

Hunting Management Plan

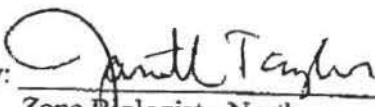
Wallkill River National Wildlife Refuge

January 2004

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I. Introduction

Wallkill River National Wildlife Refuge (NWR) was established by Congress on November 16, 1990 by authorizing legislation Public Law 101-593. The refuge is located in Sussex County, New Jersey and Orange County, New York. It follows roughly nine miles of the Wallkill River from New Jersey Route 23 north to just above the New York-New Jersey State line. There are about 7,500 acres in the approved acquisition boundary. As of January 2004, the U.S. Fish and Wildlife Service (Service) had purchased 4,796 acres. Appendix I shows the approved acquisition boundary of the refuge and current land holdings.

When acquisition is complete, the refuge will protect 4,200 acres of freshwater wetlands and 3,300 acres of adjacent upland. Wetland habitat types include 1,600 acres of palustrine forest, 1,500 acres of emergent marsh, 600 acres of wet meadow, 400 acres of scrub-shrub marsh, and 100 acres of open water. Upland habitat types include 2,500 acres of agricultural land and 800 acres of mixed hardwood forest.

In New Jersey, twenty-nine Federally-listed threatened or endangered species have been noted. The bog turtle, a resident species on the refuge, is listed as threatened under the Federal Endangered Species Act. Nineteen New Jersey State listed endangered and threatened species and fourteen New York State listed species are known to use the Wallkill River bottomlands and associated uplands. Most of these species have been confirmed on the refuge, including American bittern, barred owl, bog turtle, Cooper's hawk, grasshopper sparrow, northern harrier, osprey, savannah sparrow, sedge wren, short-eared owl, vesper sparrow, and wood turtle.

Migratory waterfowl which use the refuge include the American black duck, mallard, green-winged teal, blue-winged teal, wood duck, Canada goose, common merganser, hooded merganser, ring-necked duck, pintail, gadwall, American wigeon, and bufflehead. Common shore and wading birds include lesser yellowlegs, solitary sandpiper, great blue heron, and Virginia rail, among others.

Raptors which use the refuge for nesting and/or feeding include the great horned owl, barn owl, barred owl, eastern screech-owl, American kestrel, red-tailed hawk, and northern harrier. One hundred twenty-five species of songbirds also use the refuge during some portion of their annual cycle, including bank swallow, scarlet tanager, tufted titmouse, blue-winged warbler, cedar waxwing, eastern bluebird, eastern phoebe, and indigo bunting.

Resident wildlife includes a variety of game and non-game species of birds, mammals, fish, reptiles, and amphibians. Examples of resident birds and mammals include wild turkey, whitetail deer, beaver, muskrat, river otter, coyote, mink, raccoon, and species of voles, shrews, and mice. Reptiles and amphibians include the eastern painted turtle, bog turtle, black racer, gray tree frog, and bullfrog. There are several species of particular management concern on the refuge. These species are listed in Appendix II.

Fish species found in the Wallkill River within the refuge acquisition boundary include largemouth bass, smallmouth bass, yellow perch, pumpkinseed, common carp, white sucker, johnny darter, blacknose and longnose dace, creek chubsucker, eastern mudminnow, and cutlips minnow.

Refuge staff are currently working on land acquisition, habitat management planning, wildlife inventories, and planning for visitor use activities and facilities. Current habitat management includes moist soil and grassland management within refuge impoundments and grassland restoration on former agricultural lands. Planned visitor facilities and activities include wildlife observation trails and platforms, environmental education and interpretation, photography, hunting, trapping, and fishing.

The primary changes incorporated in this document from the station's Hunt Management Plans of 1993 and 1997 (U.S. Fish and Wildlife Service) include the addition of black bear as a species to be taken and updates of several miscellaneous facts (e.g. acreage, statutory authorities, law enforcement resources, program costs).

II. Conformance with Statutory Authorities

The U.S. Fish and Wildlife Service maintains a policy of permitting hunting on refuges where it is compatible with the purposes for which the refuge was established and the mission of the National Wildlife Refuge System. The Refuge Manual, Chapter 8, Section 5.1 states that "The Service has long recognized that hunting is an integral part of a comprehensive wildlife management program and that significant positive benefits can be attributed to a well-managed hunt. In addition, hunting is an acceptable, traditional form of wildlife-oriented recreation that can be, and is sometimes used as, a management tool to effectively manipulate wildlife population levels" (U.S. Fish and Wildlife Service 1985).

The following laws, regulations, and Executive Order relate to hunting on Federal lands:

1. The National Wildlife Refuge Administration Act of 1966 (16 USC 668dd-668ee; 80 Stat. 927), as amended, permits the uses of refuges provided that the proposed use is compatible with the primary purpose for which the refuge was established.
2. The Refuge Recreation Act of 1962 (16 USC 460k 1-4; 76 Stat. 653), as amended, authorizes recreational uses on refuges that do not interfere with the area's primary purpose. The act also authorizes the charging of fees for visitor activities.
3. The Fish and Wildlife Act of 1956 (16 USC 742a-742j; 70 Stat. 1119), as amended, authorizes development, advancement, management, conservation, and protection of fish and wildlife resources.

4. Title 50 of the Code of Federal Regulations Section 29.1 provides for public and/or private use of refuges, when the activity is not incompatible with the purposes for which the refuge was established.
5. Title 50 of the Code of Federal Regulations Section 32.1 indicates that the opening of a national wildlife refuge to hunting will be dependent upon the provisions of law applicable to the area and upon a determination by the Secretary of the Interior that the opening of the area to the hunting of migratory game birds, upland game, or big game will be compatible with the principles of sound wildlife management and will otherwise be in the public interest.
6. Title 50 of the Code of Federal Regulations Section 32.2 provides provisions which apply to each person while engaged in public hunting on a national wildlife refuge.
7. Title 50 of the Code of Federal Regulations Section 32.3 explains the procedure for publication of special regulations.
8. Executive Order 12996, "Management and General Public Use of the National Wildlife Refuge System" recognizes compatible wildlife-dependent recreational activities involving fishing, among others, as priority general public uses of the National Wildlife Refuge System.
9. National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57) identifies priority public uses that are to be given enhanced consideration in refuge planning and management, when compatible with the purposes of the refuge and the mission of the National Wildlife Refuge System. These wildlife-dependent priority public uses include hunting.

It has been determined that a public migratory bird, deer, turkey, and bear hunting program, conducted in accordance with State regulations and refuge specific regulations, will not interfere with the purposes for which the refuge was established.

The refuge is used annually by approximately 600 deer hunters, 120 turkey hunters, and 100 migratory bird hunters. These estimates are derived from sale of refuge permits for the 2002-2003 and 2003-2004 hunting seasons.

The estimated costs associated with a deer, migratory bird, and turkey hunting program and described in U.S. Fish and Wildlife Service (1993 and 1997). The estimated costs associated with a bear hunting program are as follows:

Initial Costs

Activity	Material Costs	Labor Costs	Total
Document Preparation/ Review/Public Comment	\$100	\$4,000	\$4,100
Posting/Signs	\$750	\$1,000	\$1,750
Law Enforcement/ Public Outreach	\$500	\$1,000	\$1,500
Totals	\$1,350	\$6,000	\$7,350

Annual Costs

Activity	Material Costs	Labor Costs	Total
Document Preparation and Review	\$100	\$500	\$600
Posting	\$500	\$2,000	\$2,500
Law Enforcement/Public Outreach/Permits	\$400	\$5,000	\$5,400
Totals	\$1,000	\$7,500	\$8,500

There are sufficient funds available within the annual operating budget to conduct the refuge hunt program. Most of the cost of the hunt will come out of minimum level funding. There will be little difference in the amount of posting, law enforcement, or public outreach required, regardless of whether or not there is a bear hunting program as proposed.

III. Statement of Objectives

The National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57) identifies hunting as a priority wildlife-dependent recreational use of the Refuge System. Priority public uses are to receive priority consideration in refuge planning and management when they are determined to be compatible with the purposes of the refuge.

Wallkill River NWR was established for the following purposes:

- (1) to preserve and enhance refuge lands and waters in a manner that will conserve the natural diversity of fish, wildlife, and plants, and their habitats for present and future generations;

- (2) to conserve and enhance populations of fish, wildlife, and plants within the refuge, including populations of black ducks and other waterfowl, raptors, passerines, and marsh and water birds;
- (3) to protect and enhance the water quality of aquatic habitats within the refuge;
- (4) to fulfill international treaty obligations of the United States with respect to fish and wildlife and their habitats; and
- (5) to provide opportunities for compatible fish and wildlife-dependent recreation.

The objectives of the refuge migratory bird and big game hunting programs are:

- (1) to maintain wildlife populations at levels compatible with refuge habitats;
- (2) to provide the public with a quality hunting experience;
- (3) to decrease genetic hybridization between resident and migratory Canada geese by reducing the resident goose population; and
- (4) to provide the opportunity to utilize a renewable natural resource.

IV. Assessment

An assessment of refuge resources can be found in the Environmental Assessment prepared for the refuge Visitor Services Program (U.S. Fish and Wildlife Service 1997a). The station's Hunting Management Plan addresses the effects of opening the refuge to deer hunting (U.S. Fish and Wildlife Service 1993) migratory bird hunting and turkey hunting (U.S. Fish and Wildlife Service 1997b). This document addresses the impacts of opening the refuge to bear hunting. Further, formal Compatibility Determinations have been completed for big game, migratory bird, and turkey hunting. These documents address environmental impacts, population status, inter-specific competition, and effects of hunting on non-target species. In summary, the hunt program will not result in unacceptable impacts to refuge natural or cultural resources. The species proposed for hunting will not be adversely affected by the hunt program, provided the refuge-specific regulations listed in this document are followed.

V. Description of the Hunting Program

A. Guidelines for Hunt Program

The following administrative procedures for refuge hunting programs can be found in Chapter 8, Section 5.5 of the Refuge Manual (U.S. Fish and Wildlife Service 1985):

"Refuge hunting programs should be planned, supervised, conducted, and evaluated to promote positive hunting values and hunter ethics such as fair chase and sportsmanship. In general, hunting on refuges should be superior to that available on other public or private lands and should provide participants with reasonable harvest opportunities, uncrowded conditions, limited interference from or dependence on mechanized aspects of the sport. This may require zoning the hunt unit and limiting the number of participants. Good planning will minimize the controls and regimentation needed to achieve hunting objectives."

B. Areas Open to Hunting

Wallkill River Refuge currently includes 4,796 acres. The Service is in the process of acquiring more land, and as each tract is acquired it will be considered for inclusion in the refuge hunt program. Certain tracts may be closed to hunting based on safety factors, size of tract, legal restrictions, access, compatibility with refuge objectives, etc. Only areas in New Jersey will be opened to hunting, as shown in Appendix III.

C. Species to be Taken

1. Migratory Game Birds. This includes the take of ducks, geese, mergansers, rails, gallinules, coots, woodcock, and snipe. The take of all other migratory birds will be prohibited.

It is Service policy to open no more than 40 percent of a refuge to migratory bird hunting when that refuge is an "inviolate sanctuary." This refuge is not considered an inviolate sanctuary, but Service Regional Directors retain the authority to institute this policy on all refuges within their responsibility and Region 5 policy is to do so. An exception might be to open more than 40 percent of the refuge to resident Canada goose hunting.

The season and bag limits for these species will coincide with the appropriate State regulations. The use of retrieving and/or pointing dogs for migratory game bird hunting will be permitted; however, the dogs must be under the hunter's control at all times, and groups of three or more dogs in the field per hunting party will be prohibited. Each hunter will be limited to 25 non-toxic shells and must use a dog, non-motorized boat, or waders to quickly retrieve downed waterfowl. Permanent and pit blinds will not be allowed. Temporary blinds and boats must be removed at the end of each hunting day.

2. Big Game. The take of white-tailed deer and wild turkey will be permitted on those refuge tracts as indicated in Appendix III in accordance with the refuge's Hunting Management Plan (U.S. Fish and Wildlife Service 1993 and 1997).

Black bear hunting will be permitted on the refuge in accordance with the New Jersey season and regulations. These regulations do not permit baiting, use of dogs, or harvest of denning bears. Harvest will be by shotgun only and is essentially incidental take of bears during the six-day firearms deer season. Bear hunting will be permitted on those tracts indicated in Appendix III.

The number of hunters pursuing bear on the refuge may be limited initially. The State offered 10,000 bear hunting permits in 2003. Approximately, 5,500 hunters applied for the permit and completed the State-required bear-hunting course. However, the State does not regulate bear hunters on a zone basis. Thus, the refuge may further limit the number of bear hunters to ensure a quality hunt.

The black bear hunting program is primarily offered as a wildlife-dependent public use opportunity in compliance with the statutory authorities governing the refuge with no adverse impact upon the bear population. The 1997 Black Bear Management Plan (McConnell et al 1997) recognized that the cultural carrying capacity had been reached in northern New Jersey and the bear population could sustain a limited, regulated hunt. The New Jersey Fish and Game Council reopened the black bear hunting season in 2003 to reduce the bear population and to reduce bear/human conflicts. The refuge staff receives 25 to 50 complaints annually from neighbors regarding nuisance refuge bears. The New Jersey Division of Fish and Wildlife conservatively estimates that the region in which the refuge lies supports two adult bears per square-mile (Carr and Burgess 2003). Hence, the refuge sustains approximately 25 adult bears within its acquisition boundary. The bear hunter success rate in 2003 was 6%. Thus, if 100 hunters pursue bear on the refuge (estimated from hunt permits issued for the 2003 six-day firearms deer season and staff field observations), approximately six adult bears will be harvested from the refuge annually. The refuge does not collect further data on its bear population. In absence of this data, the refuge defers to the State's assessment of harvest sustainability.

D. Justification for Requiring Permits

When hunting on Wallkill River NWR, hunters will be required to possess a signed copy of the current refuge hunting permit. The permit is accompanied by a leaflet describing refuge regulations. The leaflet and permit will be updated each year. The permit will be available from the refuge office. The refuge charges a \$10 fee for these permits to administer and facilitate the hunting program. Currently, the refuge does not place a limit on the number of migratory bird or big game permits issued. However, the Service may limit the number of permits to ensure a high-quality hunt or to achieve management objectives.

E. Refuge Staffing

The refuge currently has one full-time law enforcement officer on staff. The officer will maintain regular patrols and will conduct compliance checks on a regular basis. Assistance from Service Special Agents and State conservation officers will be provided on an occasional basis.

VI. Measures Taken to Avoid Conflicts with other Management Objectives

A. Biological Conflicts

There is a slight possibility that big game hunters might inadvertently wander into bog turtle habitat. Fall and winter hunting is not expected to have any impact on bog turtles. An intra-Service section 7 consultation has been conducted. Closure to hunting of the moist soil management area at the former Liberty Sod Farm will eliminate hunter disturbance to migratory waterfowl. It is not anticipated that hunting activities on the other parts of the refuge will adversely affect migratory game birds, resident turkey, or migrating/breeding songbird populations. This is discussed in more detail in the environmental assessment for the refuge's Visitor Services Plan, prepared in 1997.

B. Visitor Use Conflicts

The greatest potential visitor use conflict is between hunters and non-consumptive refuge users. There is a possibility that waterfowl hunters and anglers might use the same area, particularly during a September resident Canada goose hunt. Information on kiosks and brochures will remind all consumptive and non-consumptive users of the other activities that may be ongoing at the same time. If needed, fishing will be restricted in areas open during the September resident Canada goose hunt. Migratory bird hunting for all species other than resident Canada geese will be restricted to areas away from wildlife observation trails. Turkey hunting will cease by noon, thereby minimizing conflicts with non-hunters. Signs are posted at refuge trailheads to inform visitors of big game hunting seasons and periods of concurrent use by hunters and non-hunters.

C. Administrative Conflicts

No administrative conflicts are anticipated.

VII. Conduct of the Hunt

A. Federal Regulations

These are in addition to State regulations, and will take precedence where they are more restrictive than State regulations. General stipulations for refuge hunting as contained in Chapter 50, Section 32 of the Code of Federal Regulations state that hunters must have a valid State hunting license, valid Migratory Bird Hunting and Conservation Stamp ("Duck Stamp") for waterfowl hunting, comply with all current Federal hunting regulations including the migratory bird regulations (Chapter 50, Section 20 of the Code of Federal Regulations), and comply with all State hunting and safety regulations. Additionally, hunters must comply with the terms and conditions established for access to the refuge.

Pertinent Federal regulations for hunting on refuge lands follows:

- (1) The use or possession of lead shot while hunting migratory birds is prohibited. Only non-toxic shot is allowed. Lead shot is allowed for turkey hunting.
- (2) The use of all terrain vehicles (ATVs) or other vehicles on refuge lands is prohibited.
- (3) The use of nails, wire, bolts, etc., to attach a stand to a tree is prohibited.
- (4) Hunting over bait is prohibited.
- (5) The use or possession of alcoholic beverages while hunting is prohibited;
- (6) Big game hunters during firearms big game seasons (except spring gobbler) must wear in a conspicuous manner a minimum of 400 square-inches of solid hunter safety orange clothing or material on the head, chest, and back.

B. State Regulations

All State regulations will apply to hunting on the refuge, and all State licenses, tags and stamps will be required.

C. Refuge-Specific Hunting Regulations

In addition to the foregoing State and Federal regulations, the following refuge-specific hunting regulations will govern the hunting program on Wallkill River NWR:

1. Each hunter must have in their possession a signed copy of the current Wallkill River NWR hunting permit.
2. Only the following game species may be taken on the refuge: deer, bear, wild turkey, ducks, geese, mergansers, rails, gallinules, coots, woodcock, and snipe.
3. All game that is harvested shall be retrieved, if possible, and retained in the custody of the hunter in the field.
4. A permanent no-hunting zone will be located at the former Liberty Sod Farm.
5. Hunting birds with pointing and/or retrieving dogs will be allowed, but groups of three or more dogs in the field per hunting party will be prohibited.
6. Night hunting will be prohibited.

7. No camping will be allowed on refuge lands.
8. All accidents and injuries must be reported to the refuge office as soon as possible.
9. Waterfowl hunters will be limited to 25 shells per day.
10. Permanent and pit blinds will not be allowed. Temporary blinds and boats must be removed at the end of each hunting day.

D. Anticipated Public Reaction

Before the refuge was established, Service staff participated in many public meetings. The public voiced support for hunting on the refuge, since hunting is a traditional activity in Sussex County. Service staff assured the public that hunting would be considered on the refuge where and when it was compatible with refuge objectives. Currently, most local residents and business people support hunting on the refuge. There may be reaction to the refuge hunts by anti-hunter groups. Response to any demonstrations or protests will be coordinated through the Regional Office, and may require assistance from refuges who have dealt with these situations in the past.

E. Hunter Application and Registration Procedures

All persons hunting on the refuge will be required to obtain a refuge hunting permit. To receive this permit, hunters must demonstrate possession of all necessary State licenses, tags and stamps. Migratory game bird hunters must possess a Federal Migratory Bird Hunting and Conservation Stamp ("Duck Stamp") and Harvest Information Program number. Bear hunters must also show proof of completion of the State's three-hour bear hunting course. All hunters must pay a \$10 permit application fee.

F. Description of the Hunter Selection Process

Migratory bird and big game hunter numbers will not be limited initially. Refuge hunting permits will be available upon request from the refuge manager. Hunter numbers may be limited in the future if necessary to promote safety, relieve hunter congestion or public use conflicts or ensure compatibility with other refuge objectives.

G. Media Selection for Announcing and Publicizing Hunts

The draft Visitor Services Plan (U.S. Fish and Wildlife Service 1996) was made available for public review. Extensive media coverage in local newspapers and on one local radio station informed the public about the availability of these documents.

The public will be informed of refuge hunting regulations through news releases and Refuge Hunting Regulations Leaflets. The address and telephone number of the refuge will be included

in the New Jersey hunting brochures so interested people can contact the refuge. An annual program update will be filed each year as required, outlining any changes in the current hunt program. Rules and regulations will be published in the Federal Register as required.

VIII. Literature Cited

Carr, P. C., and K. Burgess. 2003. Black bear in New Jersey: status report 2003. New Jersey Division of Fish and Wildlife, Bureau of wildlife Management, Hampton, New Jersey, USA.

Executive Office of the President. 1996. Management and General Public Use of the National Wildlife Refuge System. Executive Order 12996 (March 25, 1996).

McConnell, P. A., J. R. Garriss, E. Pehek, and J. L. Powers. 1997. Black bear management plan. New Jersey Division of Fish, Game, and Wildlife, Trenton, New Jersey, USA.

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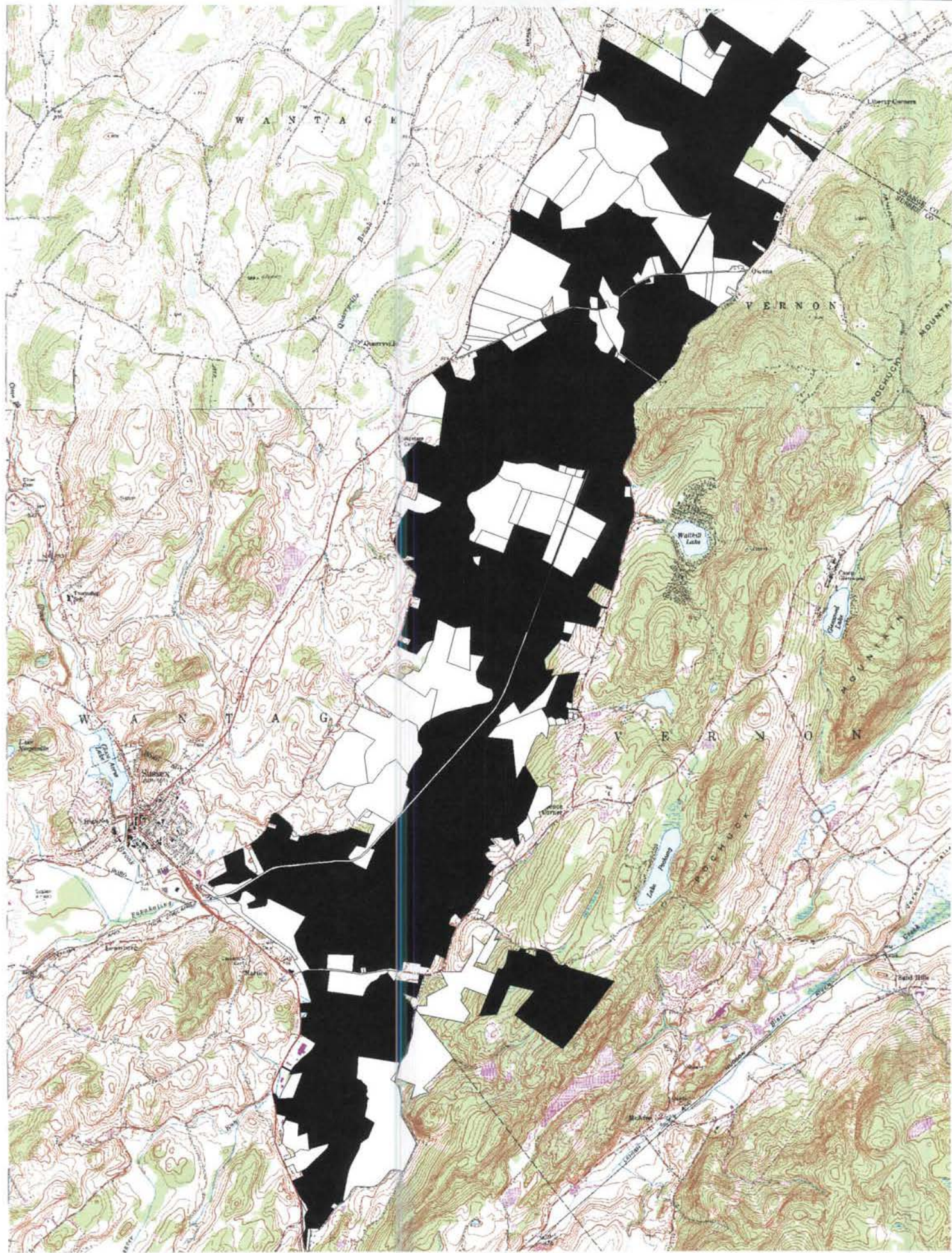
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APPENDIX I

Map of the Wallkill River National Wildlife Refuge



APPENDIX II: SPECIES OF PARTICULAR MANAGEMENT CONCERN ON THE WALLKILL RIVER NATIONAL WILDLIFE REFUGE

key to headings:

Fed T, E, or PT = Federally listed Threatened, Endangered, or Proposed Threatened Species

FWS NMB of MC = U.S. Fish and Wildlife Service Migratory Bird of Management Concern

NJ T or E = New Jersey Listed Threatened or Endangered

NY T, E, or SC = New York Listed Threatened, Endangered, or Special Concern

PIF Watchlist = Partners In Flight Watchlist

FWS NRS = U.S. Fish and Wildlife Service National Resource Species

Spring (March - May), Summer (June - August), Fall (September - November), Winter

(December - February): a = abundant; c = common; u = uncommon; o = occasional; r = rare.

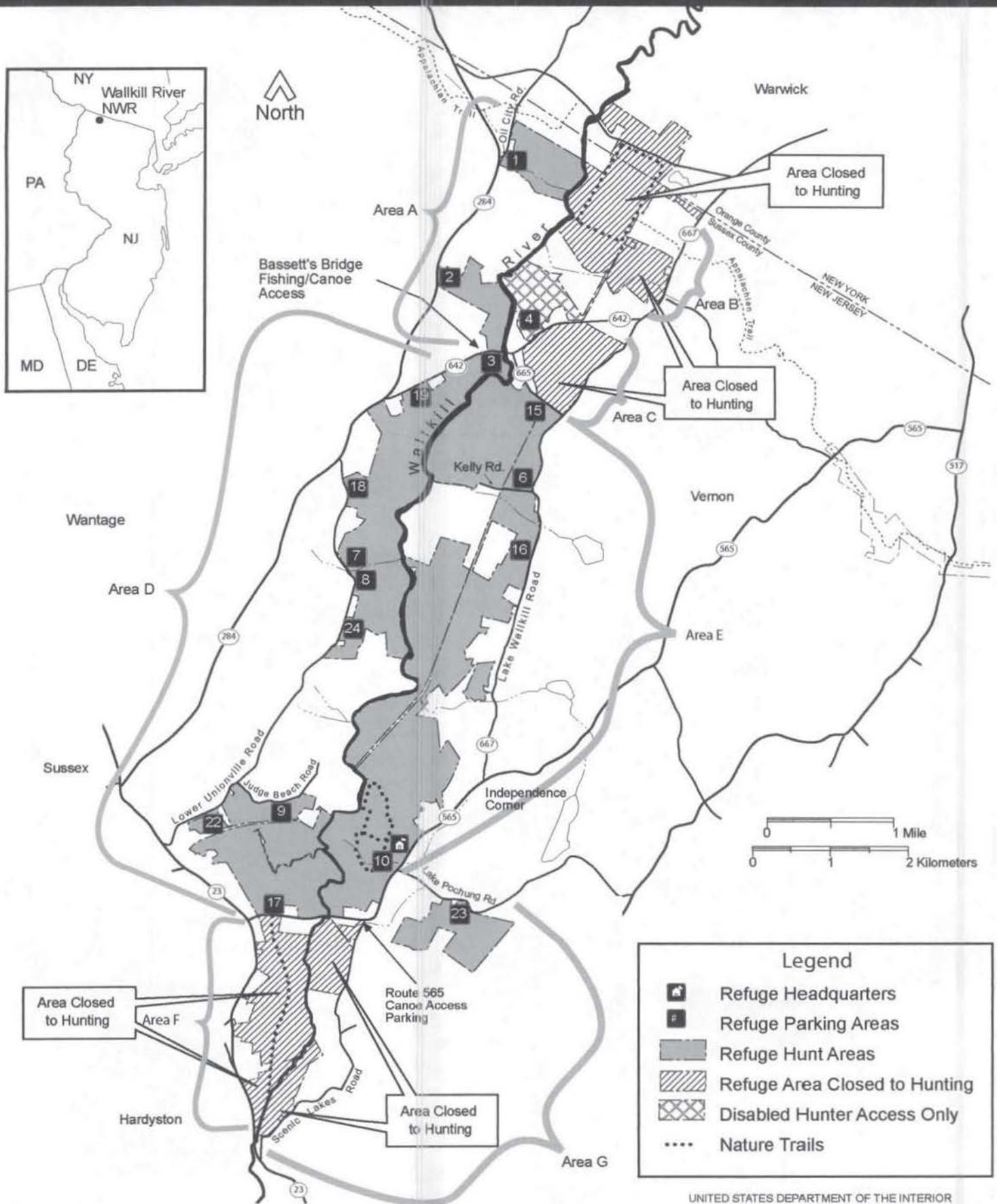
Species (Common Name)	Spring	Summer	Fall	Winter	Fed T, E, or PT	FWS NMB of MC	NJ T or E	NY T, E, or SC	PIF Watch list	FWS NRS
Pied-billed Grebe	u	-	u	r			E			
American bittern	r	r	r	-		yes	T		yes	
Least bittern	u	u	-	-		yes		SC		
Great blue heron	c	c	u	u			T			yes
Wood duck	c	u	c	o						yes
American black duck	c	r	c	r						yes
Mallard	c	c	c	u						yes
Osprey	u	r	u	-			T	T		
Bald eagle	r	r	r	r	T		E			
Northern harrier	u	r	c	c		yes	E	T		
Cooper's hawk	u	o	c	o			E	SC		
Northern goshawk	r	-	r	r		yes	T			
Red-shouldered hawk	u	r	u	r		yes	E/T	T		
Peregrine falcon	-	-	r	-	E		E	E		
Upland sandpiper	r	o	u	-		yes	E	SC		
Buff-breasted sandpiper	-	r	r	-					yes	
American woodcock	c	u	c	r						yes
Black-billed cuckoo	u	u	u	-					yes	
Yellow-billed cuckoo	u	u	u	-					yes	
Barn owl	r	r	r	r				SC		
Barred owl	c	c	c	u			T			
Long-eared owl	r	r	r	u			T			
Short-eared owl	r	r	r	u		yes	E	SC	yes	
Common nighthawk	u	r	c	-				SC		

Species (Common Name)	Spring	Summer	Fall	Winter	Fed T, E, or PT	FWS NMB of MC	NJ T or E	NY T, E, or SC	PIF Watch list	FWS NRS
Chimney swift	c	c	c	-					yes	
Red-headed woodpecker	r	r	r	r		yes	T		yes	
Northern flicker	c	c	c	u		yes				
Olive-sided flycatcher	r	r	r	-		yes			yes	
Eastern wood peewee	c	c	c	-					yes	
Cliff swallow	o	o	o	-			T			
Sedge wren	r	r	r	-		yes	E	SC		
Eastern bluebird	c	c	c	u				SC		
Veery	c	c	c	-		yes			yes	
Wood thrush	c	c	c	-		yes				
Gray catbird	a	a	a	r					yes	
Blue-winged warbler	c	c	c	-		yes				
Golden-winged warbler	o	r	r	-		yes			yes	
Chestnut-sided warbler	c	u	u	-		yes				
Prairie warbler	c	c	c	-		yes			yes	
Palm warbler	c	-	c	r					yes	
Cerulean warbler	u	o	u	-		yes			yes	
Prothonotary warbler	r	r	r	-					yes	
Worm-eating warbler	r	r	r	-		yes				
Louisiana waterthrush	u	u	u	-		yes				
Kentucky warbler	r	r	-	-					yes	
Dickcissel	r	r	r	r					yes	
Field sparrow	c	c	c	u		yes			yes	
Vesper sparrow	u	r	r	-			E	SC		
Savannah sparrow	u	r	c	u			T			
Grasshopper sparrow	c	u	c	-		yes	T	SC	yes	
Henslow's sparrow	r	r	r	-		yes	E	SC	yes	
Bobolink	c	c	a	-		yes	T		yes	
Eastern meadowlark	c	c	u	u		yes				
Rusty blackbird	u	-	u	o					yes	
Orchard oriole	u	u	-	-					yes	
Bog turtle					PT		E	E		
Wood turtle							T	SC		
Northern cricket frog								T		
Bobcat							E			

APPENDIX III

Map of the Hunt Zones at Wallkill River National Wildlife Refuge

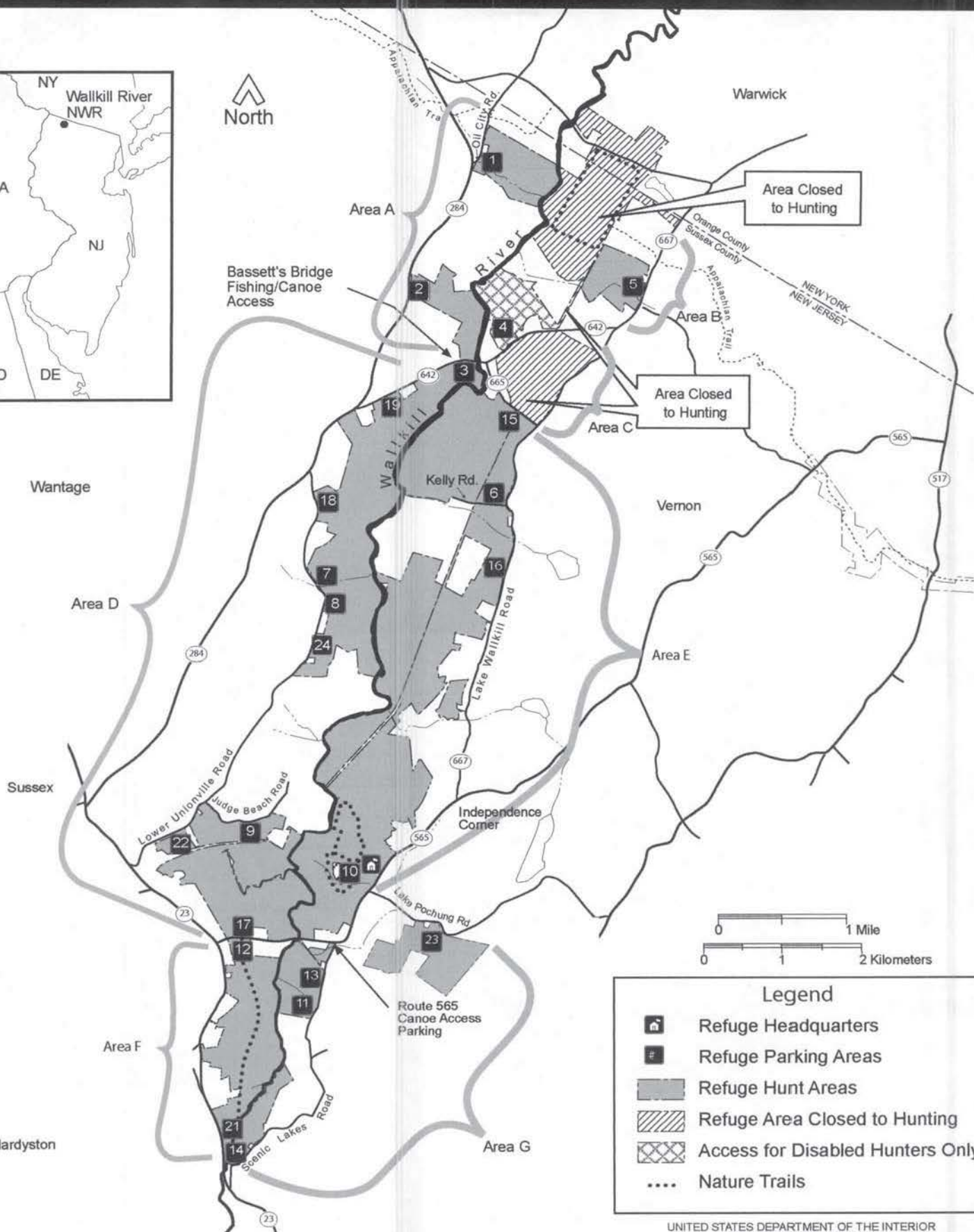
Migratory Bird Hunt Zones and Parking Facilities Wallkill River National Wildlife Refuge



UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

Big Game Hunt Zones and Parking Facilities

Wallkill River National Wildlife Refuge



Legend

- Refuge Headquarters
- Refuge Parking Areas
- Refuge Hunt Areas
- Refuge Area Closed to Hunting
- Access for Disabled Hunters Only
- Nature Trails

UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE