

- An area with over 5,000 contiguous acres. State and private lands are not included in making this acreage determination.
- A roadless island of any size. A roadless island is defined as an area surrounded by permanent waters or that is markedly distinguished from the surrounding lands by topographical or ecological features

- An area of less than 5,000 contiguous federal acres that is of sufficient size as to make practicable its preservation and use in an unimpaired condition, and of a size suitable for wilderness management.
- An area of less than 5,000 contiguous federal acres that is contiguous with a designated wilderness, recommended wilderness, or area under wilderness review by another federal wilderness managing agency such as the Forest Service, National Park Service, or Bureau of Land Management.

Discussion

Nomans Land Island NWR is a 628-acre island. The boundary of the Refuge is the low water mark. All of the lands and waters within the Refuge boundary are owned by the United States, and managed by the Service. The boundary of the Nomans Land wilderness inventory unit coincides with the Refuge boundary. The Refuge is one of eight refuges in the Eastern Massachusetts NWR Complex headquartered in Sudbury, MA.

Waters surrounding Nomans Land Island are within a military reservation boundary restricted area. Unauthorized vessels and persons are prohibited within the restricted area. The restricted area is monitored by the U.S. Coast Guard. Airspace over the island is restricted as well.

Remnants of old farm and military roads on the island total 4.6 miles. The original construction specifications and condition of these routes are unknown. The trails have been cleared of unexploded ordnance (UXO) and provide the only safe access across and around the perimeter of the island. Refuge staff and authorized agents of the Service use the trails to access the Refuge on foot and ATV for management activities and research. Every five years, Navy personnel use the trails for surface Munitions and Explosives of Concern (MEC) surveillance and clearance operations. The trails are generally maintained annually by mowing using an ATV with an attached mowing unit. Maintenance of the trails using herbicides applied with a backpack sprayer is an option. Due to the effects of time, storm activity, and vegetative growth, the routes are little more than 5 to 6 foot wide overgrown trails. The routes are not improved, maintained, or used regularly for travel by vehicle by Service or Navy personnel and therefore do not meet the definition of a road.

Conclusion

Nomans Land Island meets the wilderness criteria of a roadless island of any size.

Evaluation of the Naturalness Criteria

To qualify as a WSA, an area must meet the naturalness criterion (610 FW 4.9). Section 2 (c) of the Wilderness Act defines wilderness as an area that "...generally appears to have been affected primarily by the forces of nature with the imprint of man's work substantially unnoticeable." The area must appear "natural" to the average visitor rather than "pristine." The presence of ecologically intact, historic landscape conditions is not required.

An area may include some man-made features and human impacts provided they are substantially unnoticeable in the unit overall. In the inventory phase, the naturalness evaluation focuses on the *existing physical impacts* of refuge management activities, refuge uses, or human-caused hazards, like UXO. At this stage, we do not disqualify an area from further study solely on the basis of established or proposed activities or uses that require the use of temporary roads, motor vehicles, motorized equipment, motorboats, mechanical transport, landing of aircraft, structures, and installations generally prohibited in designated wilderness. In addition, an area may not be considered unnatural in appearance solely on the basis of "sights and sounds" of human impacts and activities outside the boundary of the unit.

Discussion

The wilderness inventory documented the following man-made features and evidence of human impact related to historic and existing uses and management activities and uses in the Nomans Land Island inventory unit.

Nomans Land Island has a long history of human use. Native Americans of the federally recognized Wampanoag Tribe of Gay Head (Aquinnah) used the island perhaps as early as 5,000 years ago and as a summer camp until the late 1600's. Five pre-Contact sites have been located from surface artifacts and reported to the Massachusetts Historical Commission.

In the 1800s, European Americans lived and farmed on the island. The major occupations were fishing, raising sheep, and piloting. The island was a hunting and fishing camp in the early 1920s. From historical accounts, the Service has inferred the locations of "Gulltown" (a fishing village also referred to as Crow Town) and the Joshua Crane Lodge. There is one plainly visible historic ruin consisting of a stone building foundation. Remnants of the low stone walls that delineated the historic property boundaries of the sheep farms are found in the shrubland habitats on the western side of the island. A wood and stone cistern near the center of the island provides further evidence of the community that lived on the island. The island is the site of the Luce Cemetery, a small family burial ground surrounded by crumbling stone walls. The cemetery contains one known grave marked by a toppled headstone. All of these features are periodically overgrown and hidden by vegetation. Vegetation in the Luce family cemetery is occasionally cleared by hand-pulling or cutting. The use of ground-penetrating radar might also be used to assist in the location of additional cultural resources as approved by and coordinated with the Service and the Navy.

Early settlers created artificial ponds on the island, largely on the western portion, by diking the outflow of bogs or digging below the water table and mounding the excavated dirt in a horseshoe shape to retain the water. Ben's Pond lies just west of the center of the island and is 1,000 feet by 500 feet. Rainbow Pond lies on the east end of the island. It is about 625 feet long and has two arms extending from it (Stone and Webster 1996). Adjacent to Rainbow Pond is a small pond with a water control structure consisting of a 18 to 24-inch diameter corrugated metal culvert. The metal culvert was installed in 1998 to control erosion caused by a failed vitreous clay pipe outlet.

The military used the island as a military aerial bombardment and gunnery range with live and dummy bombs from the early 1940s to 1996. In the years following WWII, a construction battalion was stationed on the island to improve the airstrip, erect structures including a radio tower, and maintain the bombing range. All of the structures were eventually removed or demolished and no one has lived on the island since then. Although the island was cleared of surface ordnance when the military ceased operations in 1996 and two surface clearance operations have occurred since then, frost heave and erosion may continue to expose sub-surface ordnance over time.

Plywood warning signs, approximately 4 feet by 8 feet, have been erected around the perimeter of the island to advise the public of the dangers of the island and access restrictions.

Three black and silver Conex steel storage structures, approximately 20-25 feet long and 10 feet wide are located on the northern side of the island. The structures were originally moved onto the island by the Navy by crane and are used for storage of Service and Navy supplies, field camp equipment, and an ATV and mowing unit. The structures also provide emergency storm shelter for personnel.

Despite the varied human history on the island, all remnant structures are occasional, and are largely unnoticeable upon visitation. They are largely hidden from view by acres of thick shrubland and some small degree of undulating topography. The trails also disappear from view by the vegetation. The island is primarily a shrub-dominated, uninhabited place appearing to be subject to natural processes. The sights from the island include unobscured views of vast expanses of ocean to the south and west, and views of

Martha's Vineyard to the northeast where the visible buildings and lighthouses provide a sharp contrast. The sounds of the island largely consist of seasonal avifauna, wind and waves.

Conclusion

The presence of UXO may disqualify an area from wilderness consideration where "...human-caused hazards make that area unsafe for public use, such as contaminated sites or the existence of unexploded ordnance..." (610 FW 4.9D); however, public access has not been allowed on the island since the Navy began their operations, and the Refuge will continue to enforce the ban on public access in the future. Although evidence of past human occupation and use exists, none of the existing imprints of man individually stand out as obvious detractors from the natural characteristics of the island. On the whole, Nomans Land Island appears to have been affected primarily by the forces of nature. The Nomans Land Island inventory unit meets the naturalness criteria.

Evaluation of Outstanding Opportunities for Solitude or Primitive Recreation

In addition to meeting the size and naturalness criteria to qualify as WSA, an area must provide outstanding opportunities for solitude or primitive recreation (610 FW 4.10). The area does not have to possess outstanding opportunities for both solitude and primitive recreation, and does not need to have outstanding opportunities on every acre. Further, an area does not have to be open to public use and access to qualify under these criteria. Congress has designated a number of Refuge System wilderness areas that are closed to public access to protect ecological resource values.

Opportunity for solitude refers to the ability of a visitor to be alone and secluded from other visitors in the area. Primitive and unconfined recreation means non-motorized, dispersed outdoor recreation activities that do not require developed facilities or mechanical transport. These primitive recreation activities may provide opportunities to experience challenge and risk, self-reliance, and adventure.

These two opportunity "elements" are not well defined by the Wilderness Act but in most cases can be expected to occur together. However, an outstanding opportunity for solitude may be present in an area offering only limited primitive recreation potential. Conversely, an area may be so attractive for recreation use that experiencing solitude is not an option.

Conclusion

Nomans Land Island inventory unit meets the solitude criterion, but does not meet the primitive and unconfined recreation criterion. Nomans Land Island is and will remain closed to public access under the terms of the Navy transfer agreement, so there are no outdoor recreational opportunities. The island is three miles offshore from Martha's Vineyard. Views to the south and east are of an expanse of open ocean. Human visitors to the island are limited to Refuge and Navy personnel, contractors and authorized volunteers. In the future, access may be provided to members of the Wampanoag Tribe for cultural purposes. Because visiting parties are limited in size and visitors are confined to the existing access trails for safety, the predominantly shrub vegetation and topographic diversity is sufficient to allow one to escape the sights and sounds of other humans on the island. Solitude is the overwhelming force that these limited numbers of authorized employees, staff, volunteers and tribal members experience on Nomans Land Island.

Supplemental Values

Supplemental values are defined by the Wilderness Act as "ecological, geological, or other features of scientific, educational, scenic, or historic value."

Nomans Land Island is a vital and unique maritime resource for migratory birds along the Atlantic Flyway and provides a diversity of habitat for passerines, raptors, waterfowl, and seabirds. Several unique and significant natural plant community types exist on Nomans Land Island. Much of the Refuge habitat is maritime shrubland, which is considered rare in Massachusetts. This is found in coastal areas characterized

by patches of dense shrubs with scattered more open areas of low growth or bare ground. The small areas of maritime beach strand community and maritime dune community on the Refuge are also considered rare in Massachusetts.

Nomans Land Island also has cultural and historic supplemental values. The island is the setting for a recurring story in the oral traditions of the Wampanoag Tribe of Gay Head (Aquinnah). The Wampanoag tell that the first Indians on Martha's Vineyard were the giant, Maushop (Proto-Algonquian for "big man" or "giant") and his wife, Squant (derived from the seventeenth-century word, Squáuanit, the woman's god) and their children. One Maushop story recurs frequently, but was first collected in 1792 and published in the Massachusetts Historical Society Collections in 1806. In this story, Maushop separates Nomans Land Island from Martha's Vineyard by making marks with his toe across the beach, isolating a section of the isthmus that separates (or joins) them. Water rushed into the cuts on each side of the isthmus and eroded the rest of the beach, separating the islands (Simmons 1986). In fact, Nomans Land Island was likely attached to Martha's Vineyard until recent geological time, within the past 1,000 years. The separation of Nomans Land Island from the Vineyard reflects rising sea level, but the event that finally removed the spit was a storm (LaFarge 1933).

Nomans Land Island had permanent inhabitants in the eighteenth and nineteenth centuries. Two villages arose, Gull Town (also known as Crow Town; Wood 1978) and Jimmy Town, and there were over 20 dwellings and fishing shacks that were home to about 40 families. In addition, the island housed a church, school, store, gristmill, graveyard, and a boardinghouse for sailors. The three major occupations were fishing, raising sheep, and piloting.

These supplemental values provide unique opportunities for scientific research and off-site environmental education of cultural and historic resources. These values are not required for wilderness but their presence complements the requirements for wilderness designation. See Chapter 3 of the EA/draft CCP for a more complete description of these supplemental values.

Table C.1. Wilderness Inventory Area Findings Summary for Nomans Land Island Unit.

Refuge unit and acreage	(1) has at least 5,000 acres of land or is of sufficient size to make practicable its preservation and use in an unconfined condition, or is a roadless island;	2) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable;	(3a) has outstanding opportunities for solitude;	(3b) has outstanding opportunities for a primitive and unconfined type of recreation;	4) contains ecological, geological or other features of scientific, educational, scenic, or historical value.	Parcel qualifies as a wilderness study area (meets criteria 1, 2, and 3a or 3b)
Nomans Land Island 628 acres	Yes, the area is a roadless island.	Yes, impacts of past historic habitation and Navy use and minimal facilities related to current Refuge management activities are obscured by the forces of nature and substantially unnoticeable.	Yes. The island is approximately 3 miles from the mainland and offers sights and sounds of wilderness. No homes and other improvements are visible from most places on this island, except the view of the distant MA mainland coast. Authorized persons will be able to experience solitude when visiting the Refuge.	No. The area is closed to public access.	Yes. Diversity of waterbirds, rare maritime shrub and coastal dune habitat as well as cultural and historic values.	Yes.

Wilderness Study of Nomans Land Island NWR

The Nomans Land Island WSA (Map C-1; encompasses Refuge acquisition boundary (area outlined in white)) was further evaluated to determine suitability for designation, management, and preservation as wilderness (610 FW 4.13). Considerations in this evaluation included:

- quality of wilderness values; and
- capability for management as wilderness (or manageability) and minimum requirements/tools analysis.

This information provides a basis to compare the impacts of a range of management alternatives and determine the most appropriate management direction for each WSA.

Evaluation of Wilderness Values

The following information considers the quality of the WSAs' mandatory and supplemental wilderness characteristics.

Size

Nomans Land Island WSA is a 628-acre roadless island and meets the minimum size criterion.

Naturalness

Nomans Land Island WSA generally appears to have been affected primarily by the forces of nature, with the imprint of human uses and activities substantially unnoticeable. The impacts of human presence are small in terms of structures and constructed features and do not affect the overall naturalness of the WSA.

Outstanding Opportunities for Solitude

Solitude overwhelms the human spirit on Nomans Land Island.

Evaluation of Manageability and Minimum Requirements/Tools Analysis

Several management activities are required for the Service to meet responsibilities for managing Nomans Land Island WSA as a national wildlife refuge as specified in relevant legislation and policies.

Jurisdiction

In 1996 all military operations were ceased on the island, and an extensive surface ordnance sweep was conducted to ready the island for transfer to the Service. Management responsibility of the island was transferred from the Department of Defense to the Department of the Interior in 1998, under the Act Authorizing the Transfer of Certain Real Property for Wildlife. A transfer agreement was established by both parties to delineate the terms of the transfer and the ongoing responsibilities of both parties. These terms mandate that the Service keep the island closed to the public due to safety and liability hazards, that permanent warning signs be erected on the island, and that the Navy maintain the right to access the island to continue remedial operations to a level commensurate with that of an unstaffed national wildlife refuge. Close cooperation by both agencies since the transfer has allowed for UXO removal and resource management to positively affect the island.

The Navy retains responsibility for contaminants and Munitions and Explosives of Concern (MEC) that remain on Nomans Land Island as a result of past military operations. The Navy's current management of residual MEC is based on the Services designation of Nomans Land Island as an unstaffed national wildlife refuge. Any change to this designation that would result in increased exposure to MEC would require additional cleanup at the Service's expense.

As noted elsewhere in this document, the Navy has been working with the Service and the Massachusetts Department of Environmental Protection on the cleanup of the site since the mid-1990's. Contaminant remediation has taken place and extensive clearance operations were conducted in 1998. In addition there have been two limited follow-up MEC surface clearances, in 2003 and 2008, to address MEC that was exposed by erosion.

Consistent with the guidance and regulations set forth in CERCLA, the Navy will conduct five year reviews of the island so long as human use of the island is restricted. The nature and extent of these five year reviews by the Navy of Nomans Land Island are subject to the alternative chosen in the Navy's Phase III/Feasibility Study Report.

A draft Phase III/Feasibility Study (FS) Report has been prepared for the Navy which identifies and evaluates appropriate Remedial Action Alternatives (RAAs) to address the risk to safety for Nomans Land Island. Risks to the environment, human health, and public welfare have been previously addressed and closure attained. The feasibility of alternatives for remedial actions is evaluated according to criteria set forth in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the 2004 Naval Facilities Engineering Command - Guidance for Optimizing Remedy Evaluation, Selection, and Design, and is consistent with the guidance and regulations from the Massachusetts Contingency Plan. The public will be provided an opportunity to comment on the Phase III/Feasibility Study Report in 2010. Once that report is finalized, the Navy will prepare a Proposed Plan to indicate the preferred remedy.

We do not anticipate any conflicts with our proposed management, including wilderness, of the Refuge as a result of these final plans. Except for Navy activities, the Service has complete jurisdiction to manage Nomans Land Island NWR.

Manageability

In order to fulfill the Refuge purpose and uphold legal responsibilities, there are several generally prohibited uses that are necessary to continue on the island (by both the Service and the Navy) that may temporarily detract from its wilderness character. These actions would be subject to evaluation by a MRA. Though it may not be possible to eliminate these activities or uses, they would be modified if possible and as necessary to minimize any impacts that detract from wilderness character.

The use of motorboats is one such generally prohibited use. Located in the Atlantic Ocean three miles south of Martha's Vineyard, transportation to Nomans Land Island can only occur via boat. For reasons of safety and practicality, small motorized vessels are used to transport equipment and personnel to the island to establish temporary field camps and conduct biological survey and monitoring activities. Service biologists visit the Refuge a few times a year for periods of 1 to 3 days. Two moorings installed offshore the island by the Navy in 2008 are now property of the Service. The beaching of motorboats is necessary to unload personnel and supplies. The boats are then tied up at the established moorings located about 50 feet out in the water on the northeast side of the island. It is the intent of the Service to allow this activity to continue under a wilderness designation.

In addition, Refuge staff utilize an ATV with attached mowing unit to maintain the existing access trails on the island. The trails have been cleared of surface ordnance and are necessary to ensure safe access around and across the island for Refuge management activities.

There exist three Conex storage structures that are used for storage of the ATV and field camp supplies and equipment. The structures are necessary to provide emergency shelter for Refuge staff in the event of storm or hurricane activity. The storage structures do not require regular maintenance, but might have to be replaced in the event of damage or destruction from storms.

Installations include the eight warning signs that are erected around the perimeter of the island. These are required for public safety, are mandated in the transfer agreement signed with the Navy, and must be

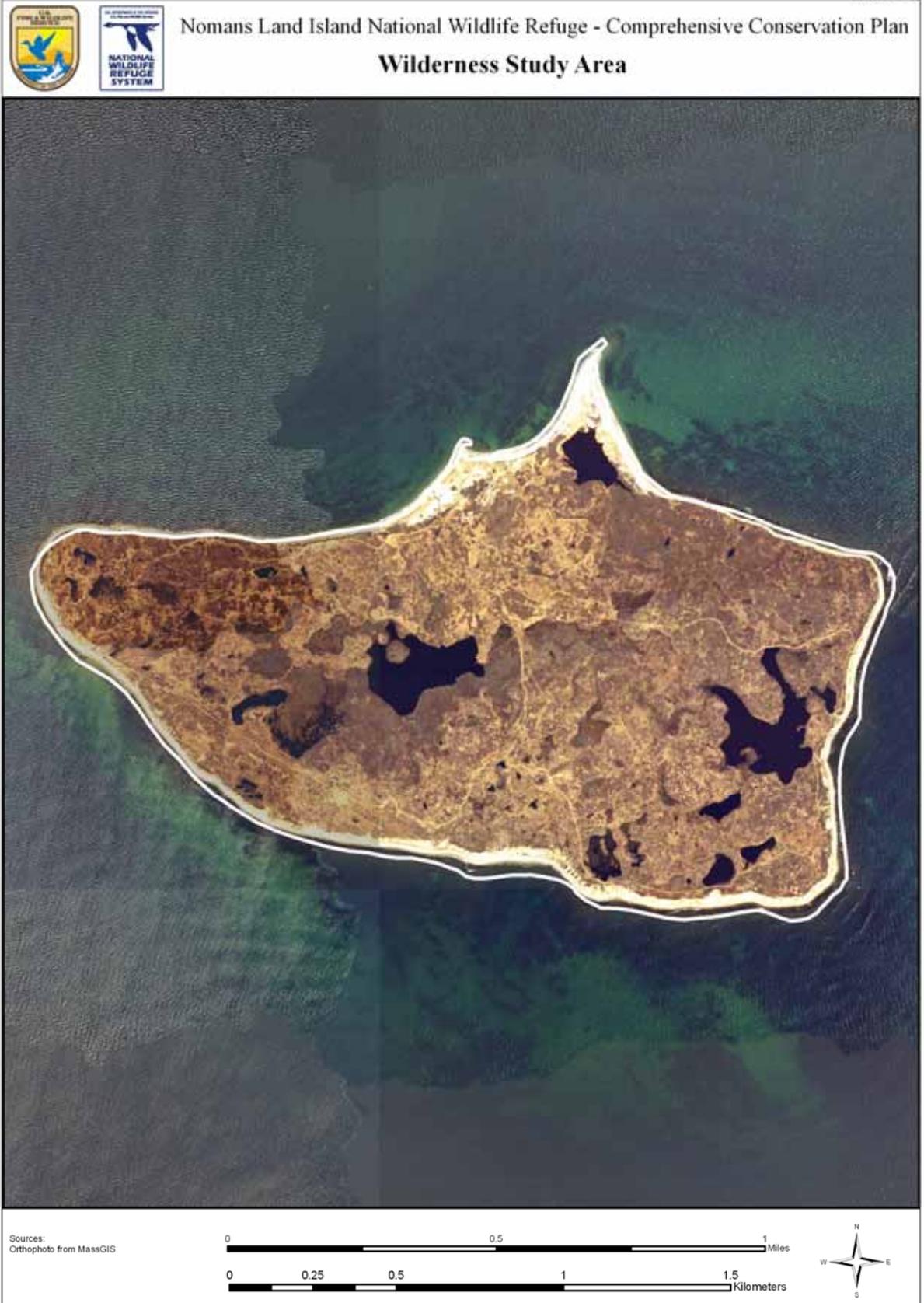
maintained by Refuge staff. Because of the size and weight of the signs, an ATV is required to transport new signs or materials when replacement or maintenance is required. In addition, smaller warning signs posted on Refuge beaches may also be installed, depending on the alternative chosen as part of the Navy's Phase III/Feasibility Study. Minimal remote weather equipment might be used to monitor weather and climate change on the island in the future.

Efforts to control invasive species on the Refuge began in 2004. Methods of control include hand pulling and herbicide application. In 2004 and 2005, Phragmites was aurally treated with glyphosate. Phragmites must be treated aurally because wetlands have not been cleared of UXO. Backpack sprayers with either glyphosate or triclopyr have been used to treat Japanese honeysuckle, Asiatic bittersweet, black swallow-wort, Phragmites, autumn olive and silver poplar. Poplar and autumn olive are also cut and the stumps treated with glyphosate. Purple loosestrife and spotted knapweed have been pulled by hand. Treatment has varied each year based on the timing of trips to the island, weather and staffing.

Remediation and management by the Navy in the past has required periodic surveillance and surface ordnance clearing. This has typically included surveillance by foot of burned areas using hand-held magnetometers to identify exposed and buried ordnance. The clearance operations have included retrieval of the ordnance, detonation and other activities to render it inert, and transport and disposal off the island. These activities typically required heavy equipment, which were brought in by barge to load and remove heavy UXO from the island. These operations will likely be necessary to some lesser extent in the future as frost heave and erosion may continue to expose sub-surface ordnance over time. Though the nature and extent of the Navy's future remedial actions will not be finalized until later this year, these clearance operations are short-term, temporary activities. They would be subject to evaluation by a MRA, and would not permanently impact the island's wilderness character.

None of the current or expected Refuge management activities or Navy operations and maintenance would permanently diminish the wilderness character of Nomans Land Island WSA. Proposed management activities and protocols for invasive species control, prescribed burning, predator control, and maintenance or stabilization of cultural sites and the Luce cemetery could be carried out using the minimum impact methods and tools, including the potential use of ground penetrating radar, to accomplish the work safely and with a minimal amount of impairment to wilderness character. The Nomans Land Island Refuge could be managed in the long-term to maintain wilderness character and supplemental values recognizing that using a "minimum requirements" approach would be required for all activities.

In summary, safety, practicality, and effectiveness require the occasional use of management programs and associated tools (some of which are generally prohibited by the Wilderness Act) to pursue achievement of Refuge purposes, goals and objectives. Current and proposed Refuge management would be consistent with wilderness designation and management of the Nomans Land Island WSA. Although occasionally diminished, the area's wilderness character and supplemental values would not be permanently impacted because of wilderness designation and the management described herein.



Alternatives

After evaluating the quality of wilderness values, manageability, minimum management requirements, the following alternatives were developed and analyzed for wilderness designation. The alternatives are described in detail in Chapter 2 of the EA/draft CCP.

Alternative A (Current Management)

This alternative is the “No Action” alternative required by the National Environmental Policy Act of 1969. Alternative A defines our current management activities, and serves as the baseline against which to compare the other alternatives. The island would remain closed to public access and Refuge lands and waters would be managed as they have been in the past to accomplish Refuge purposes in accordance with legal and policy guidance for the System.

Our habitat management would focus on allowing natural processes and prescribed burns conducted by the U. S. Navy for UXO removal operations to maintain the diversity of the maritime shrubland habitat that supports migratory and nesting birds of conservation concern such as the eastern towhee and gray catbird. Other than some invasive species management, only natural processes would affect the ponds and wetlands on the Refuge that provide important breeding habitat for Virginia rail and other species of conservation concern.

We would continue to maintain the 15 acres of herbaceous upland and 100 acres of intertidal beach and rocky shore to provide suitable habitat conditions for nesting American oystercatcher, piping plover and terns as well as other shorebird, colonial waterbird, and seabird species identified as conservation concern. We would continue to enforce the ban on public access along the shoreline to prevent public use activities that may pose safety risks due to UXO.

We would continue to work with our partners to monitor the island habitats for invasive plants and disease, and we would treat the vegetation to fight invasive species if we have available funding and staffing. Our biological monitoring and inventory program and habitat and trail management would continue at its current minimal level, and would be limited by safety concerns and UXO removal conducted by the Navy.

We would continue to protect cultural resources by strengthening our relationships with the Tribe and the Chilmark Historical Commission. We would consult with the Navy, Regional Archaeologist, and state and tribal historic preservation offices before committing to any ground-disturbing activities or the use of equipment such as ground penetrating radar, as with all alternatives.

Our visitor services programs would not change; minimal off-site interpretation of the island’s resources would occur via our website and virtual tour. Our staffing and facilities would remain the same. Existing staff for the refuge complex would remain in place, and the headquarters would remain at the Sudbury Office. No new staff would be hired specifically for this Refuge.

Alternative B (Enhanced Wildlife Management and Visitor Services)

In this alternative, the Service would take a more active role in managing habitats, research, monitoring and inventorying its priority natural and cultural resources. The Nomans Land Island WSA would not be recommended suitable for wilderness designation.

We would coordinate with the U.S. Navy on all management activities and to provide additional trails for monitoring and management access throughout the island. Under this alternative we would establish a fire-based management regime with prescribed burns to maintain 400 acres of desired shrubland habitat conditions to support focal nesting bird species and to provide critical shrubland stop-over habitat for migrating landbirds and butterflies. We would also explore the potential to introduce the New England

cottontail on the Refuge to support regional recovery efforts for this species of state and regional conservation concern.

We would manage the 15 acres of herbaceous upland vegetation that provides habitat for shorebirds and terns, and the 100 acres of marine intertidal beach and rocky shore habitats to benefit marine mammals, and nesting and migrating shorebirds. We would manage the 100-150 acres of freshwater wetland communities to support breeding marshbirds and native plant and animal communities, and control non-native invasive species and predators as necessary to support nesting focal species of conservation concern. We would create a habitat map for the Refuge and conduct inventories, research and monitoring on rare and special concern species.

Since no public use is allowed, we would increase visitor services programming off-site with environmental education and interpretation by developing partnerships with the Tribe, Town of Chilmark, and the Aquinnah Cultural Center. We would work with partners to conduct shoreline surveys for archeological resources at risk from erosion, develop protocols for collection and repository of artifacts and remains. We would increase refuge complex staff by 3 new positions for the Complex to allow for increased Biological, Visitor Services and Law Enforcement. Under this alternative we would focus on strengthening partnerships with the Tribe for ceremonial access. We would also increase access and management throughout the Refuge with the cooperation of the U.S. Navy.

Alternative C (Natural Processes Emphasis, Focal Species Management, and Wilderness Designation (Service-Preferred Alternative))

This alternative is the Service-preferred alternative for management of the Refuge over the next 15 years. It includes an array of less active management actions that, in our professional judgment, works best toward achieving the Refuge purposes, our vision and goals (including a goal to maintain the wilderness character of Nomans Land Island), and the goals of other state and regional conservation plans. We also believe it most effectively addresses the key issues that arose during the planning process. Lastly, it is the most realistic given the relatively modest increase in staffing and funding that is anticipated over the next 15 years.

Under this alternative, Nomans Land Island WSA would be recommended suitable for designation and inclusion in the NWPS. Since Congress has reserved the authority to make final decisions on wilderness designation, the wilderness recommendation is a preliminary administrative determination that would receive further review and possible modification by the Director, the Secretary of Interior, or the President. However, the analysis of environmental consequences is based on the assumption that Congress would accept the recommendation and designate Nomans Land Island NWR as wilderness. The information and analyses in the CCP/EA would be used to compile a wilderness study report and legislative EIS to accompany the wilderness recommendation.

The Nomans Land Island Wilderness would be managed according to the provisions of the Wilderness Act and Service Wilderness Stewardship Policy (610 FW 1-3). The wilderness area would be managed to accomplish Refuge purposes and the Refuge System mission, while also preserving wilderness character and natural values for future generations. Uses that are “generally prohibited” in wilderness (use of motorized vehicles, motorized equipment, and mechanical transport) would be allowed on the island for emergency purposes and when necessary to meet minimum requirements for the administration of the area as wilderness and to accomplish Refuge purposes. “Generally prohibited uses” and proposed or new Refuge management activities would be evaluated through a minimum requirements analysis (MRA) to determine if the activities are necessary and to identify impacts and mitigating measures. The island would continue to be accessible by motorboat.

Alternatives considered but eliminated from detailed study

Federal agencies are required by NEPA to rigorously explore and objectively evaluate all reasonable alternatives and to briefly discuss the reasons for eliminating any alternatives that were not developed in detail (40 CFR 1502.14). It was determined that there was no benefit in analyzing a partial wilderness alternative. There are no feasible or practical boundary adjustments that would improve the manageability of the Nomans Land Island WSA.