

Appendix C



Mao Lin/USFWS

Exemplary tussock-sedge bog turtle habitat.

Wilderness Review

- Introduction
- Documentation of Wilderness Inventory
- Inventory Criteria
- Inventory Conclusions

Introduction

The purpose of a wilderness review is to identify and recommend to Congress the lands and waters of the National Wildlife Refuge System that merit inclusion in the National Wilderness Preservation System (NWPS). Wilderness reviews are required elements of CCPs, are conducted in accordance with the refuge planning process outlined in the Fish and Wildlife Service Manual (602 FW 1 and 3), and include compliance with the National Environmental Policy Act (NEPA) and regulations on public involvement.

Wilderness Study Areas (WSAs) are areas that meet the criteria for wilderness identified in the Wilderness Act. Section 2(c) of the act gives the following definition:

“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 untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act 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’s work 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 historical value.”

The wilderness review process has three phases: inventory, study and recommendation.

- In the inventory phase, we identify lands and waters that meet the minimum criteria for wilderness.
- In the study phase, we evaluate a range of management alternatives to determine whether a WSA is suitable for wilderness designation or management under an alternative set of goals and objectives that do not involve wilderness designation.
- In the recommendation phase, we forward in a wilderness study report the suitable recommendations from the Director through the Secretary and the President to Congress. We prepare that report after our Regional Director has signed the record of decision for the final CCP.

We manage any areas recommended for designation to maintain their wilderness character in accordance with the management goals, objectives and strategies in the final CCP, until Congress makes a decision or we amend the CCP to modify or remove the wilderness proposal.

Documentation of Wilderness Inventory

The purposes of the wilderness inventory phase are

- to identify areas of System lands and waters with wilderness character and establish those areas as WSAs;
- to identify areas of Refuge System lands and waters that do not qualify as WSAs; and
- to document the inventory findings for the planning record.

Inventory Criteria

Introduction

The wilderness inventory is a broad look at each planning area (Wilderness Inventory Area [WIA]) to identify WSAs. A WSA is an area of undeveloped federal land that retains its primeval character and influence, without permanent improvements or human habitation, and further, meets the minimum criteria for wilderness as identified in section 2(c) of the Wilderness Act. Only federal lands owned in fee are eligible to be considered WSAs and recommended further for wilderness designation and inclusion in the NWPS.

Minimum Wilderness Criteria

A WSA is required to be a roadless area or an island of any size, meet the size criteria, appear natural, and provide for solitude or primitive recreation.

Roadless—Roadless refers to the absence of improved roads suitable and maintained for public travel by means of motorized vehicles primarily intended for highway use. A route maintained solely by the passage of vehicles does not constitute a road.

The following factors were the primary considerations in evaluating the roadless criteria.

- A. The area does not contain improved roads suitable and maintained for public travel by means of motorized vehicles primarily intended for highway use.
- B. The area is an island, or contains an island that does not have improved roads suitable and maintained for public travel by means of motorized vehicles primarily intended for highway use.
- C. The area is in federal fee title ownership.

Size—The size criteria can be satisfied if an area has at least 5,000 acres of contiguous, roadless, public land, or is sufficiently large that its preservation and use in an unimpaired condition is practicable.

The following factors were the primary considerations in evaluating the size criteria.

- D. An area of more than 5,000 contiguous acres. State and private lands are not included in making this acreage determination.
- E. 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.
- F. 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.
- G. An area of less than 5,000 contiguous 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.

Naturalness—The Wilderness Act, section 2(c) defines wilderness as an area that “generally appears to have been affected primarily by the forces of nature with the imprint of human work substantially unnoticeable.” The area must appear natural to the average visitor, rather than “pristine.” The presence of historic landscape conditions is not required.

An area may include some human impacts provided they are substantially unnoticeable in the unit as a whole. In evaluating the naturalness criteria, we also consider significant hazards caused by humans, such as the presence of unexploded ordnance from military activity and the physical impacts of refuge management facilities and activities. An area may not be considered unnatural in appearance solely on the basis of the sights and sounds of human impacts and activities outside the boundary of the unit. We considered the cumulative effects of those factors, in conjunction with the size of the land base and its physiographic and vegetative characteristics in our evaluation of naturalness.

The following factors were the primary considerations in evaluating naturalness.

- H. The area appears to have been affected primarily by the forces of nature with the imprint of human work substantially unnoticeable.
- I. The area may include some human impacts provided they are substantially unnoticeable in the unit as a whole.
- J. The presence of unexploded ordnance from military activity or the existence of other significant hazards caused by humans.
- K. The presence of physical impacts of refuge management facilities and activities.

Solitude or Primitive and Unconfined Recreation.—A WSA must provide outstanding opportunities for solitude or primitive and unconfined recreation. The area does not have to possess outstanding opportunities for both elements, 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 this criteria; Congress has designated a number of wilderness areas in the Refuge System that are closed to public access to protect resource values.

Opportunities for solitude refer 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 are compatible and 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 elements are not well defined by the Wilderness Act, but can be expected to occur together in most cases. 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.

The following factors were the primary considerations in evaluating outstanding opportunities for solitude or primitive unconfined recreation.

- L. The area offers the opportunity to avoid the sights, sounds and evidence of other people. A visitor to the area should be able to feel alone or isolated.
- M. The area offers non-motorized, dispersed outdoor recreation activities that are compatible and do not require developed facilities or mechanical transport.

Supplemental Values.— The Wilderness Act states that an area of wilderness may contain ecological, geological, or other features of scientific, educational, scenic or historical value. Supplemental values of the area are optional, but the degree to which their presence enhances the area's suitability for wilderness designation should be considered. The evaluation should be based on an assessment of the estimated abundance or importance of each of the features.

Inventory Conclusions

Evaluation of the Roadless Requirement

Paved, state- or county-owned roads almost entirely outline the Wallkill River refuge (see map C-1, below). Only small sections of the northern and southeastern edges of the refuge are unbounded by roads.

In addition, the linear orientation of the refuge (9 miles long by an average of 1 mile wide) limits its practicable management as a wilderness. A number of maintained roads bisect the refuge, further limiting its roadless areas and interrupting any given area with a number of unimpaired acres. Three roads completely bisect the refuge in an east-west direction; two additional roads cross about half of the refuge. Another seven roads border the refuge for a half-mile or more. The greatest distance between any two of those roads is 3.5 miles. Any point on the refuge lies within at least 0.75 miles of a road. Two of the roads are state highways traveled by thousands of cars per day. Many of the other roads are county highways with large volumes of traffic as well.

In addition to the paved roads, a number of gravel and dirt roads interrupt the refuge landscape. Although none of them receives much traffic, they make it impracticable to manage areas of the refuge as wilderness. Also running through the center of the refuge is a raised, abandoned railroad bed, about half of which is a right-of-way for a gas pipeline. The railroad bed interrupts any areas in unimpaired condition, and further fragments any wilderness character of the refuge. A refuge visitor would always be within a half mile of one of those unpaved roads or railroad beds. There are no islands associated with the Wallkill River.

Evaluation of the Size Requirement

The Service now owns 5,106 acres in the 7,500-acre refuge acquisition boundary. That minimally qualifies for the size criterion of a WSA. However, several inholdings would affect our ability to manage for wilderness. A few hundred acres within the current acquisition boundary are ineligible for purchase by the Service because permanent easements require their maintenance as agricultural land. Finally, the refuge lacks a large, core area; instead, it stretches along a river valley.

Evaluation of the Naturalness Requirement

Almost all the lands of the Wallkill River refuge are reclaimed agricultural lands bisected by a host of transportation corridors (railroad beds, agricultural roads, and logging roads) clearly visible on the landscape. Drained wetlands and irrigated fields have altered the natural hydrology of the land. Little remains of the region's historic bottomland hardwood forest and white cedar swamps. Managed grasslands, old fields, young woodlands, and middle-aged mixed forests dominate the landscape.

Throughout the refuge, the human imprint on the landscape is ubiquitous and easily recognizable. Foundations and home sites are commonplace, as are non-native species such as privet, daffodils, and Japanese barberry. Stone walls and old barbed wire fences traverse the landscape.

The area around the refuge is a mix of farmland and residential and commercial development. More than 5,000 people live within a quarter-mile of the refuge. Shopping centers, gas stations and restaurants border the refuge, as do a rock quarry and a soil mining operation.

No history exists of military use or unexploded ordnance on the refuge. Except for the occasional cellar hole, few other manmade hazards exist.

The management activities on the refuge have a moderate impact on its landscape. The refuge headquarters, maintenance facilities and structures affect an area of about 50 acres, separated into five sites. Additional refuge structures affect another five sites. The refuge also manages 335 acres of moist soil management units, which would be excluded from wilderness consideration because of the intense management activities required to maintain this habitat type.

Various forms of noise pollution, such as airplanes bound for one of New York City's four major airports, automobile traffic on one of the nearby roads, the traffic of canoes and kayaks on the Wallkill River, the chorus of lawnmowers in suburban areas, and farm tractors haying fields, make finding solitude on the refuge a challenge.

Although visitors occasionally can find solitude at a sandstone outcrop southwest of Kelly Road, nowhere on the refuge can they find "challenge and risk, self-reliance, and adventure," especially in comparison with the wilder areas of the Catskills and Adirondacks only a few hours away.

Furthermore, we close any area on the refuge that could provide a fleeting sense of solitude for all public activities except hunting. During the hunting season, those areas certainly would not meet the naturalness criteria. No supplemental values at the Wallkill River refuge require consideration for this wilderness review.

Conclusion

Based on the inventory above, we do not recommend any WSAs or the further evaluation of wilderness potential on the refuge. Although the 5,106-acre refuge meets the minimum size criteria, the shape of the refuge is linear, and its land is fragmented by maintained roads, defunct railroad beds, and a host of other corridors. Furthermore, in our opinion, the refuge lands do not meet the naturalness criteria, nor do they provide outstanding opportunities for solitude, primitive or unconfined recreation. Although 9 miles of the undeveloped Wallkill River runs through the middle of the refuge and offers scenic supplemental values, that is not enough to warrant the status of a WSA.

If we purchase from willing sellers the six privately owned tracts totaling more than 100 acres in the area around Kelly Road, they could create a contiguous land base and an opportunity for restoration, thus triggering an additional wilderness review in the future. However, that purchase is not a viable management consideration at this time.

Although the refuge shares part of its boundary with protected lands that contain the Appalachian Trail, no lands are contiguous with other federal-agency-owned lands now under review for wilderness.

