EVERGLADES HEADWATERS CONSERVATION PARTNERSHIP:

Land Protection Plan for the Establishment of the Everglades Headwaters National Wildlife Refuge and Conservation Area

Polk, Osceola, Okeechobee, and Highlands Counties, Florida

U.S. Department of the Interior
Fish and Wildlife Service

Southeast Region
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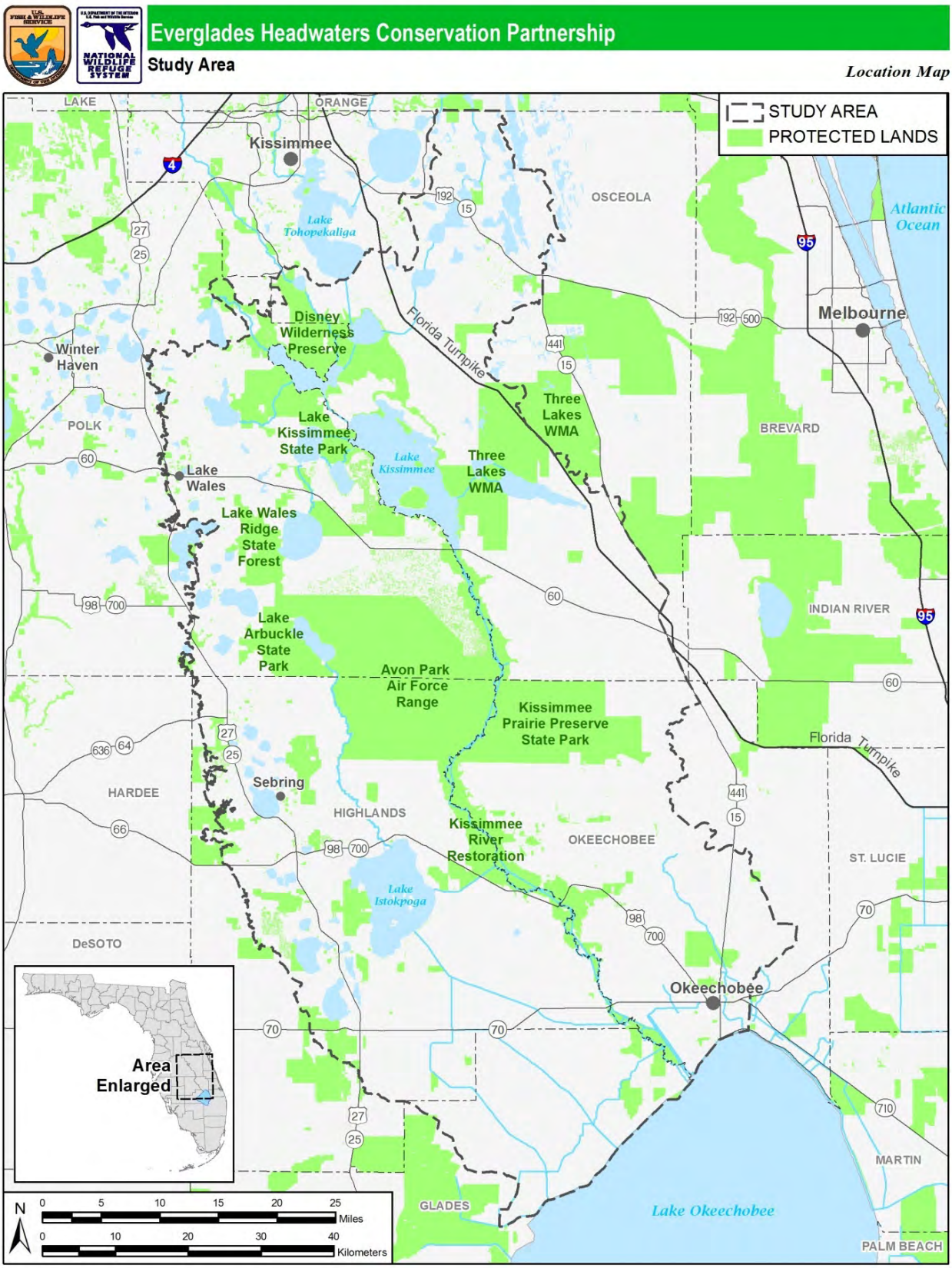
I. Introduction and Purpose

Widely recognized as a nationally important landscape and area of biological diversity, the Kissimmee River Basin in central Florida contains a network of existing conservation lands that includes state parks, state wildlife management areas, other state lands, agricultural working lands (e.g., with conservation easements), Avon Park Air Force Range, Disney Wilderness Preserve, and other conservation lands. The Everglades Headwaters National Wildlife Refuge (NWR) and Conservation Area will help connect these existing conservation lands, further protecting watersheds and wildlife corridors and enhancing the ecological functioning of the Kissimmee River Basin. The planning process for the Everglades Headwaters NWR and Conservation Area has helped with coordination and collaboration between the various management entities within the Kissimmee River Basin to support a more functional conservation landscape into the future, forming the Everglades Headwaters Conservation Partnership. Key conservation agencies and organizations have a long tradition of working in the Kissimmee River Basin landscape, including the Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture (USDA); Avon Park Air Force Range, U.S. Air Force; Florida Fish and Wildlife Conservation Commission (FWC); Florida Department of Agriculture and Consumer Services (FDACS); Florida Forest Service (FFS) (formerly Florida Division of Forestry) ; Florida Department of Environmental Protection (FDEP); Florida Division of State Lands; South Florida Water Management District (SFWMD); and The Nature Conservancy. As the Fish and Wildlife Service (Service) endeavored to fill in some of the conservation gaps in the Kissimmee River Basin landscape, coordination and consultation with these partners were keys to developing the this project. The Service also worked with Native American tribes to ensure timely and effective cooperation and collaboration. During this planning process, the Service contacted several tribes with interest in this landscape: Seminole Tribe of Florida; Miccosukee Tribe of Indians of Florida; Seminole Nation of Oklahoma; Muscogee (Creek) Nation; and Poarch Band of Creeks. Further, various state and local governmental agencies, organizations, businesses, and the public, with interest in this landscape, participated in the planning process.

The specific action identified in this Final Land Protection Plan (Final LPP), to establish the Everglades Headwaters NWR and Conservation Area, is the Service's first major contribution in this partnership effort. The Greater Everglades Partnership Initiative, which includes other federal agencies, state and local agencies, and non-governmental organizations, and which covers the greater Everglades area, including the headwaters area, seeks collaborative and cost-effective ways to conserve the land, water, and wildlife resources in central and south Florida, while honoring the legacy of stewardship handed down through generations of Floridians.

Recognizing the generations of responsible stewardship within this working rural landscape, the Everglades Headwaters NWR and Conservation Area seek to work with willing landowners to secure a legacy of conservation lands for future generations to enjoy. The Everglades Headwaters NWR and Conservation Area aim to protect and restore one of the great grassland and savanna landscapes of eastern North America, conserving one of the nation's prime areas of biological diversity. Further, the Everglades Headwaters NWR and Conservation Area aim to address threats from habitat fragmentation and urban development, altered ecological processes, and impacts from global climate change. Key species and habitats of concern for this area include the Florida grasshopper sparrow, Everglade snail kite, Florida black bear, Audubon's crested caracara, red-cockaded woodpecker, and cutthroat wetlands. Figure 1 outlines the Study Area.

Figure 1. Location and Study Area for the Everglades Headwaters NWR and Conservation Area



Working with the key partners, as well as with other state and local governments, Native American tribes, businesses, non-governmental organizations, and the public, the Service examined the needs for wildlife habitat protection within the biologically important Kissimmee River Basin of Florida (Figure 1). During the planning process, this Study Area was further refined to encompass a smaller, approximately 745,000-acre area referred to as the Conservation Partnership Area, wherein the Service will acquire permanent less-than-fee-title interest in up to 100,000 acres (with a conservation easement focus) and fee-title interest in up to 50,000 acres. It is critical to note that the Service's policy is to work with willing sellers to acquire fee-title or less-than-fee-title interest in property.

This Final LPP identifies the establishment of the Everglades Headwaters NWR and Conservation Area, as outlined in the Service's Preferred Alternative (Alternative C, Conservation Partnership Approach) in the Final Environmental Assessment (Final EA). The purposes of this Final LPP are to:

- announce the Service's intent to establish the Everglades Headwaters NWR and Conservation Area;
- provide landowners and the public with an outline of Service policies, priorities, and protection methods for property in the project area;
- assist landowners in determining whether their properties are located within the Conservation Partnership Area and/or Conservation Focal Area boundary; and
- inform landowners about the Service's long-standing policy of acquiring land only from willing sellers.

This Final LPP presents the methods that the Service, conservation partners, and interested landowners could use to accomplish wildlife and habitat goals and objectives for the Everglades Headwaters NWR and Conservation Area.

The table and maps contained in Attachment 1 identify the land parcels contained within the Conservation Focal Area, the area within which the Service will seek to acquire up to 50,000 acres of fee-title interest (Figures 3a-3h). Table 6 groups parcels together by landowner and lists each parcel, each parcel identification number, estimated acres, type of ownership, preferred method of acquisition, overall priority ranking for a single or group of parcels under one landowner, acres by parcel and landowner in the tiers I, II, and III; and the figure number where each parcel or group of parcels can be found.

The scope of this Final LPP and the Final EA is limited to the acquisition of lands, in fee-title and less-than-fee-title, within the Conservation Partnership Area, including the Conservation Focal Area. This Final LPP and the Final EA are not intended to cover the development and/or implementation of detailed, specific programs for the administration and management of those lands. A Conceptual Management Plan and Interim Compatibility Determinations will guide management and public use on newly established refuge lands and conservation easements until a comprehensive conservation plan and compatibility determinations are developed (see Appendices A and B for the Conceptual Management Plan and Interim Compatibility Determinations, respectively).

A. PROJECT DESCRIPTION

The generalized area of interest (Study Area) for the Everglades Headwaters NWR and Conservation Area is located within portions of Polk, Osceola, Okeechobee, Highlands, and Glades Counties, Florida, in the Kissimmee River Basin (Figure 1). It is bounded by the city of Orlando to the north, Lake Okeechobee to the south, on the east by the St. Johns River watershed, and on the west by the Lake Wales Ridge. This Study Area was determined based on a number of factors, including hydrologic basin,

the Lake Okeechobee shoreline, and the western edge of the Lake Wales Ridge. The Everglades Headwaters NWR and Conservation Area will protect a combination of wetland and upland habitats supporting migratory birds, federal and state listed species, and regionally important wildlife and plant communities in the Kissimmee River Basin. The Everglades Headwaters NWR and Conservation Area include portions of one of the great grassland and savanna landscapes of eastern North America. Habitats include a mosaic of seasonally wet grasslands, longleaf pine savannas, sandhill and scrub, and forested wetlands that support a number of imperiled plants and animals. The Study Area includes 38 federal and 143 state listed species (Threatened and Endangered), 3 Candidate species for federal listing, 75 federal Species of Concern, and 23 state Species of Special Concern. The Florida Committee on Rare and Endangered Plants and Animals identified status designations for 133 species, including 20 Endangered, 42 Threatened, 29 Species of Concern, 25 Rare, 6 Status Undetermined, and 11 Rare Status Undetermined species. (See Appendix E of the Final EA for additional information on at-risk species.) This area is part of the Lake Okeechobee and greater Everglades watershed, providing improved water quality and groundwater recharge benefits. Within this region, undeveloped lands and surface waters provide a host of wildlife-dependent recreational opportunities such as hunting, fishing, and wildlife-watching amid an increasingly urbanized landscape.

The listed definitions aid in outlining the Everglades Headwaters NWR and Conservation Area.

Conservation Partnership Area	A specified area within which the Service will work with partners and willing landowners to achieve conservation goals and within which the Service will have authority to work with willing landowners to acquire less than fee title interest or enter into management agreements. The Service will only be authorized to acquire up to a specified amount or acreage cap. The Service identifies an approximately 745,000-acre Conservation Partnership Area within which the Service will have an acquisition cap of 100,000 acres for less than fee title acquisitions (with a conservation easement focus). The designation of a Conservation Partnership Area will not convey authority to establish rules and regulations within this area.. The Conservation Partnership Area acres do not include protected lands in this landscape, areas removed from consideration, and major lakes.
Conservation Area	The less-than-fee-title interest acquired within the Conservation Partnership Area. As less-than-fee-title interests in lands are acquired from willing landowners, they will become the Conservation Area. The Conservation Area total is 100,000 acres.

Conservation Focal Area	A specified area within which the Service will have the authority to purchase property for a refuge, but where the Service will be limited to an acquisition cap smaller than the Conservation Focal Area itself. The Service will be limited to acquiring fee-title interest in property within the Conservation Focal Area, but will have the ability to adjust specific parcel acquisition to respond to changing landowner interest, conditions, and opportunities. The Conservation Focal Area is approximately 130,000 acres with an acquisition cap of 50,000 acres.
Refuge Acquisition Boundary	A Refuge Acquisition Boundary defines specific parcels of property which the Service will have the authority to purchase from willing sellers. Under Alternative B, the proposed Refuge Acquisition Boundary is 50,000 acres.
Refuge Boundary	A Refuge Boundary is the management boundary of an approved refuge. A Refuge Boundary is generally comprised of Service-owned property, but can include other properties through some sort of agreement with the landowner (e.g., management agreement, lease, and easement). Under both Alternatives B and C, the Refuge Boundary is 50,000 acres.
Study Area	A generalized area of interest within which the Service evaluates opportunities for additional conservation measures. The Study Area for this project totals approximately 1.8 million acres of the Kissimmee River Basin. The designation of a Study Area does not convey authority to establish rules and regulations throughout the 1.8 million-acre area.
Areas Not Considered	During the planning process, certain areas were removed from consideration for fee-title or less-than-fee-title acquisition, including incorporated and developed areas and areas determined not to meet the Service's criteria for additional conservation.

CONSERVATION AREA OVERVIEW

During the development of this document, the original 1.8 million-acre Study Area was refined and reduced to an approximately 745,000-acre Conservation Partnership Area. It is within this Conservation Partnership Area that the Service will have the ability to work with willing landowners and partners on conservation programs and agreements. Within the Conservation Partnership Area, the Service will be authorized to acquire up to 100,000 acres of less-than-fee-title interest from willing landowners. Once 100,000 acres are acquired for the Conservation Area, any proposal to expand beyond the authorized 100,000 acres will require an additional planning effort by the Service, including public involvement, in accordance with applicable laws and policies. Participation by landowners in the Conservation Area will be voluntary. Landowners within an approved Conservation Partnership Area will be under no obligation to sell interest in their properties to the Service. The Conservation Partnership Area will provide important opportunities for conservation, while at the same time maintaining the ability of the ranching community to persist. Landowners in the Conservation Partnership Area may voluntarily choose to participate, and participating lands will remain in private ownership. Private landowners who elect to participate will continue to control activities on their lands. If interests in lands are acquired, they then become part of a 100,000-acre Conservation Area, and will reflect the vision, purposes, and goals of the overall project, and will be subject to the terms and conditions of whatever easement, agreements, and/or other tool(s) that are used for less-than-fee-title acquisition. Less-than-fee-title acquisitions (e.g., conservation easements) will be acquired in perpetuity.

REFUGE OVERVIEW

The approximately 130,000-acre Conservation Focal Area is the area within which the Service will acquire up to 50,000 acres for the refuge by working with willing landowners. Landowners within an approved Conservation Focal Area will be under no obligation to sell their properties to the Service. The preferred method of protection within the Conservation Focal Area is fee-title acquisitions; however, less-than-fee-title acquisition methods could also be employed. The Conservation Focal Area will allow the Service the flexibility to respond to changing landowner interest and acquisition opportunities within the landscape over time, but will limit the acquisition total to 50,000 acres. Any proposal to expand beyond the authorized 50,000 acres will require an additional planning effort by the Service, including public involvement, in accordance with applicable laws and policies.

Public uses that are planned to continue to occur on the Everglades Headwaters NWR and Conservation Area are: hunting, fishing, environmental education and interpretation, wildlife observation and photography, research, camping, hiking, horseback riding, bicycling, and grazing, following appropriate and compatibility processing. Potential public uses and activities supporting these uses will also be considered (depending on the specifics of a particular property acquired), such as all-terrain vehicle use on designated roads and trails and primitive camping to support hunting and research activities, motorized and non-motorized boating to support fishing activities, and facilities to support any of the approved uses. The Service commits to working with the FWC to facilitate public use activities, specifically hunting and fishing through a Memorandum of Understanding.

For lands that the Service will own in fee-title, habitat restoration and management will provide threatened, endangered, and resident wildlife with suitable habitat. Wetland drainage ditches may be filled to restore historic water storage capacity and provide breeding grounds for waterfowl. Prescribed fire will be used to remove excess vegetation and restore native plant communities. Invasive species will

be controlled through manual, mechanical, and/or chemical means. Cultural and historical resources will be protected and interpretive programs and materials will allow the public to better understand and appreciate these important resources.

B. REFUGE PURPOSES, VISION, AND GOALS

Emphasizing migratory birds, listed species, and wetlands, while protecting the important fish and wildlife resources of this landscape, the listed purposes have been developed for the establishment of the Everglades Headwaters NWR and Conservation Area.

> *"... conservation, management, and ... restoration of the fish, wildlife, and plant resources and their habitats ... for the benefit of present and future generations of Americans..." 16 U.S.C. 668dd(a)(2) (National Wildlife Refuge System Administration Act)*
>
> *"…to conserve (A) fish or wildlife which are listed as endangered species or threatened species…or (B) plants…" 16 U.S.C. 1534 (Endangered Species Act of 1973)*
>
> *"…the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions ..." 16 U.S.C. 3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986)*
>
> *"…for use as an inviolate sanctuary, or for any other management purpose, for migratory birds…." 16 U.S.C. 715d (Migratory Bird Conservation Act)*
>
> *"…for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude..." 16 U.S.C. 742f(b)(1) "…for the development, advancement, management, conservation, and protection of fish and wildlife resources...." 16 U.S.C. 742f(a)(4), (Secretarial powers to implement laws related to fish and wildlife) (Fish and Wildlife Act of 1956)*
>
> *"…suitable for— (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species ..." 16 U.S.C. 460k-1 "... the Secretary ... may accept and use ... real ... property. Such acceptance may be accomplished under the terms and conditions of restrictive covenants imposed by donors ..." 16 U.S.C. 460k-2 [Refuge Recreation Act (16 U.S.C. 460k-460k-4), as amended]*

The vision for the Everglades Headwaters NWR and Conservation Area is to:

> conserve, protect, and manage one of the great grassland and savanna landscapes of eastern North America for current and future generations, protecting the important wildlife and habitats of the working rural landscape of central Florida's Kissimmee River Basin that is home to abundant fish and wildlife resources; that is vital to restoration and protection of the water quality and quantity for the Everglades ecosystem; that is resilient to the effects of global climate change; and that offers outdoor recreational opportunities important to the region's economy.

Four overarching goals were developed for the Everglades Headwaters NWR and Conservation Area. The goals are intentionally broad, descriptive statements of the desired future conditions. They embrace the purposes and vision statement. The goals address a functional conservation landscape; habitat for fish and wildlife; water quality, quantity, and storage; and wildlife-dependent recreation, as listed.

Goal 1. Functional Conservation Landscape. The upper Everglades watershed will become a more connected and functional conservation landscape that will provide effective habitat connections between existing conservation areas and allow habitats and species to shift in response to urban development pressures and global climate change.

Goal 2. Habitat for Fish and Wildlife. The Everglades Headwaters NWR and Conservation Area will provide a wide range of quality Kissimmee River Basin habitats to support migratory birds, federal and state listed species, state designated species of special concern, and native wildlife diversity.

Goal 3. Enhanced Water Quality, Quantity, and Storage. Focusing on restoring or mimicking natural hydrologic processes, the Everglades Headwaters NWR and Conservation Area will contribute to water quality, water quantity, and water storage capacity of the upper Everglades watershed to support Everglades restoration goals and objectives and water quality and supply for central and south Florida.

Goal 4. Wildlife-dependent Recreation and Education. Refuge visitors of all abilities will enjoy opportunities for hunting, fishing, wildlife observation, wildlife photography, and environmental education and interpretation, while increasing knowledge of and support for conservation of the important grassland and savanna landscape of the headwaters of the Everglades.

II. Resources

A. RESOURCES TO BE PROTECTED

HABITAT AND WILDLIFE RESOURCES

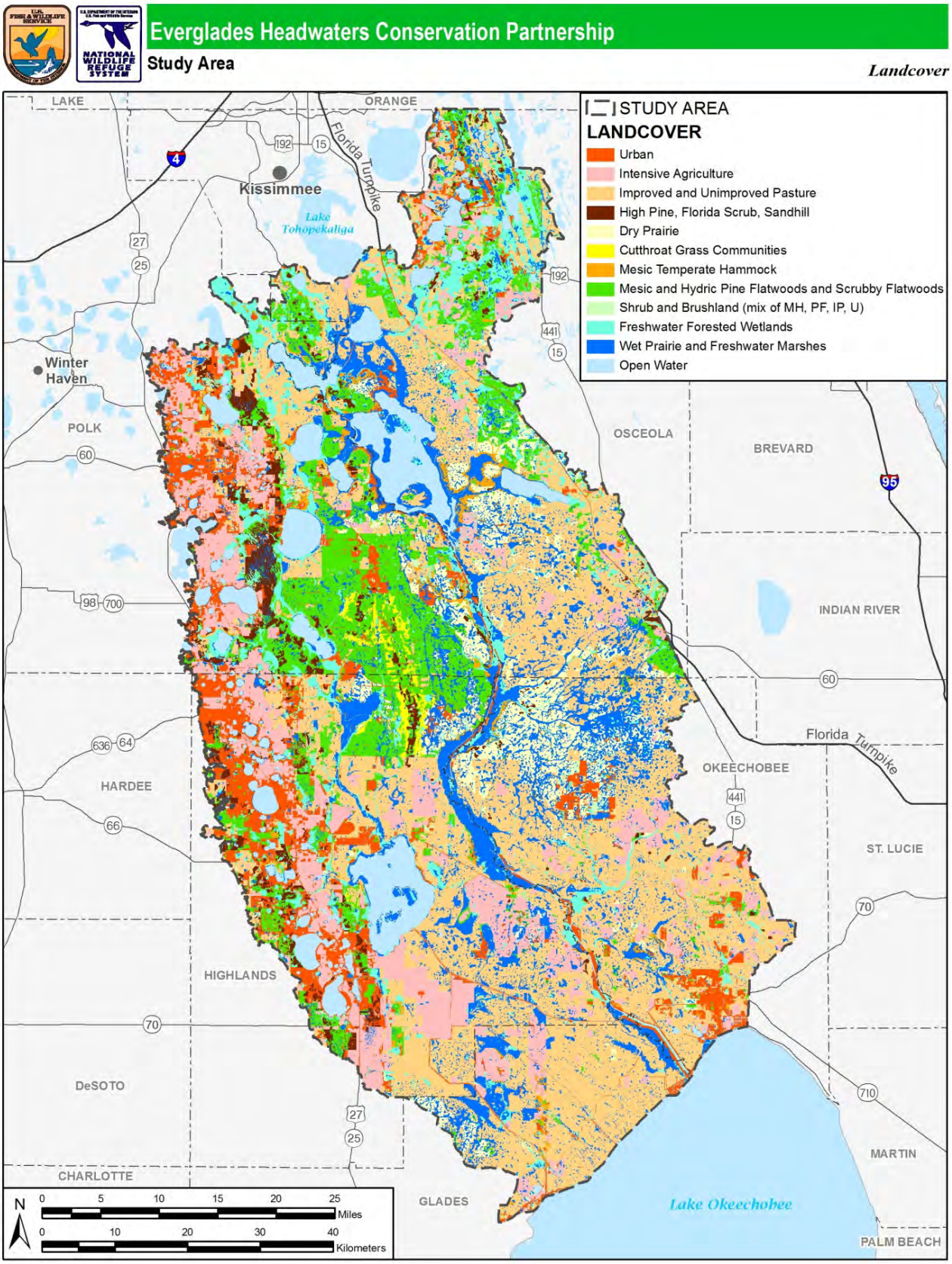
Habitat

The Everglades Headwaters NWR and Conservation Area lies in the Lake Okeechobee watershed of south-central Florida, a largely rural area that has a long history of cattle ranching, agriculture, and forestry. The Lake Okeechobee watershed includes the Kissimmee River Basin, as well as several other sub-watersheds which drain to the Gulf of Mexico, the Atlantic Ocean, and the Everglades. As further detailed in the Affected Environment chapter of the Final EA, major habitat types in the Study Area consist of sandhill and scrub; freshwater wetlands; prairies; mesic, scrubby, and hydric pine flatwoods; and pasture (Figure 2). A Conservation Focal Area of approximately 130,000 acres has been delineated, within which the Service will acquire up to 50,000 acres (with a fee-title acquisition focus) (Figures 3a-3h). Major habitats located in the Conservation Focal Area consist of pasture (improved and unimproved), wet prairie and freshwater marshes, dry prairie, and forested wetlands (Table 1 and Figure 2). A comprehensive list of all habitat types can be found in Table 1. (The habitats are also discussed in the Final EA in Chapter II.) In addition, the Service will also seek to acquire approximately 100,000 acres of less-than-fee-title interest as a Conservation Area from within a broader Conservation Partnership Area, which will complement existing conservation lands and the Everglades Headwaters NWR.

Table 1. Major habitat types and acreages within the Conservation Focal Area

Land Cover	Acres
Dry Prairie	13,414.6
Freshwater Forested Wetlands	9,181.2
High Pine, Florida Scrub, Sandhill	2,176.8
Improved and Unimproved Pasture	63,017.5
Intensive Agriculture	3,814.5
Mesic and Hydric Pine Flatwoods and Scrubby Flatwoods	10,123.4
Mesic Temperate Hammock	1,686.5
Open Water	169.6
Shrub and Brushland	662.9
Urban	627.5
Wet Prairie and Freshwater Marshes	25,233.4
Total	**130,107.9**

Figure 2. Major habitat types within the Study Area



Wildlife

The variety of habitats found in the Conservation Partnership and Conservation Focal Areas supports a range of wildlife, including various amphibians and reptiles that tend to stay in localized areas to wide-ranging species such as Florida black bear. (Chapter II in the Final EA contains more detailed information about the wildlife of this area.) Numerous bird species, both resident and migratory, utilize project area habitats for foraging, loafing, and breeding. Common mammal species include white-tailed deer and a host of other mammals, including raccoon, opossum, various rodents, and bats. Project area waters provide habitat for at least 50 fish species, most of which are found across peninsular Florida. More than 400 amphibian, reptile, bird, and mammal species have been identified within the Study Area.

Threatened and Endangered Species

As is further detailed in the Affected Environment chapter of the Final EA, the Everglades Headwaters NWR and Conservation Area will provide habitat for many federal and state listed species. In addition, the Final EA discussed habitat needs of several listed species and factors contributing to population declines. Listed species include most major taxonomic groups; however, plants, many of which are endemic, comprise a large proportion of the total. There are 43 federally listed or candidate plant and animal species, and 161 state listed species that may be present in the Study Area (Table 2). A more comprehensive list of at-risk species found throughout the five counties encompassing the Study Area can be found in Appendix E of the Final EA.

Table 2. Federal and state listed threatened and endangered species likely to occur in the Study Area

Scientific Name	Common Name	Legal Status*	
		Federal	State
Invertebrates			
Highlands tiger beetle	*Cicindela highlandensis*	C	N
Amphibians and Reptiles			
Bluetail mole skink	*Eumeces egregious lividus*	T	T
Eastern indigo snake	*Drymarchon corais couperi*	T	T
Gopher tortoise	*Gopherus polyphemus*	C	T
Sand skink	*Neoseps reynoldsi*	T	T
Short-tailed snake	*Stilosoma extenuatum*	N	T
Birds			
Audubon's crested caracara	*Polyborus plancus audubonii*	T	T
Bald eagle	*Haliaeetus leucocephalus*	N	T
Everglade snail kite	*Rostrhamus sociabilis*	E	E

Scientific Name	Common Name	Legal Status*	
		Federal	State
Florida grasshopper sparrow	*Ammodramus savannarum floridanus*	E	E
Florida sandhill crane	*Grus Canadensis pratensis*	N	T
Florida scrub-jay	*Aphelocoma coerulescens*	T	T
Red-cockaded woodpecker	*Picoides borealis*	E	T
Sandhill crane	*Grus canadensis pratensis*	N	T
Southeastern American kestrel	*Falco spaverius paulus*	N	T
Wood stork	*Mycteria americana*	E	E
Mammals			
Florida black bear	*Ursus americanus floridanus*	N	T
Florida bonneted bat	*Eumops floridanus*	C	E
Florida panther	*Puma concolor coryi*	E	E
West Indian manatee	*Trichechus manatus*	E	E
Plants			
American Chaffseed**	*Schwalbea americana*	E	E
Ashe's savory	*Calamintha ashei*	N	T
Avon Park harebells	*Crotalaria avonensis*	E	E
Britton's beargrass	*Nolina brittoniana*	E	E
Carter's warea	*Warea carteri*	E	E
Clasping warea	*Warea amplexifolia*	E	E
Curtiss' milkweed	*Asclepias curtissii*	N	E
Cutthroat grass	*Panicum abscissum*	N	E
Edison's St. John's-wort	*Hypericum edsonianum*	N	E
Florida bonamia	*Bonamia grandiflora*	T	E
Florida perforate cladonia	*Cladonia perforata*	E	E
Florida ziziphus	*Ziziphus celata*	E	E
Garrett's mint	*Dicerandra christmanii*	E	E

Scientific Name	Common Name	Legal Status*	
		Federal	State
Highlands scrub hypericum	*Hypericum cumulicola*	E	E
Lewton's polygala	*Polygala lewtonii*	E	E
Nodding pinweed	*Lechea cernua*	N	T
Papery whitlow-wort	*Paronychia chartacea ssp. Chartacea*	T	E
Pine pinweed	*Lechea divaricata*	N	E
Pygmy fringe-tree	*Chionanthus pygmaeus*	E	E
Sandlace	*Polygonella myriophylla*	E	E
Scrub blazing star	*Liatris ohlingerae*	E	E
Scrub bluestem	*Schizachyrium niveum*	N	E
Scrub buckwheat	*Eriogonum longifolium var. gnaphalifolium*	T	E
Scrub lupine	*Lupinus aridorum*	E	E
Scrub mint	*Dicerandra frutescens*	E	E
Scrub pigeon-wing	*Clitoria fragrans*	T	E
Scrub plum	*Prunus geniculata*	E	E
Scrub stylisma	*Stylisma abdita*	N	E
Scrub willow	*Salix floridana*	N	E
Short-leaved rosemary	*Conradina brevifolia*	E	E
Wedge-leaved button snakeroot	*Eryngium cuneifolium*	E	E
Wide leaf warea	*Warea amplexifolia*	E	E
Wireweed	*Polygonella basiramia*	E	E
Yellow star anise	*Illicium parviflorum*	N	E

* *Federal and State Listings:*
E = Endangered, T = Threatened, N = Not Listed, C = Candidate for Listing

**note: believed to be extirpated from the Study Area

THREATS TO THE RESOURCES

Habitat Loss and Fragmentation Resulting from Urban Development and other Land Uses

Habitat loss continues to negatively impact Florida's wildlife, including numerous federal and state listed species (FWC 2010). Urban and suburban development and other wholesale land clearing are by far the major threats to this area. Existing roadways traverse wildlife corridors and are a leading mortality factor for wide-ranging species such as the Florida panther and Florida black bear. The development and expansion of these roadways will likely create further barriers to wildlife movements. Further, habitat fragmentation and urban development also help to spread invasive species, negatively impacting native wildlife and habitats. The Everglades Headwaters NWR and Conservation Area will protect key habitat and habitat connections in an effort to address the threats associated with habitat fragmentation and urban development.

Altered Ecological Processes

Alterations of hydrology and fire regimes within the Everglades ecosystem are among the most harmful and damaging threats facing the Everglades headwaters. Stream channelization (U.S. Army Corps of Engineers 1991, U.S. Army Corps of Engineers and the South Florida Water Management District 1999), wetland modification and drainage (Dahl 2005), increasing water withdrawal (Natural Resources Defense Council 2010), and sediment and nutrient loading all negatively impact water quality, water quantity, and water delivery throughout the ecosystem. Many of the habitat types found throughout the Conservation Partnership Area are dependent on frequent, low-intensity, lightning-caused fires. Fire suppression has led to changes in plant communities, creating habitat unsuitable for the threatened and endangered plants and animals that require a frequent fire regime (Pyne 1982, Abrahamson and Abrahamson 1996). Altered ecological processes also help spread invasive species, negatively impacting native wildlife and habitats. The Everglades Headwaters NWR and Conservation Area will restore or mimic natural processes to minimize the impacts from altered ecological processes.

Impacts from Global Climate Change

The Everglades Headwaters NWR and Conservation Area will help address conservation needs of wildlife in southern Florida that may be impacted by the effects of global climate change (Florida Oceans and Coastal Council 2010). As sea levels rise, temperatures increase, and precipitation patterns are altered, lands in the Everglades Headwaters NWR and Conservation Area will assist the survival and management of many of Florida's rare, threatened, and endangered species. Further, impacts from climate change will likely increase the spread of invasive species, negatively impacting native wildlife and habitats. The Everglades Headwaters NWR and Conservation Area will help address some of the impacts associated with climate change, increasing resiliency of the landscape and assisting in wildlife response to climate change and associated stressors.

B. RELATIONSHIP OF PROJECT TO LANDSCAPE CONSERVATION GOALS AND OBJECTIVES

Numerous landscape-level conservation programs, plans, and initiatives apply to the Kissimmee River Basin area. The Everglades Headwaters NWR and Conservation Area will contribute to and complement many of these, including the Peninsular Florida Landscape Conservation Cooperative, conservation and mitigation banks, national and international conservation plans and initiatives (including Partners-in-Flight Peninsular Florida Bird Conservation Plan; NRCS Wetlands Reserve Program, USDA; and America's Great Outdoors Initiative), and regional conservation plans and initiatives (including federal recovery plans, the State Wildlife Action Plan, Florida's Endangered and

Threatened Species Management and Conservation Plan, Florida Forever Program, Critical Lands and Waters Identification Project, Avon Park Air Force Range Joint Land Use Study, Kissimmee River Restoration Project, South Florida Water Management District General Management Plan, Northern Everglades and Estuaries Protection Program, State of the Scrub, Highlands County Comprehensive Plan, Polk County Environmental Lands Program, Osceola County Environmental Lands Conservation Program, and Green Horizon Land Trust).

PENINSULAR FLORIDA LANDSCAPE CONSERVATION COOPERATIVE

The Everglades Headwaters NWR and Conservation Area are located within the Peninsular Florida Landscape Conservation Cooperative's (LCC) area of interest. Comprising one of the 22 delineated LCCs in the continental United States, the Service's Peninsular Florida LCC includes several important areas with protective designations, including Ocala National Forest, Everglades National Park, Welaka National Fish Hatchery, and numerous national wildlife refuges. Various other local, state, and federal conservation areas are also located within the Peninsular Florida LCC. The Peninsular Florida LCC spans temperate and subtropical climates, numerous physiographic districts, and a wide variety of habitats. Barrier islands, xeric scrub, pine flatwoods, freshwater marshes, lakes, streams, springs, mixed hardwood/pine forests, cypress swamps and domes, dry prairies, maritime forests, hardwood hammocks, estuarine marshes, pine rocklands, sandhill woodlands, coastal strands, sawgrass prairies, sloughs, and tree islands of the Peninsular Florida LCC serve a variety of native wildlife, including over 100 federally listed species, as well as interjurisdictional fishes, neotropical migratory birds, nongame waterbirds, and waterfowl.

The biggest problem facing the landscape of the Peninsular Florida LCC is the loss of habitat through direct destruction and fragmentation, as well as through impacts from human activities. The predominant stresses to habitats found throughout the Peninsular Florida LCC are human population growth, tourism, agriculture, silviculture, mining, water channelization, urbanization, aquifer depletion, fire suppression, exotic species, and nonpoint- and point-source pollution. The actions of the Peninsular Florida LCC are guided by two categories: trust resources and management issues. The trust resources include: migratory birds, anadromous fish, endangered species, and marine mammals. The management issues focus on habitat protection and management, habitat restoration, contaminants, regulatory compliance, law enforcement, and biodiversity. The Everglades Headwaters NWR and Conservation Area will seek to address the threats and problems found within this landscape by working with the partners to develop a more functional conservation landscape within the Kissimmee River Basin.

CONSERVATION AND MITIGATION BANKS

Conservation banks are permanently protected lands that contain natural resource values. These lands are conserved and permanently managed for species that are threatened, endangered, candidates for listing, or are species-at-risk. Conservation banks function to offset adverse impacts to these species that occurred elsewhere, sometimes referred to as off-site mitigation. In exchange for permanently protecting the land and managing it for these species, the Service approves a specified number of habitat or species credits that bank owners may sell. Developers or other project proponents who need to compensate for the adverse impacts their projects have on species may purchase the credits from conservation bank owners to mitigate their impacts. Conservation banking offers opportunities for a variety of landowners through conservation, enhancement, restoration, and/or establishment of habitat for species. Lands used for ranching, farming, and timber operations or similar agricultural purposes can function as conservation banks, if they are managed as habitat for species. Degraded habitat, such as retired croplands or orchards, may be restored. Linear areas or corridors, such as stretches of streams and their associated riparian habitat that link populations of

species, may also qualify as conservation banks. Currently, there are two skink and scrub-jay conservation banks approved within the Study Area totaling approximately 630 acres. Five additional conservation banks are currently in negotiations, which total another 1,000 acres.

A mitigation bank is a wetland, stream, or other aquatic resource area that has been restored, established, enhanced, or (in certain circumstances) conserved for the purpose of providing compensation for unavoidable impacts to aquatic resources permitted under Section 404 of the Clean Water Act or a similar state or local wetland regulation. Mitigation banks require a formal agreement between the bank owners and regulators establishing liability, performance standards, management and monitoring requirements, and the terms of bank credit approval. They also identify a geographic area (service area) in which permitted impacts can be compensated for at a given bank. The value of a bank is defined in "compensatory mitigation credits." The bank's agreement identifies the number of credits available for sale and requires the use of ecological assessment techniques to certify that those credits provide the required ecological functions. Mitigation banks are a form of "third-party" compensatory mitigation, in which the responsibility for compensatory mitigation implementation and success is assumed by a party other than the permittee. At this time, there is one mitigation bank within the Study Area: the Split Oak Forest Wetland mitigation bank straddles the border between Osceola and Orange Counties. The bank is approximately 1,733 acres, with about 728 acres within the Study Area. Further, eight mitigation bank service areas include portions of the northern and eastern parts of the Study Area.

NATIONAL AND INTERNATIONAL CONSERVATION PLANS AND INITIATIVES

Multiple partnerships have been developed among government and private entities to address the environmental problems affecting regions. A large amount of conservation and protection information helps define the role of the Everglades Headwaters NWR and Conservation Area at the local, national, international, and ecosystem levels. Conservation initiatives include broad-scale planning and cooperation between affected parties to address declining trends of natural, physical, social, and economic environments. The Everglades Headwaters NWR and Conservation Area will support key national and international conservation plans and initiatives, including the North American Bird Conservation Initiative, which includes the Partners-in-Flight (PIF) Bird Conservation Plan; the Wetlands Reserve Program; and the America’s Great Outdoors Initiative. Further, the Everglades Headwaters NWR and Conservation Area and the Wetlands Reserve Program staff will discuss how we might work together to support conservation and restoration throughout the greater Everglades landscape.

North American Bird Conservation Initiative

Started in 1999, the North American Bird Conservation Initiative is a coalition of government agencies, private organizations, academic institutions, and private industry leaders in the United States, Canada, and Mexico, working to ensure the long-term health of North America's native bird populations by fostering an integrated approach to bird conservation to benefit all birds in all habitats. The four international and national bird initiatives include the North American Waterfowl Management Plan, Partners-in-Flight, Waterbird Conservation for the Americas, and the U.S. Shorebird Conservation Plan. The Everglades Headwaters NWR and Conservation Area will play a role in supporting these plans.

Partners-In-Flight (PIF) Bird Conservation Plan

Managed as part of the PIF Bird Conservation Plan, the peninsular Florida physiographic area represents a scientifically based land bird conservation planning effort that ensures long-term maintenance of healthy populations of native land birds, primarily nongame land birds. Nongame land birds have been vastly under-represented in conservation efforts, and many are exhibiting significant declines. The PIF Bird Conservation Plan is voluntary and non-regulatory, and focuses on relatively common species in areas where conservation actions can be most effective, rather than the frequent local emphasis on rare and peripheral populations. About 140,000 acres of public conservation lands are included in the peninsular Florida physiographic area, contributing to PIF goals and objectives (PIF 2009). The Everglades Headwaters NWR and Conservation Area will help support these goals and objectives through the conservation and connection of additional habitats to support a variety of bird species.

Wetlands Reserve Program

The Wetlands Reserve Program (WRP) is a voluntary program offering landowners the opportunity to protect, restore, and enhance wetlands on their property. The USDA's NRCS provides technical and financial support to help landowners with their wetland restoration efforts. The NRCS goal is to achieve the greatest wetland functions and values, along with optimum wildlife habitat, on every acre enrolled in the program. This program offers landowners an opportunity to establish long-term conservation and wildlife practices and protection. NRCS is actively engaged in restoring wetlands in the greater Everglades landscape through the WRP.

America's Great Outdoors Initiative

President Obama launched the America's Great Outdoors (AGO) Initiative to develop a 21st Century conservation and recreation agenda for our nation. The AGO Initiative takes as its premise that lasting conservation solutions should rise from the American people – that the protection of our natural heritage is a non-partisan objective shared by all Americans. The vision of the AGO Initiative involves connecting Americans to the great outdoors, conserving and restoring America's great outdoors, and working together for America's great outdoors. The AGO Initiative seeks to empower all Americans—citizens, young people, and representatives of community groups; the private sector; nonprofit organizations; and local, state, and tribal governments—to share in the responsibility to conserve, restore, and provide better access to our lands and waters in order to leave a healthy, vibrant outdoor legacy for generations yet to come. The Everglades Headwaters NWR and Conservation Area serve the conservation initiative outlined by the AGO Initiative. (For more information about the AGO Initiative, please visit: http://americasgreatoutdoors.gov/.)

REGIONAL CONSERVATION PLANS AND INITIATIVES

The Everglades Headwaters NWR and Conservation Area will contribute to and complement a variety of regional conservation plans and initiatives, including recovery plans for federally listed species, the State Wildlife Action Plan, Florida's Endangered and Threatened Species Management and Conservation Plan, Florida Forever Program, Critical Lands and Waters Identification Project, Avon Park Air Force Range Joint Land Use Study, Kissimmee River Restoration Project, South Florida Water Management District General Management Plan, Northern Everglades and Estuaries Protection Program, State of the Scrub, Highlands County Comprehensive Plan, Polk County Environmental Lands Program, Osceola County Environmental Lands Conservation Program, and Green Horizon Land Trust.

Federal Recovery Plans

The 1999 South Florida Multi-Species Recovery Plan is one of the first recovery strategies specifically designed to meet the needs of multiple species that do not occupy similar habitats. The Everglades Headwaters NWR and Conservation Area will play a role in the recovery many of the species listed in the Multi-species Recovery Plan, including Florida ziziphus (*Ziziphus celata*), Garrett's mint (*Dicerandra christmanii*), scrub lupine (*Lupinus aridorum*); Florida scrub-jay (*Aphelocoma coerulescens*), Everglade snail kite (*Rostrhamus sociabilis plumbeus*), Florida grasshopper sparrow (*Ammodramus savannarum floridanus*), sand skink (*Neoseps reynoldsi*), and bluetail mole skink (*Eumeces egregious lividus*). Other species recovery plans that will be supported by the protection of lands include Audubon's crested caracara (USFWS 1989), eastern indigo snake (USFWS 1982), Florida panther (USFWS 2008), and wood stork (USFWS 1997).

State Wildlife Action Plan

As a requirement for participating in the Federal State Wildlife Grants Program, each state and territory created a Comprehensive Wildlife Conservation Strategy for conservation of a broad array of fish and wildlife. Throughout the development process, the objectives were to identify species of greatest conservation need and their habitats and to develop high-priority conservation actions to abate problems for those species and habitats. These objectives have been developed in a prudent effort to prevent declines before species become imperiled, thereby saving millions of tax dollars. In addition, the matching requirement has encouraged partnerships and cooperation among conservation partners. To meet the intent of the Service's State Wildlife Grants Program, the FWC created Florida's Wildlife Legacy (FWL) Initiative.

The goal of the FWL Initiative was to develop a strategic vision for conserving all of Florida's wildlife. Florida's Comprehensive Wildlife Conservation Strategy (FCWCS) was completed and approved in 2005. The FCWCS emphasizes the building of partnerships with other agencies and the private sector, uses a habitat-based conservation approach, incorporates a broad definition of wildlife (to include invertebrates, aquatic species, and other species), and favors non-regulatory methods in its effort to reach conservation goals and objectives. The FCWCS identifies 194 state threatened, endangered, and species of special concern. Twenty-four projects have been identified in the FCWCS specific to interior scrub and sandhill taxa that utilize the refuge, including sand swimming reptiles and the Florida scrub-jay (FWC 2005). The Everglades Headwaters NWR and Conservation Area will protect and manage important scrub and other habitats identified as being threatened in the FCWCS.

Florida's Endangered and Threatened Species Management and Conservation Plan

Florida's Endangered and Threatened Species Management and Conservation Plan and annual Progress Report provide management and conservation guidance as required under Section 5 of the Florida Endangered and Threatened Species Act of 1977 [372.072, Florida Statutes (F.S.)]. The Act requires the preparation of an initial plan, and any subsequent revisions regarding the management and conservation of threatened and endangered species to be submitted annually. It addresses research and management priorities and FWC's citizen's awareness program, and it includes a progress report on FWC's actions for listed species. Many state listed species are known to occur in the Conservation Partnership Area of the Everglades Headwaters NWR and Conservation Area, including Florida mouse (*Podomys floridanus*), Florida gopher frog (*Rana capito*) gopher tortoise (*Gopherus polyphemus*), Florida scrub lizard (*Sceloporus woodi*), black bear (*Ursus americana*), cutthroat grass (*Panicum abscissum*), scrub stylisma (*Stylisma abdita*), nodding pinweed (*Lechea cernua*), scrub bay (*Persea humilis*), and Curtiss' milkweed (*Asclepias curtissii*).

Florida Forever Program

The Florida Forever Program, created by the Florida Legislature in 1999, follows in the footsteps of earlier successful land acquisition programs in the State of Florida by continuing to focus land acquisition efforts in several resource categories including natural communities, forest resources, plants, fish and wildlife, freshwater supplies, coastal resources, geologic features, historical resources, and outdoor recreational resources. Lands have been proposed for acquisition in the Florida Forever Program because of outstanding natural resources, opportunity for natural resources-based recreation, or historic and archaeological resources. Some of the Everglades Headwaters NWR and Conservation Area lands will likely be targeted for acquisition by Florida Forever. If the Service protects these lands, it will allow Florida Forever to direct its limited resources to other sites urgently needing protection, the reciprocal also being true.

Critical Lands and Waters Identification Project

The Critical Lands/Waters Identification Project (CLIP) was launched in 2006 to support the work of the Century Commission for a Sustainable Florida. CLIP is a statewide GIS inventory of ecological conservation priorities created in collaboration by Tom Hoctor, Director of the Center of Landscape Conservation Planning at the University of Florida, Jon Oetting of Florida Natural Areas Inventory (FNAI) at Florida State University, and FWC. CLIP uses relevant science and the best available statewide spatial data to identify and aggregate Florida's critical environmental resources in a database that can be used as a decision-support tool for collaborative statewide and regional conservation and land use planning to ensure the sustainability of Florida's biodiversity and ecosystem services (Century Commission for a Sustainable Florida 2010; Oetting et al. 2011).

CLIP science recommendations will be vetted with rural landowners, state agencies, regional planning councils, and other stakeholders through the Cooperative Conservation Blueprint Initiative, led by FWC through a partnership-based process. The goal is to develop a strategic plan for land and water conservation in Florida, using a new and broader range of conservation incentives with a shared view of the priorities. Current Cooperative Conservation Blueprint work includes the development of a regional pilot project in south-central and southwest Florida to integrate CLIP-based priority areas with additional regional and local conservation priorities data and to work with landowners, counties, and other stakeholders to identify existing and future opportunities to use incentives to conserve and sustain private working landscapes that are key for conservation efforts in the region.

Avon Park Air Force Range Joint Land Use Study

The Joint Land Use Study (JLUS) is a collaboration with local cities and counties that includes portions of Polk, Osceola, Highlands, and Okeechobee Counties and the cities of Avon Park, Frostproof, and Sebring. The JLUS program encourages cooperative land use planning between military installations and the adjacent communities so future community growth and development are compatible with the training and operational missions of the installation. The JLUS is studying the planned land uses in the area that surround the range, and the military training needs of the armed forces, to determine their compatibility. It is designed to protect public health, safety, and welfare, while safeguarding the ability of the military services and homeland security agencies to provide needed training. A common recommendation for all counties and cities from this study includes developing policies to protect critical areas supporting military readiness and/or environmental conservation, including partnering opportunities with the U.S. Air Force, The Nature Conservancy, Florida Forever, Florida Defense Alliance, South Florida Water Management District, Florida Department of Environmental Protection, and federal agencies to

purchase conservation lands. As part of this program, potential funding sources should be identified and alternative mechanisms to fee-title purchase explored, such as restrictive use easements, aviation easements, land exchanges, and transfer of development rights.

Kissimmee River Restoration Project

In 1992, the U.S. Congress authorized the Water Resources Development Act to implement the Kissimmee River Restoration project, a cost-shared partnership between SFWMD and the USACE. Scheduled for completion in 2015, the Kissimmee River Restoration Project is targeted to restore over 40 square miles of the river/floodplain ecosystem, including 43 miles of meandering river channel and 27,000 acres of wetlands (http://www.ces.fau.edu/education/riverwoods/kissimmee).

South Florida Water Management District General Management Plan

The Lake Marion/Reedy Creek Management Area is a Save Our Rivers project that lists management goals and objectives, provides historic and current site information, and describes specific management issues and activities relating to natural resources, public use, and project administration from 2005 through 2010. Natural resource management of Lake Marion/Reedy Creek Management Area includes maintenance of natural vegetative communities, wildlife management, and the protection of threatened and endangered species. Current natural resource management activities focus on prescribed fire, vegetation management, and forest management, including exotic plant control, prescribed burning, and environmental restoration of these scrub sites (SFWMD 2005). The Everglades Headwaters NWR and Conservation Area will support some of the water quality and quantity conservation goals and objectives identified in the SFWMD plan.

Northern Everglades and Estuaries Protection Program

In May 2007, the Florida legislature passed the Northern Everglades and Estuaries Protection Program (NEEPP), which expanded the existing Lake Okeechobee Protection Act (LOPA) to include Caloosahatchee and the St. Lucie Rivers and Estuaries. The program promotes a comprehensive, interconnected watershed approach to protecting these systems and recognizes the importance and connectivity of the entire Everglades ecosystem from the Kissimmee Chain of Lakes south to Florida Bay. The Florida legislation charged the SFWMD, the FDEP, and the FDACS to effectively coordinate in order to create the NEEPP, with the primary goal to restore and protect surface water resources by addressing water quality, quantity, and the timing and distribution of water to the natural system. Refuge-managed units will play a role in the surface water quality objectives identified through NEEPP. The Everglades Headwaters NWR and Conservation Area will benefit NEEPP.

State of the Scrub

"*State of the Scrub*" by Turner et al. (2006) represents the most current information on conservation progress, management responsibilities, and land acquisition priorities for imperiled species of Florida's Lake Wales Ridge. The report collates and synthesizes data on 36 of the ecosystem's rare and endemic species and evaluates the success of land acquisition efforts in reducing threats to imperiled species using a new quantitative approach. In addition, the report estimates the effectiveness of the reserve network that is likely to result from planned and future acquisitions. The State of the Scrub identifies several species on the Lake Wales Ridge that merit special attention from land managers, and quantification of the importance of each site to each of the rare species is provided, thereby highlighting those sites that are important to the survival of particular species. Finally, high-priority sites are determined for future acquisition

based on their biological value and cost-effectiveness. The areas targeted for protection by the Service include several sites that are identified in "State of the Scrub."

Highlands County Comprehensive Plan

Highlands County is a major contributor of natural area acquisition and protection in Highlands County, primarily through the vision and implementation of the Highlands County Comprehensive Plan. The Highlands County Comprehensive Plan identifies acquisition of natural resources including scrub and sandhill habitats (xeric habitats); endemic populations of threatened or endangered species, including species of special concern; wetlands and cutthroat seeps, and un-canalized freshwater estuaries feeding the lakes; important aquifer recharge functions; and unique scenic or natural resources through the plan's Natural Resources Element utilizing the Conservation Trust Fund account. Acquisition can be in the form of fee-title purchase, easements, donations, and other less-than-fee-title mechanisms of natural resources listed above for the enhancement, required maintenance, and/or management of publicly owned conservation-valued lands, as determined by the Highlands County Board of County Commissioners (Board). The Conservation Trust Fund is funded through voluntary contributions, mitigation or impact fees, matching grants, and referendum. Other sources of funding as recommended by the Highlands County Natural Resources Advisory Commission (NRAC) are considered by the Board. NRAC was established in 1991 by the Board whose members include 11 full-time residents of Highlands County, including environmental, developmental, agricultural, professional, and at-large representatives, who function as an advisory body to the Board on matters of natural resource protection, environmental clearance, and the stewardship of conservation efforts by, in, and for Highlands County.

Polk County Environmental Lands Program

Polk County is a major contributor of natural area protection, acquiring more than 12,000 acres of diverse lands in the county through the Polk County Environmental Lands Program (Program). The Program accepts site nominations and then gathers pertinent information for each nomination. The Environmental Lands Criteria are used by the County's Technical Advisory Group and Conservation Land Acquisition Selection Advisory Committee (CLASAC) to rank sites and recommendations for or against acquisition. These site and recommendations are then forwarded to the Board of County Commissioners (BoCC) for consideration and approval. Costs for acquisition are shared with partners whenever possible. Once acquired, interim management begins and may include site security, debris removal, exotic species removal, and creation of visitor service amenities. A final management plan for each site is finalized and adopted by the BoCC based on evaluations of nature-based recreation opportunities and resource inventories to ensure compatibility with the site, and through input received via public review, CLASAC, and Polk County staff. Acquisition, management, and restoration of environmentally sensitive lands, water resources, and important wildlife habitat in Polk County are funded through a 1994 bond referendum utilizing ad valorem taxes administered over a 20-year life span.

Osceola County Environmental Lands Conservation Program

Osceola County established the Environmental Lands Conservation Program to acquire and manage environmentally significant lands with a voter-endorsed ad valorem funding source. This property tax enables the program to issue bonds for the purchase of land for water resource protection, wildlife habitat, public green space and resource-based passive recreation. A Land Conservation Advisory Board ranks proposed properties for possible acquisition. It is comprised of nine members from the community representing such areas as agriculture, business, education, environment, government, civic organizations, and the cities of Kissimmee and St. Cloud. An environmental lands coordinator

assists the Land Conservation Advisory Board, county commissioners, and county manager and staff with the responsibilities of acquiring and managing environmentally significant lands for public use in Osceola County. To begin acquiring and protecting natural lands and water resources, the process starts with a site nomination form, which is available from the environmental lands coordinator. The completed form will then be reviewed by the Land Conservation Advisory Board for consideration for purchase as an environmentally significant site.

Green Horizon Land Trust

The Green Horizon Land Trust was created to conserve environmentally valuable or sensitive lands and open space in and around the central Florida ridge systems for the benefit of the general public, and to educate the public as to the importance of such lands and their conservation. Green Horizon is a local, nonprofit, 501(C)(3) Florida corporation incorporated in 1991 and governed by a Board of Directors consisting of local individuals from such diverse fields as business, law, banking, real estate, land planning, and conservation. Green Horizon uses a variety of creative methods to achieve its land conservation goals and to financially benefit donors. Conservation may be accomplished through outright purchases, bargain sales, donations, conservation easements, limited development agreements or similar techniques as landowners may be able to take advantage of income, estate, or property tax benefits that can help make land conservation affordable. The trust has acquired thousands of acres, mostly in Polk, Osceola, and Citrus Counties, and placed them in preservation for protection of habitat and for the enjoyment of the public in perpetuity. Some lands are managed directly by Green Horizon, but many have been acquired by donation or purchase then placed in the stewardship of cities, counties, or Florida water management districts for the benefit of the public. With the exception of properties that are inaccessible by roads, all are planned to be or are currently opened to the public for low impact recreation such as hiking, biking, canoeing, bird watching, or environmental education (Green Horizon Land Trust 2009). The Everglades Headwaters NWR and Conservation Area will complement Green Horizon protection efforts.

C. PARTNERSHIP EFFORTS/RELATED RESOURCES

Partnerships are integral to the conservation of this landscape. The protection and conservation of wildlife habitats and working landscapes are issues of concern in the region. During the public scoping and conversations with landowners and other conservation partners in this landscape, the Service recognized that all interested parties will have an enhanced ability to protect and manage wildlife and habitats in the Kissimmee River Basin. Partners often assist with activities, including environmental education and interpretive programs, land acquisition, public relations, habitat evaluations, species inventories, nest site and wildlife monitoring, and habitat restoration. For that reason, the Service recognizes the need to collaborate with other conservation organizations in the region and is facilitating a Greater Everglades Partnership Initiative.

Through this initiative, the Service will work to combine conservation efforts with those of many partners, including partners yet to be identified. Several federal and state agencies serve as key partners in this landscape, including Natural Resource Conservation Service (NRCS), U.S. Department of Agriculture (USDA); Avon Park Air Force Range, U.S. Air Force; Florida Fish and Wildlife Conservation Commission (FWC); Florida Department of Agriculture and Consumer Services (FDACS); Florida Forest Service (FFS) (formerly Florida Division of Forestry); Florida Department of Environmental Protection (FDEP); Florida Division of State Lands; and South Florida Water Management District (SFWMD). Figure 1 depicts current conservation lands and waters within the Study Area. Many of our partners already own or have future plans to protect lands in the project area through conservation or agricultural easements. Still others have completed on-the-ground habitat restoration projects throughout the Kissimmee River Basin. These partners use their individual mission

statements to focus protection and restoration efforts. Taken together, those mission statements cover the protection of state and federal threatened and endangered species, rare habitats, prairie and flatwoods habitats, ranchlands, and recreational areas that have been identified through the scoping process as being important to the long-term ecological health, economy, and way of life of the region.

RELATIONSHIP TO STATE WILDLIFE AGENCY

A provision of the National Wildlife Refuge System Improvement Act of 1997, and subsequent agency policy, is that the Service shall ensure timely and effective cooperation and collaboration with other state fish and game agencies during the course of acquiring and managing refuges. State wildlife management areas and national wildlife refuges provide the foundation for the protection of species, and contribute to the overall health and sustainment of fish and wildlife species in the State of Florida.

Key state conservation agencies in this landscape include the FWC, FFS, FDACS, FDEP, SFWMD, and Southwest Florida Water Management District (SWFWMD).

Management of state fish and wildlife resources is administered by FWC, FDACS, and FDEP for the long-term well-being and benefit of people. FWC protects and manages habitats for more than 575 species of wildlife, more than 200 native species of freshwater fish, and more than 500 native species of saltwater fish; while balancing these species' needs with the needs of nearly 19 million residents (U.S. Census Bureau 2011) and the 81 million annual visitors (FDOT 2010) who share the land and water with Florida's wildlife.

The FWC responsibilities include:

- Law Enforcement – to protect fish and wildlife, keep waterways safe for millions of boaters, and cooperate with other law enforcement agencies providing homeland security.
- Research – to provide information for the FWC and others to make management decisions based on the best science available involving fish and wildlife populations, habitat issues, and the human-dimension aspects of conservation.
- Management – to manage the state's fish and wildlife resources based on the latest scientific data to conserve some of the most complex and delicate ecosystems in the world along with a wide diversity of species.
- Outreach – to communicate with a variety of audiences to encourage participation and responsible citizenship and stewardship of the state's natural resources.

FWC, FDACS, and FDEP manage state lands and waters. FWC directly manages 1.4 million acres and participates with other public land mangers on 2.9 million acres and 220,000 acres of private lands for recreation and conservation purposes. FDEP manages 150 state parks covering nearly 0.6-million acres and 57 coastal and aquatic managed areas, totaling over 5 million acres of submerged lands and coastal uplands.

FFS manages over 1 million acres of state forests in Florida for multiple public uses including timber, recreation, and wildlife habitat. Operating from 15 field units throughout the state, FFS maintains a mission to protect and manage the forest resources of Florida, ensuring that they are available for future generations. Wildfire prevention and suppression are key components in FFS's efforts.

The SFWMD and SWFWMD are two of five state water management agencies. The districts are responsible for water management, water supply, and the conservation and protection of water resources, while providing environmental, economic, and recreational benefits in all or part of 32 south and southwest Florida counties. Together, the SFWMD and SWFWMD along with their

partners manage more than 1.05 million acres (SFWMD 2011) for the purposes of protecting, supplying, and conserving the region's water resources.

The state's participation and contribution throughout this land protection process will provide for ongoing opportunities and open dialogue to improve the ecological sustainment of fish and wildlife in the State of Florida. Various state agencies provided input during scoping and through the State Clearinghouse during public review and comment (for more information regarding comments submitted, see the Public Participation section in Chapter I of the Final EA and the Summary of Comments and the Service's Responses in Appendix G of the Final EA).

RELATIONSHIP TO TRIBAL GOVERNMENTS

Native American tribes are also important partners in the greater Everglades landscape. The Service also works with the tribes to ensure timely and effective cooperation and collaboration. During the development of both the Draft and Final LPP and the Draft and Final EA, the Service contacted several Native American tribes with interest in this landscape. These included: Seminole Tribe of Florida; Miccosukee Tribe of Indians of Florida; Seminole Nation of Oklahoma; Muscogee (Creek) Nation; and Poarch Band of Creeks.

The Service met with the Seminole Tribe of Florida during this planning process to develop an understanding of the Seminole Tribe of Florida's concerns, including those related to cultural and water resources. The Seminole Tribe of Florida administers a robust tribal government, operates various tourist and other enterprises, and supports the local economy and employment base. The Study Area for the Everglades Headwaters NWR and Conservation Area encompasses numerous sites of interest to the Seminole Tribe of Florida. Sites that might be encountered within the 50,000-acre refuge include green corn dance sites, villages, camps, cemeteries, and historic landscapes such as the Okeechobee Battlefield. Further, the Brighton Reservation of the Seminole Tribe of Florida is located in Glades County, adjacent to the Study Area. Issues of concern to the Seminole Tribe of Florida include water rights, cultural resources, management plans, grazing rights, and vegetation and fire management/green corn dance.

The Muscogee (Creek) Nation and the Miccosukee Tribe of Indians of Florida have also expressed interest in the project. The Tribal Historic Preservation Officer for the Muscogee (Creek) Nation requested copies of the Draft LPP and Draft EA when they were available for review. The Miccosukee Tribe's main interest appears related to tribal cattle grazing lands in Highlands County and burial sites. (For more information regarding comments submitted, see the Public Participation section in Chapter I of the Final EA and the Summary of Comments and the Service's Responses in Appendix G of the Final EA.)

III. Land Protection Strategy

A. ACTION AND OBJECTIVES

LAND PROTECTION AREA

The land protection area for the Everglades Headwaters NWR and Conservation Area has a boundary of up to approximately 150,000 acres within the Kissimmee River Basin (Figure 3a). The Service concludes that acquiring identified habitat areas will provide for the protection of imperiled species, enhance habitat connectivity, protect water resources, and mitigate the effects of global climate change. It will also help many of the more common game and nongame species. Additionally, this habitat complex will provide ample opportunities for wildlife-dependent recreation, new and dynamic partnerships, and scientific research.

LAND USE/LAND COVER

Table 3 summarizes the general types and amounts of land use/land cover in the project area. In general, the land is a mix of wet and dry prairies, sandhill and scrub, pine flatwoods, various wetlands, ranchland, silviculture (tree farming) land, and open water. Numerous habitats could benefit from large-scale management (Figure 2).

Table 3. Land use/land cover acreages in the Study Area

LAND COVER	PROTECTED	UNPROTECTED	TOTAL
Cutthroat Grass Communities	11,025.15	35.29	11,060.44
Dry Prairie	48,150.97	34,451.69	82,602.66
Freshwater Forested Wetlands	47,893.80	81,623.26	129,517.06
High Pine, Florida Scrub, Sandhill	23,548.83	26,073.73	49,622.56
Improved and Unimproved Pasture	47,991.70	536,487.85	584,479.55
Intensive Agriculture	2,952.52	199,254.18	202,206.70
Mesic and Hydric Pine Flatwoods and Scrubby Flatwoods	103,715.75	76,837.08	180,552.83
Mesic Temperate Hammock	11,910.91	18,441.77	30,352.68
Open Water	4,302.10	136,224.39	140,526.49
Shrub and Brushland	1,315.61	8,168.01	9,483.62
Urban	20,172.66	135,357.35	155,530.01
Wet Prairie and Freshwater Marshes	98,252.21	148,938.70	247,190.91
TOTAL	**421,232.21**	**140,1893.3**	**1,823,125.51**

B. LAND PROTECTION PRIORITIES

The Everglades Headwaters NWR and Conservation Area will protect 150,000 acres, using a combination of fee-title acquisitions and less-than-fee-title acquisitions (e.g., conservation easements and cooperative agreements) from willing sellers. The Service believes these are the minimum interests necessary to conserve and protect the fish and wildlife resources in this landscape.

Private lands have been prioritized for acquisition using the following criteria:

- Landscape connectivity and wildlife corridors
- Priority habitats for threatened and endangered species
- Restoration of wetlands and water quality in the Everglades watershed
- Opportunities for wildlife-dependent recreation and education

Based on a GIS-based land prioritization analysis (Appendix C, Final EA), three categories of land acquisition have been established: high, medium, and low. These priority ranks are high (Tier I), medium (Tier II), and low (Tier III). However, attributes of each group may increase the suitability for increasing a lower-ranked priority group to a higher-ranked priority group [e.g., a property needing habitat restoration (Tier III) may provide a critical habitat linkage after restoration, thus warranting elevating it to a Tier I or II rating]. In addition to the initial rank scoring of an individual property, a site visit and best professional judgment or management assessment will be used to assure properties receive appropriate consideration. A description of the lands within each of the three priority groups is given below. Specific parcels and group assignments are detailed in Attachment 1. Table 6 summarizes the Service's land protection priorities and proposed methods of acquisition. Figures 3a-3h detail the parcels included in the approximately 130,000-acre Conservation Focal Area, Figures 4a-4g show the overall priority rankings for the approximately 130,000-acre Conservation Focal Area, and Figure 5 shows the general priorities across the landscape.

TIER I GROUP

Lands identified in the Tier I group contain the higher-ranked habitats based on our land prioritization model (Appendix C, Final EA). One of the key attributes of the Tier I Group is that habitats are relatively pristine and ecologically intact. Examples of this habitat are intact dry prairie or scrub habitat. Wetlands that have not been significantly altered are also found within this group. Management is needed to maintain these habitats, but little is required for habitat restoration. Priority habitats and species are known to occur on these parcels. A second key attribute of this group is that it is adjacent to and increases connectivity of the existing conservation landscape. The combination of connectivity and quality of habitats provide the basis for inclusion in this priority group.

TIER II GROUP

Lands identified in the Tier II Group contain the medium-ranked habitats based on our land prioritization model. Key attributes of the Tier II Group are that there is considerable opportunity for habitat restoration activities that require minimal activity (e.g., filling of surface ditches, reintroducing fire) and that connectivity with conservation lands can be improved. This group may have high habitat value, but does not fully contribute to connectivity between conservation lands, or the inverse may be true. Also, habitats may be of high-quality, being mostly intact but in need of some restoration activities. Examples of this habitat in this group are the same as for the Tier I Group, but may include semi-improved pasture, degraded dry prairie, or overgrown scrub.

TIER III GROUP

Lands identified in the Tier III Group contain lesser amounts of habitat quality and connectivity based on our land prioritization model. However, restoration potential of this habitat is much higher with this group than with the other two groups. Habitats may be the same as the other groups, but may appear further degraded. Lack of site-specific scientific data may also be responsible for a Tier III rating. Examples may be more intensive wetland drainage, or shifts in plant communities due to the lack of fire. One of the habitats found in greater quantities than the other groups is improved pasture. While improved pasture provides habitat for some imperiled species, such as Audubon's crested caracara, restoration of improved pasture will also provide habitat for other species, such as Florida grasshopper sparrow and Everglade snail kite. As such, the Tier III Group provides the greatest potential to not only restore habitat, but also to improve the quality of the overall landscape. It should be noted that all three of these priority groups have been ranked higher (according to our prioritization model) than other habitats found throughout the project area, thus all should be considered as suitable opportunities for conservation.

With the above criteria in mind, we configured the boundaries for the Conservation Focal Area. Lands to be included in the Conservation Partnership Area will be prioritized as willing landowners become known. The Service reserves the right to be flexible with the tier group rankings detailed above, because several factors also influence the priority of land protection, including the availability of willing sellers, availability of funding, and increased scientific understanding. In addition, the Service must be flexible in its methods and priorities of land protection to meet the needs of individual landowners. Attachment 1 provides the parcel table, the parcel maps, and their associated priorities.

C. LAND PROTECTION OPTIONS

The Service acquires lands and interests in lands, such as easements, and management rights in lands through leases or cooperative agreements, consistent with legislation or other congressional guidelines and executive orders, for the conservation of fish and wildlife and to provide wildlife-dependent public use for recreational and educational purposes. These lands include national wildlife refuges, national fish hatcheries, research stations, and other areas.

We will use the listed options to implement this Final LPP.

Option 1: management or land protection by others
Option 2: less-than-fee-title acquisition by the Service
Option 3: fee-title acquisition by the Service

When land is needed to achieve fish and wildlife conservation objectives, the Service seeks to acquire the minimum interest necessary to meet those objectives, and acquire it only from willing sellers. Our approach includes a combination of Options 1, 2, and 3 above. We believe this approach offers a cost-effective way of providing the minimal level of protection needed to accomplish refuge objectives, while also attempting to meet the needs of local landowners.

OPTION 1. MANAGEMENT OR LAND PROTECTION BY OTHERS

A great deal of land adjacent to and ecologically important to the project is already owned by our partners or managed by our partners through conservation easements, while others are proposed (e.g., through Florida Forever). It should also be noted that the conservation and protection of this landscape fits well into several partner agency initiatives. Management and protection of lands by others will continue, and the project will complement those efforts.

OPTION 2. LESS-THAN-FEE-TITLE ACQUISITION BY THE SERVICE

Under option 2, we will protect and manage land by purchasing only a partial interest from willing landowners, typically in the form of a conservation easement. Other less-than-fee-title acquisition methods that may be employed include leases, donations, mitigation and conservation banks, and/or cooperative agreements. Most of the less-than-fee-title acquisition options leave the parcel in private ownership and the Service and landowner agree to land-use practices that enable both to meet their conservation goals, as well as provide the landowner continued stewardship and management of his lands. The structure of such easements will provide permanent protection of existing wildlife habitats while also allowing habitat management or improvements and access to sensitive habitats, such as for endangered species or migratory birds. We will determine, on a case-by-case basis, and negotiate with each landowner, the extent of the rights that we will be interested in buying. Those may vary, depending on the configuration and location of the parcel, the current extent of development, the nature of wildlife activities in the immediate vicinity, the needs of the landowner, and other considerations. Less-than-fee-title acquisitions (e.g., conservation easements) will be acquired in perpetuity.

In general, any less-than-fee-title acquisition will maintain the land in its current configuration with no further subdivision or development. Easements are a property right, and typically are perpetual. If a landowner later sells the property, the easement continues as part of the title. Properties subject to easements generally remain on the tax rolls, although the change in market value may reduce the assessment. The Service does not pay refuge revenue sharing (i.e., funds the Service pays to counties in lieu of taxes) on easement rights. Where we identify conservation easements, we will be interested primarily in purchasing development rights and some wildlife management rights, such as restoring wetland or grassland habitat. Easements are best when:

- only minimal management of the resource is needed, but there is a desire to ensure the continuation of current undeveloped uses and to prevent fragmentation over the long term;
- a landowner is interested in maintaining ownership of the land, does not want it to be further developed, and would like to realize the benefits of selling development rights;
- current land use regulations do not limit the potential for adverse management practices;
- the protection measures for the easement lands can be accommodated with passive management; or
- only a portion of the parcel contains lands of interest to the Service.

The determination of value for purchasing a conservation easement involves an appraisal of the rights to be purchased, based on recent market conditions and structure in the area. The Land Protection Methods section further describes the conditions and structure of easements.

Acceptance of interest in conservation and mitigation banks or entering into management agreements typically involves the acceptance of less-than-fee-title interest. In these instances, the Service will accept the management responsibility while ownership remains with the landowner. In those instances where the acceptance involves fee-title-transfer, the parcel will either need to be located within the Conservation Focal Area, or the Service will be required to conduct additional acquisition planning according to NEPA guidelines.

OPTION 3. FEE TITLE ACQUISITION BY THE SERVICE

Under Option 3, we will acquire parcels in fee-title from willing sellers, thereby purchasing all rights of ownership. This option provides us the most flexibility in managing priority lands, and ensuring the protection in perpetuity of nationally significant trust resources, and providing opportunities to engage the public with wildlife-dependent recreation and education opportunities.

Generally, the lands we will buy require more than passive management (e.g., controlling invasive species, mowing or prescribed burning, planting, or managing for the six priority public uses). We only propose fee-title acquisition when adequate land protection is not assured under other ownerships, active land management is required, or we determine the current landowner will be interested in a fee-title acquisition transaction and is unwilling to sell a partial interest such as a conservation easement.

In some cases, it may become necessary to convert a previously acquired conservation easement to fee-title acquisition: for example, when an owner is interested in selling the remainder of interest in the land on which we have acquired an easement. We will evaluate this need on a case-by-case basis.

D. LAND PROTECTION METHODS

We may use several methods of acquiring either a full or a partial interest in the parcels identified for Service land protection: (1) Purchase (e.g., complete title, or a partial interest like a conservation easement); (2) leases and cooperative agreements; (3) mitigation and conservation banks, and (4) donations.

PURCHASE

For the up to 50,000 acres of the Everglades Headwaters NWR, the preferred acquisition method is fee-title acquisition; however, less-than-fee-title interest will be considered. For the 100,000 acres for the Conservation Area, the preferred acquisition method is through conservation easements; however, other less-than-fee-title interest acquisition methods could also be used.

Fee-Title Purchase

A fee-title interest is normally acquired when: (1) The area's fish and wildlife resources require permanent protection not otherwise assured; (2) land is needed for visitor use development; (3) a pending land-use change could adversely impact the area's resources; or (4) it is the most practical and economical way to assemble small tracts into a manageable unit.

Fee-title acquisition conveys all ownership rights to the Federal Government and provides one of the best assurances of permanent resource protection. A fee-title interest may be acquired by donation, exchange, transfer, or purchase (as the availability of funding allows).

Easement Purchase

Easement purchase refers to the purchase of permanent, limited rights (less-than-fee-title) from an interested landowner. The landowner will retain ownership and use of the land, but will sell certain rights identified and agreed upon by both parties. The objectives and conditions of our conservation easements will recognize lands for their importance to wildlife habitat, and any other qualities that recommend them for additional conservation. Land uses that are normally restricted under the terms of a conservation easement include:

- Conversion of native habitats,
- Development rights,
- Alteration of the area's natural topography (unless for restoration),
- Uses adversely affecting the area's desired floral and faunal communities, and
- Alteration of the natural water regime.

LEASES AND COOPERATIVE AGREEMENTS

Potentially, the Service can protect and manage habitat through leases and cooperative agreements. Landowners and agencies could enter into long-term renewable leases or cooperative agreements should they want to co-manage their lands with the Service. Short-term leases can be used to protect or manage habitat until more secure land protection can be negotiated.

DONATION

We accept donations and transfer of lands from other agencies, organizations, and individuals in fee-title or conservation easement within approved areas. We are currently aware of potentially three or four formal opportunities to accept donations of parcels in our land protection boundary for this project.

MITIGATION AND CONSERVATION BANKS

Conservation and mitigation banks provide a unique opportunity for the Service to manage lands, and completely restore wetlands and/or endangered species habitat as part of the National Wildlife Refuge System. Additionally, funding under conservation and mitigation banks will also provide for management and monitoring activities associated with managing the bank. Trust fund management could reside with other entities (e.g., land trusts and non-governmental organizations) and the Service could provide its management expertise. Ownership of title to the bank itself could be another agency, organization, individual, or the Service.

EXCHANGE

We have the authority to exchange land in Service ownership for other land that has greater habitat or wildlife value. Inherent in this concept is the requirement to get dollar-for-dollar land value with, occasionally, an equalization payment. Exchanges are attractive because they usually do not increase federal land holdings or require purchase funds. However, they also may be very complicated and take a long time to complete.

E. FISH AND WILDLIFE SERVICE LAND ACQUISITION POLICY

It is the Service's policy to work with willing sellers to acquire fee-title or less-than-fee-title interest in property.

CONSERVATION PARTNERSHIP AREA

During the development of this document, the original 1.8 million-acre Study Area was refined and reduced to an approximately 745,000-acre Conservation Partnership Area. Within this Conservation Partnership Area the Service will have the ability to work with willing landowners and partners on conservation programs and agreements. The Service will have the authority to acquire up to 100,000 acres of less-than-fee-title interest; once 100,000 acres are acquired for the Conservation Area, any proposal to expand beyond the authorized 100,000 acres will require an additional planning effort by the Service, including public involvement, in accordance with applicable laws and policies. Participation will be voluntary. Landowners within an approved Conservation Partnership Area are under no obligation to sell interest in their properties to the Service. The Conservation Partnership Area will provide important opportunities for conservation, while at the same time maintaining the ability of the ranching community to persist. Landowners in the Conservation Partnership Area may voluntarily choose to participate and participating lands will remain in private ownership. Private landowners who elected to participate will continue to control activities on their lands. As lands are

acquired, they then become part of a 100,000-acre Conservation Area, and will reflect the vision, purposes, and goals of the overall project, but are subject to the terms and conditions of whatever easement, agreements, and/or other tool(s) that will be used for less-than-fee-title acquisition. Less-than-fee-title acquisitions (e.g., conservation easements) will be acquired in perpetuity.

CONSERVATION FOCAL AREA

Once a Conservation Focal Area has been approved for fee-title purchase, we will contact landowners within the boundary to determine whether any landowners are interested in selling. If a landowner expresses an interest and gives us permission, a real estate appraiser will appraise the property to determine its market value. Once an appraisal has been approved, we can present an offer for the landowner's consideration. In the case of this project, a Conservation Focal Area of approximately 130,000 acres was identified, within which the Service will only have authority to acquire up to 50,000 acres. Less-than-fee-title acquisition methods could also be used within the Conservation Focal Area.

Appraisals conducted by Service or contract appraisers must meet federal as well as professional appraisal standards. In all fee-title acquisition cases, the Service is required by federal law to offer 100 percent of the property's appraised market value, which is typically based on comparable sales of similar types of properties. However, we can accept landowner offers of less than the appraised value.

We based the Conservation Focal Area on the biological importance of key habitats and connectivity within the landscape. The establishment of this boundary gives the Service the opportunity to negotiate with landowners that may be interested in selling their land. With this internal approval in place, the Service can react more quickly as important lands become available. The Service's long-established policy is to work with willing sellers as funds become available. Lands within an approved Conservation Focal Area do not become part of the refuge unless their owners willingly sell or donate them to the Service.

F. FUNDING

Much of the funding for the Service to buy land comes from the Land and Water Conservation Fund (LWCF), which derives proceeds from certain user fees, the proceeds from the disposal of surplus federal property, the federal tax on motor boat fuels, and oil and gas lease revenues. About 90 percent of that fund now derives proceeds from Outer Continental Shelf oil and gas leases. The Federal Government receives 40 percent of these funds to acquire and develop nationally significant conservation lands.

For the Everglades Headwaters NWR and Conservation Area, LWCF funds will likely be used to acquire lands and easements for properties that consist mainly of dry prairie, flatwoods, and upland areas. Another potential source for funding is the North American Wetlands Conservation Act, which awards funds to wetland conservation projects for the benefit of wetlands-associated migratory birds and other wildlife.

OWNERSHIP, ACQUISITION METHOD, AND ACQUISITION COSTS

There are 45 known landowners within the Conservation Focal Area of approximately 130,000 acres (of which the Service has authority to acquire only up to 50,000 acres) (see Table 6). Many other landowners throughout the Kissimmee River Basin have expressed interest in the project. The estimated cost of acquiring the 150,000 acres for the Everglades Headwaters NWR and Conservation Area is $398 million. This rough estimation is based on the listed assumptions. The

cost per acre values used in this rough estimation are based on the latest county tax assessment data released on November 1, 2011, for the four counties within the project area.

- 50,000-acre Everglades Headwaters NWR. All fee-title lands acquired will primarily be ranchland. We used a median estimated price of $4,000 per acre for ranchland, based on current estimates of cost per acre in this area. Thus, the estimated cost of acquiring all the ranchland in the project area is: 50,000 acres multiplied by $4,000/acre = $200,000,000. Please note any properties that are donated or transferred would lower this estimated total. Table 6 includes properties that are expected to be donated by private interests or transferred by the Federal Government to the refuge, lowering the total by an estimated $2,036,000 and making the total acquisition estimate for the refuge just under $198 million.

- 100,000-acre Conservation Area. The Service will target the use of conservation easements as the primary tool for the Conservation Area. All conservation easements will total about 100,000 acres. Based on our knowledge of acreage values for the area and based on the target of the acquisition of development rights for these easements, the median price of $2,000/acre is estimated for these easements. Hence, the estimated cost of acquiring the available conservation easements is: 100,000 acres multiplied by $2,000/acre = $200,000,000.

Our total estimated cost is the costs of fee-title lands plus conservation easements or $198,000,000 + $200,000,000 = $398,000,000 to purchase whole or partial interest in the 150,000 acres in the project area. It must be noted that these costs are outlined here only to provide an approximation based on currently available information and the assumption that all lands would be purchased at current market value. Donations, mitigation and conservation banks, the ratio of fee-title to easement purchases, and land value fluctuations over time would likely influence the costs associated with completion of the Everglades Headwaters NWR and Conservation Area.

FINANCIAL STRATEGY – ANNUAL OPERATING AND MAINTENANCE, STAFFING, AND REFUGE OPERATING NEEDS PROJECTS

This plan assumes the Service would acquire some structures as part of fee-title acquisitions which would not support the refuge or Service mission and would be slated for demolition. Structures likely to be obtained include single-family homes, hunting cabins, and ranch structures (pens, loading chutes, barns). Some buildings that are in excellent condition could be used for refuge quarters, equipment storage or a visitor contact facility, although we did not identify that as an objective in the Final EA. The most cost-effective way to remove a structure is usually for the staff or a contractor to demolish it, although other methods would be used, where available and appropriate (e.g., local fire department burning for training). All structures would be surveyed for historical significance prior to demolition. Tables 4 and 5 below show typical anticipated costs. The Service also identified the costs associated with posting signs for boundaries and seasonal closures. There would likely be contaminant expenses because of the possibility of contamination from previous land uses such as agriculture and; as such, the Service does not anticipate acquiring any contaminated sites because they would require substantial funding for remediation.

Adding new lands to the refuge will result in additional public use opportunities and costs. In the project area, planned facilities could include hiking trails, several observation areas, and other public use infrastructure. Lands will also be opened to the public for hunting and fishing through a Memorandum of Understanding with FWC. The exact number and location of these public use improvements and opportunities are currently unknown, although some additional details are provided in the Conceptual

Management Plan and Interim Compatibility Determinations, Appendix A and Appendix B, respectively. Details will be further defined and announced to the public as new lands are acquired.

Table 4. One-time costs associated with operating and maintaining refuge lands outlined in this Final LPP

Estimated One-Time Operating Costs	Costs in Dollars
Post boundary signs ($875 per mile @ 80 miles)	$70,000
Survey boundary ($5,000 per mile @ 80 miles)	$400,000
Demolition of houses/small buildings ($25,000 per structure @ 3)	$75,000
Demolition of barns ($10,000 per structure @ 3)	$30,000
Construction of public use sites (boardwalk trails) ($1.4 million per mile)*	$1,404,480
Construction/improvement of parking areas ($16,000 each per 6 lots)	$96,000
New kiosks/exhibits ($12,000 each @ 5)	$60,000
Office, parking, and visitor center ($443 per SF @ 5,000 SF)	$2,215,000
Heavy equipment needs	$400,000
Total Estimated One-Time Operations Cost	$4,750,480

**note: not considered in this figure area additional trails for public access which will be provided and consist of pre-existing gravel and dirt roads and trails*

Table 5. Annual costs associated with operating and maintaining refuge lands outlined in this Final LPP

Estimated Annual Operation & Maintenance Costs	Costs in Dollars
Wildlife and habitat inventories ($5,000 each @ 5)	$25,000
General maintenance of refuge facilities and equipment (e.g., refuge office, public use facilities, vehicles, and equipment)	$150,000
Mowing ($5 per acre @ 1,000 acres annually)	$5,000
Prescribed fire program ($25 per acre @ 15,000 acres annually)	$375,000
Boundary maintenance (e.g., fencing and boundary posting)	$25,000
Invasive species ($10 per acre @ 1,000 acres annually)	$10,000
Operational costs for staff support, buildings, and equipment (e.g., building and utilities, fuel, fleet operation, cell phones, travel, and training)	$100,000
Coordination of hunting and fishing programs with FWC	$25,000
Total Estimated Annual Operations & Maintenance Cost	**$715,000**

Staffing

Staffing on national wildlife refuges is based on a number of factors including refuge size and complexity, proximity to other refuges, and funding. Based on these and other factors, the refuge may be managed as a unit of a refuge complex or as a stand-alone refuge. At this time, it is difficult to delineate staffing specifics, because of the uncertainties associated with the refuge's land acquisition activity, management program complexity, resource issues, funding, and other factors. Because of this uncertainty, two staffing models are described. These models may serve to guide how this refuge may grow in staff over time. Initially however, the Everglades Headwaters NWR and Conservation Area will be managed as a unit under the supervision and management of the Pelican Island NWR Complex, a unit of the larger Merritt Island NWR Complex. Staff from nearby refuges may also be used to support needed staffing functions. Under any scenario, the Service's Southeast Region evaluates and determines staffing needs and priorities.

Refuge Complex Staffing Model

The initial staffing strategy for the Everglades Headwaters NWR and Conservation Area will be under the refuge complex scenario, which identifies complex staff support and a few new positions. The primary oversight and leadership for management will be from the Pelican Island NWR Complex, managed as a unit of the larger Merritt Island NWR Complex, with GS-14 and GS-13 refuge managers and their supporting staffs. New positions include: a refuge manager (GS 11/12) to assist in providing direction, supervision, and coordination for all management activities, ensuring effective oversight and community outreach and successful management of fee-title and conservation easement acquisitions; a maintenance worker (WG 7/8) to assure management projects are completed, such as invasive species control, mowing, boundary maintenance, and other general maintenance activities; and a fish and wildlife biologist (GS-9) to assist in delivering the full range of wildlife conservation and restoration projects on public land, providing technical assistance and assisting in the restoration and management of new acquisitions, and conducting baseline wildlife and habitat monitoring. All other refuge functions, such as office administration, law enforcement, and outreach, will be provided by the overlying refuge complex staff. Fire management staffing will be as outlined below.

Refuge Stand-Alone Staffing Model

At full acquisition, an independent, stand-alone refuge staff will be comprised of the following eight positions: refuge manager GS 13/14 to provide oversight for operation and maintenance of the refuge and conservation area; deputy refuge manager GS 12/13 to assist in all management activities; refuge law enforcement (park ranger, GS 9) to ensure the safety of the visiting public, coordinate with the FWC officers and other local law enforcement, and assure that wildlife laws are enforced to protect an ever-increasing federal interest; an administrative office assistant (GS 7/9) to handle the administrative workload of operating an independent refuge (e.g., purchasing, budget, and personnel support); a maintenance worker (WG 7/8) to assure management projects are completed, such as invasive species control, mowing, boundary maintenance, and other general maintenance activities; a visitor services staff member (Park Ranger, GS 7/9) to provide the needed link with local community educational institutions for wildlife-dependent education and oversee plans for any public use activities such as the coordination of a hunting program; an assistant refuge manager (GS 7/9) to administer and implement the conservation easement program; and a private lands biologist (GS 9/11) to assist landowners with implementing conservation activities on privately owned lands within the Conservation Partnership Area. Fire staffing will be as outlined below in the Fire Management Staffing section.

Additionally, collaborative staffing approaches, such as a co-located multi-agency/organization visitor service facility and program, will also be under the direction of the refuge manager. In the long-term, the Service's Southeast Regional Office will evaluate the need for additional full-time staff based on management needs, project loads, public use activities, and other factors, and could move forward with providing additional staff, if justified.

Fire Management Staffing

Under either the initial or full implementation staffing scenario, fire management activities will be supported not only from Merritt Island NWR, but likely also from Arthur R. Marshall Loxahatchee NWR and Florida Panther NWR. The Service will also coordinate with the Central Florida Ecosystem Restoration Team. Also under either staffing scenario, the approach for fire management will be to use the existing fire staff member for Lake Wales Ridge NWR as the coordination point for both Everglades Headwaters and Lake Wales Ridge NWRs. Once 10,000 acres (20 percent of the total) are acquired for the refuge, a prescribed fire specialist (GS 9/11) will also need to be located in the landscape to coordinate wildfire response. At full acquisition, fire staffing in the landscape to support both Everglades Headwaters and Lake Wales Ridge NWRs will need to include: a prescribed fire specialist/fire management officer (GS 9/11) to oversee a fire operations specialist (GS 7/8), three forestry technician (GS 5) positions, and an engineering equipment operator (WG 8).

IV. Coordination

Throughout the planning process for the Everglades Headwaters NWR and Conservation Area, the Service solicited and carefully considered public comments regarding Service land protection within the Kissimmee River Basin landscape. The Service worked with other federal partners, Native American tribes, the State of Florida, county governments, various municipalities, local land trusts, local and national conservation organizations, landowners, ranchers and farmers, area residents, and the general public. Several federal and state agencies serve as key partners in this landscape, including NRCS, USDA; Avon Park Air Force Range, U.S. Air Force; FWC; FDACS; FFS, FDACS; FDEP; Florida Division of State Lands; and SFWMD. These partners were keys to the development of this project. The Service also contacted several Native American tribes with interest in this landscape: Seminole Tribe of Florida; Miccosukee Tribe of Indians of Florida; Seminole Nation of Oklahoma; Muscogee (Creek) Nation; and Poarch Band of Creeks.

PUBLIC SCOPING

Public scoping helped the Service identify issues and concerns, potential alternatives, and scientific information regarding the Study Area. Preliminary scoping for this project began on August 19, 2010 with a coordination meeting with FWC, which was followed on August 26, 2010, by an America's Great Outdoors event in Kenansville, Florida. This was followed by preliminary informational presentations to the Arthur R. Marshall Foundation, Pelican Island Audubon Society, National Wildlife Refuge Association's Beyond the Boundaries, Trust for Public Land, Summerplace Garden Club, Osceola County Natural Resource Department, FWC, South Florida Water Management District Water Resources Advisory Commission, area ranchers, Osceola County Board of County Commissioners, and Florida Agriculture Commissioner Putnam. A preliminary meeting with the governmental partners was held on November 10, 2010 in Altamonte Springs, Florida, including the Service, NRCS of the USDA, FWC, FDEP, FFS, and SFWMD. The Nature Conservancy and the National Wildlife Refuge Association also attended this November meeting, acting as consultants for the Service.

Secretary of Interior Ken Salazar announced the project at the Everglades Coalition meetings on January 7, 2011. A White House blog appeared the same day to announce the project. The Service created a webpage for the project and posted it on January 10, 2011 (http://www.fws.gov/southeast/greatereverglades). This website was frequently updated throughout the planning process to help provide information to interested parties.

A notice of intent appeared in the *Federal Register* on January 12, 2011 (76 FR 2132), announcing the intent of the Service to develop a Land Protection Plan and associated NEPA documents for the proposed Everglades Headwaters NWR and Conservation Area in the Kissimmee Valley area and opening the public scoping period for the proposal. Public scoping comments were requested to be received by February 28, 2011. By mid-February, this deadline was extended to March 31, 2011.

Information about the project was sent to Florida national wildlife refuges' friends groups (1/12/2011); a press release was sent out to local media to announce the public scoping meetings (1/19/2011); public notice was e-mailed to over 500 individuals, organizations, and government agency officials on the mailing list for the proposal (1/19-20/2011); a press release was sent to about 2,400 media outlets in Florida to announce the public scoping meetings (1/19-20/2011); over 650 printed flyers were mailed to individuals, organizations, and government agency officials on the mailing list for the proposal (1/20-21/2011); the Lake Wales Ridge Ecosystem Working Group forwarded a copy of the press release to its members (1/20-21/2011); a follow-up press release was sent to about 2,400 media outlets in Florida to

announce the remaining public scooping meetings (2/7/2011); notice of the extension of the public scoping comment period was sent to over 880 e-mail addresses and 500 mailing addresses of interested individuals, organizations, and government agency officials on the mailing list for the proposal (2/17/2011); and a follow-up press release was sent to about 2,400 media outlets in Florida to announce the public scoping comment period extension (2/17/2011). Informational presentations and discussions about the project also continued, including to the Lake Wales Ridge Ecosystem Working Group (1/10/2011), Archie Carr Working Group (1/13/2011), Osceola County (2/11/2011), Everglades Day (2/12/2011), River Ranch Property Owners Association and local airboat groups (2/18/2011), Okeechobee Economic Council (3/2/2011), South Florida Water Management District Water Resources Advisory Council (3/3/2011), Osceola County Cattleman's Association (3/8/2011), University of Florida/Institute of Food and Agricultural Sciences Working Across Boundaries Workshop (3/23/2011), Association of County Commissioners (3/25/2011), Conservation Blueprint Pilot Project (3/29/2011), Florida Today Editorial Board (4/5/2011), Palm Beach Post Editorial Board (4/7/2011), Archbold Biological Station (4/14/2011), Seminole Tribe of Florida (5/13/2011), Martin County Conservation Alliance (5/18/2011), National Wildlife Refuge Association Board of Directors (5/20/2011), Florida Cattleman's Association (6/1/2011), Environmental Committee of the Florida Cattleman's Association (6/21/2011), Governor's Cabinet (6/22/2011), Florida Department of Environmental Protection and Florida Department of Agriculture and Consumer Services (6/22/2011), Marshall Foundation (7/1/2011), Natural Resources Conservation Service (7/18/2011), Osceola County (7/19/2011), United Waterfowlers (8/25/2011), Ducks Unlimited (8/26/2011), and Environmental Committee of the Florida Cattleman's Association (9/1/2011).

Articles and information about the project have appeared in print, online, and radio media, including Osceola News Gazette (1/5/2011, 1/6/2011), Sun Sentinel (1/7/2011), Miami Herald (1/7/2011), Reuters (1/7/2011), Environmental News Service (1/7/2011), SoutheastAgnet.com (1/8/2011), GardenNews.biz (1/9/2011), SustainableBusiness.com (1/10/2011), Habi-Chat (January 2011), Ft. Myers News Press (1/18/2011), National Public Radio (1/19/2011, 3/7/2011, 3/17/2011), WCTV.com Tallahassee Eyewitness News Channel 6 (1/19/2011), Okeechobee News (1/26/2011, 2/20/2011), Highlands Today (1/29/2011, 2/6/2011), Palm Beach Post (1/29/2011, 1/30/2011), Vero Beach Press Journal (2/5/2011, 2/7/2011, 2/10/2011), Sebring News Sun (2/6/2011, 2/20/2011), WPTV.com West Palm Beach News Channel 5 (2/11/2011), St. Petersburg Times (2/19/2011, 3/13/2011), Sebring News Sun (2/20/2011), Florida Today (2/23/2011), Gator Tales (Spring 2011), and TCPalm.com (6/23/2011).

Public scoping comments were submitted verbally and in writing at public scoping meetings and by mail, fax, and e-mail. Four public scoping meetings were conducted in and around the Study Area: January 26, 2011 at the Kissimmee Civic Center, Kissimmee, Florida, with about 200 attendees; February 4, 2011 at the Sebring Civic Center, Sebring, Florida, with about 325 attendees; February 9, 2011 at Okeechobee High School, Okeechobee, Florida, with about 665 attendees; and February 10, 2011 at the Freshman Learning Center of Vero Beach High School, Vero Beach, Florida, with about 580 attendees. Both verbal and written comments were submitted at the public scoping meetings. Further, over 38,000 written comments were submitted to the Service during the public scoping period in person and by mail, fax, and e-mail.

The Service met with the Seminole Tribe of Florida during this planning process to develop an understanding of its concerns, including those related to cultural resources. The Seminole Tribe of Florida administers a robust tribal government, operates various tourist and other enterprises, and supports the local economy and employment base. The Study Area for the Everglades Headwaters NWR and Conservation Area encompasses numerous sites of interest to the Seminole Tribe of Florida. Sites that might be encountered within the 50,000-acre refuge include green corn dance sites, villages, camps, cemeteries, and historic landscapes, such as the Okeechobee Battlefield. The Seminole Tribe of Florida also expressed interest in assuring that the project would not impact any

pre-existing tribal water rights. Further, the Brighton Reservation of the Seminole Tribe of Florida is located in Glades County, adjacent to the Study Area. The Historic Preservation Officer for the Muscogee (Creek) Nation requested copies of the Draft LPP and the Draft EA when available for review. And the Miccosukee Tribe expressed interest in the project, especially in relation to burial sites and tribal cattle grazing lands in Highlands County.

PUBLIC REVIEW AND COMMENT

In advance of the release of the Draft LPP and Draft EA, the Service e-mailed and mailed postcards to nearly 1,400 interested parties to announce the upcoming availability of the documents for public review and comment and to allow interested parties to request CD and/or paper copies of the documents. Following release of the Draft LPP and Draft EA, the Service held a public review and comment period during which public comments were requested on the documents. A notice of availability was published in the Reading Room of the *Federal Register* on September 7, 2011 and on September 8, 2011 in the *Federal Register* (76 FR 55699) to help announce the public review and comment period for the Everglades Headwaters NWR and Conservation Area. Information was also posted on the project's website (http://www.fws.gov/southeast/evergladesheadwaters), notices were mailed and e-mailed to the mailing list, and articles were published in various media. Paper and/or CD copies of the Draft LPP and Draft EA were mailed to requesting parties. The documents were also posted on the project's website. A notice of comment extension was posted in the Reading Room of the *Federal Register* at 8:45 a.m. on October 24, 2011 and published in the *Federal Register* (76 FR 66321) on October 26, 2011 to extend the comment period to November 25, 2011. Press releases were sent to over 2,100 media outlets in Florida on 9/7/2011, 9/20/2011, and 10/24/2011.

Beyond Federal Register notices and web postings by the Service, public outreach activities included two open house and public hearing events, mailings and e-mailings to the mailing list, ongoing informational presentations, and media coverage. The Service held two public meetings: September 24, 2011 at the Theatre for the Performing Arts at the South Florida Community College in Avon Park, FL (with 68 attendees) and October 1, 2011 at Exhibit Hall A at Osceola Heritage Park in Kissimmee, FL (with 54 attendees). The first hour was an open house event that allowed attendees the opportunity to ask questions and talk with Service staff about the proposal in an informal atmosphere. The open house portion was followed by a public hearing where the Service presented the proposal and formal public comments were recorded. The Service also mailed notices and requested copies of the documents before September 8, 2011 and e-mailed notices to the mailing list on September 8, 2011, to nearly 1,500 interested parties. On October 24, 2011, the Service also mailed and e-mailed nearly 1,500 notices of the extension of the comment deadline from October 24, 2011 to November 25, 2011. The Service also gave 13 informational presentations to requesting groups during the public review and comment period, including to: Highlands County Board of County Commissioners (9/13/2011), South Florida Water Management District Water Resources Advisory Council (9/19/2011), Polk County Board of County Commissioners (9/27/2011), Sportsman's Association leadership group (10/5/2011), Osceola County Board of County Commissioners (10/10/2011), Peninsular Florida Landscape Conservation Cooperative (10/12/2011), Central Florida Regional Planning Council (10/12/2011), Okeechobee Board of County Commissioners (10/13/2011), Archie Carr Working Group (10/13/2011), Cooperative Alliance for Refuge Enhancement (10/25-26/2011), FWC (11/2/2011) University of Central Florida staff (11/14/2011), and Cooperative Conservation Blueprint (11/15/2011). During the public review and comment period, articles appeared in and on a variety of print, online, and radio media: SoutheastAgNET.com (9/7/2011, 9/20/2011, 9/27/2011), UPI.com (9/7/2011), AudubonofFloridaNews.org (9/7/2011), CFNews13.com (9/7/2011) and on Cable Central Florida News 13 (9/7-8/2011), ABC News Channel 9 (9/7/2011), NBC News Channel 2 (9/7/2011), St. Petersburg Times (9/8/2011), Highlands Today (9/8/2011), Miami Herald (9/8/2011,

11/3/2011, 11/7/2011), Lakeland Ledger (9/8/2011), News Chief (9/8/2011), Orlando Sentinel (9/5/2011, 9/7/2011), Tampa Bay Water Atlas (tampabay.wateratlas.usf.edu) (9/7/2011), National Wildlife Refuge Association (refugeassociation.org, 9/7/2011), National Public Radio (9/12/2011, 10/4/2011, 10/5/2011, 11/8/2011), FLFFC.org (Florida Freshwater Fishing Coalition, 9/9/2011), OrvisNews.com (9/12/2011), Tampa Tribune (9/24/2011), News Sun (9/30/2011, 10/1/2011), Marsh Rider: The Voice of Airboating (October/November edition), News Press Tribune (TCPalm.com, 10/12/2011), Treasure Coast Newspapers (10/25/2011), Politico.com (11/1/2011), NaplesNews.com (11/3/2011), Waterworld.com (11/3/2011), Sarasota.WaterAtlas.org (11/3/2011), Sun-Sentinel.com (11/3/2011, 11/10/2011, 11/19/2011), and SummitCountyVoice.com (11/21/2011).

The Service received more than 2,300 comments during the public review and comment period (see Appendix J in the Final EA for a summary of the substantive comments and the Service's responses). During the public review and comment period, the Seminole Tribe expressed concerns regarding: water rights, cultural resources, management plans, grazing rights, and vegetation and fire management/green corn dance. The Miccosukee Tribe expressed concerns regarding future refuge management activities inundating (e.g., through major hydrological projects) cultural resource sites, especially burial sites. The Service continues to consult with both the Seminole Tribe of Florida and the Miccosukee Tribe of Indians of Florida regarding concerns related to the refuge and conservation area.

Following the public review and comment period, the Service reviewed all comments submitted to assist in evaluating the proposal to develop the Final LPP and the Final EA (see Appendix G in the Final EA for the summary of public comments on the Draft EA and Draft LPP and the Service's responses).

V. Socioeconomic and Cultural Impacts

We do not predict significant adverse socioeconomic or cultural impacts as a result of the Preferred Alternative, as further detailed in the Final EA. There will be an overall positive effect on the socioeconomic environment as a result of the action outlined in the Final LPP. Were the Service to buy fee-title and less-than-fee-title interests in most of the lands in the project area in pursuit of the 150,000 acres as outlined in the Final LPP, we believe positive benefits for communities in Florida will include: increased property values, increased watershed protection, maintenance of many traditional uses, increased opportunities for public use activities, and increased revenues for local businesses from refuge visitors who participate in bird watching, hunting, fishing, and wildlife observation. Recreational use on national wildlife refuges generated almost $1.7 billion in total economic activity during Fiscal Year 2006, according to the Service's *Banking on Nature 2006: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation* report (Carver and Caudill 2007). According to the Banking on Nature study, nearly 35 million people visited national wildlife refuges in 2006, supporting almost 27,000 private sector jobs and producing about $543 million in employment income (Carver and Caudill 2007). In addition, recreational spending on refuges generated nearly $185.3 million in tax revenue at the local, county, state, and federal levels (Carver and Caudill 2007). An estimated 87 percent of refuge visitors travel from outside the local area (Carver and Caudill 2007).

The potential exists for some adverse impacts, namely a potential decline in tax revenue to local governments (as lands come under Service ownership). However, this decline may or may not occur, since those lost tax revenues will be offset by the Federal Government. The Refuge Revenue Sharing Act of June 15, 1935, as amended (16 U.S.C. 715s), requires the Service to make payments to local taxing authorities, typically counties, to offset the loss of local tax revenues due to federal ownership. The Service makes annual payments to local taxing authorities, based on the estimated values of lands that the Service owns located in those jurisdictions. Money for these payments comes from the sale of oil and gas leases, timber sales, grazing fees, the sale of other Refuge System resources, and from congressional appropriations, which are intended to make up the difference between the net receipts from the refuge Revenue Sharing Fund and the total amount due to local taxing authorities. The actual refuge Revenue Sharing payment does vary from year-to-year because Congress may or may not appropriate sufficient funds to make full payment. For the nearby Lake Wales Ridge NWR, 2009 Refuge Revenue Sharing payments were: $23,252 for 1,685 acres in Highlands County and $2,278 for 172 acres in Polk County, while 2010 Refuge Revenue Sharing payments were: $16,406 for 1,689 acres in Highlands County and $1,605 for 172 acres in Polk County. The Service will make similar payments for fee-title lands.

Refuge lands will increase protection for cultural resources in the area. Service ownership will protect unidentified or undeveloped cultural sites from disturbance or destruction. Project-related and research-driven investigations will help elucidate the area's history, cultural adaptations to changing ecological and climatic conditions, and paleoecology. Partnering with the Seminole Tribe and/or other Native American tribes will aid in identifying and protecting sites, cultural landscapes, and specific biota of importance to the tribe(s). Planned interpretation and environmental education programs will continue to promote public understanding and appreciation of the area's rich cultural resources.

Taken together, we believe there to be a net positive effect to the region. (For more information regarding socioeconomic and cultural impacts of the refuge and conservation area, please see Chapter IV, Environmental Consequences, in the Final EA.)

Attachment 1. Parcel Table and Maps

The parcel maps (Figures 3a-3h) show the project area and all land parcels in that area, providing detailed maps which can be used to locate each parcel. The corresponding table (Table 6) groups parcels together by landowner and lists each parcel, each parcel identification number, estimated acres, type of ownership, preferred method of acquisition, overall priority ranking for a single or group of parcels under one landowner, acres by parcel and landowner in the three tiers; and the figure number where each parcel or group of parcels can be found. Figures 4a-4g outline the overall priority rankings from Table 6 for the approximately 130,000-acre Conservation Focal Area for the Everglades Headwaters NWR. Figure 5 outlines the priorities for the entire Conservation Focal Area and will be used during the evaluation and ranking of acquisition of less-than-fee-title interest for the Conservation Area (e.g., through conservation easement). Appendix C of the Final EA outlines the habitat prioritization methodology used to prioritize habitats and properties. The information was derived from the county tax offices. Please note that the acreage derived from the Service GIS database may differ from the acreage on the county tax maps. The Service will acquire either full or partial interest in land parcels, as available from willing sellers over time and as the availability of funding allows. Listed are the definitions of the column headers in Table 6.

Owner Id Number	Numerical identifier for each landowner
Parcel Alpha Code	Alphabetical identifier for each parcel of a particular landowner
Parcel Id	Numerical identification number (property parcel or lot number)
Parcel Acres (estimate)	Estimated acres for each parcel (estimated using parcel data and GIS)
Type of Land Ownership	Private, local government, state, or federal landowner
Preferred Method of Acquisition (minimum interest)	Preferred method of acquisition using the minimum interest necessary to be acquired to meet outlined goals
Overall Priority Ranking	Priority ranking by landowner (i.e., for one or more properties grouped together on the landscape)
Tier I Priority Group (acres, est.)	Number of acres of a landowner or by parcel that qualified for the high-priority ranking
Tier II Priority Group (acres, est.)	Number of acres of a landowner or by parcel that qualified for the medium-priority ranking
Tier III Priority Group (acres, est.)	Number of acres of a landowner or by parcel that qualified for the low-priority ranking
Figure	Figure number that depicts each parcel and group of parcels

Table 6. Protection priorities for the establishment of the Everglades Headwaters NWR and Conservation Area and recommended methods of acquisition

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
1				**9,072.8**	**Private**	**Fee Title**	**I**	**9,061.3**	**11.5**		**3b**
	A	012632000000200000	15.8					15.8			
	B	022632000000200000	637.0					637.0			
	C	032632000000100000	645.7					645.7			
	D	042632000000100000	630.3					630.3			
	E	052632000000100000	643.4					643.4			
	F	082632000000100000	575.3					575.3			
	G	092632000000100000	105.4					105.4			
	H	102632000000100000	576.1					576.1			
	I	112632000000100000	644.2					644.2			
	J	122632000000200000	32.9					32.9			
	K	132632000000200000	30.4					30.4			
	L	142632000000100000	642.8					642.8			
	M	152632000000100000	633.3					633.3			
	N	162632000000100000	102.9					97.9	5.0		
	O	172632000000100000	6.5						6.5		
	P	172632000000300000	253.2					253.2			
	Q	212632000000100000	275.7					275.7			

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
	R	222632000000100000	605.2					605.2			
	S	232632000000100000	642.6					642.6			
	T	242632000000200000	30.3					30.3			
	U	252632000000200000	31.7					31.7			
	V	262632000000100000	642.3					642.3			
	W	272632000000100000	531.3					531.3			
	X	282632000000100000	138.5					138.5			
2				**3,072.6**	**Private**	**Fee Title**	**II**	**998.3**	**2,074.3**		**3c**
	A	313028000000000000	173.1						173.1		
	B	313029000000000000	510.9					510.9			
	C	313030000000000000	487.4					487.4			
	D	313031000000000000	641.8						641.8		
	E	313032000000000000	643.2						643.2		
	F	313033000000011010	598.3						598.3		
	G	313034000000033010	17.9						17.9		
3				**39,643.1**	**Private**	**Fee Title**	**II**	**5,675.3**	**14,726.6**	**19,241.2**	**3d**
	A	013232000000100000	631.2							631.2	
	B	023232000000100000	637.6							637.6	
	C	033232000000100000	666.0						666.0		
	D	043232000000100000	643.9						643.9		
	E	043233000000100000	634.8						634.8		

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
	F	053232000000100000	568.8						568.8		
	G	053233000000100000	629.4							629.4	
	H	063233000000100000	563.7							563.7	
	I	073132000000200000	208.1						208.1		
	J	073233000000100000	637.7							637.7	
	K	083232000000100000	191.3					191.3			
	L	083233000000100000	641.5							641.5	
	M	093232000000100000	644.2						644.2		
	N	093233000000100000	481.6							481.6	
	O	093233459000010010	58.2							58.2	
	P	093233459000080240	0.2							0.2	
	Q	093233459000210120	0.3							0.3	
	R	093233460000010010	56.9							56.9	
	S	103232000000100000	693.7							693.7	
	T	113131000000100000	127.5						127.5		
	U	113232000000100000	652.3							652.3	
	V	123131000000200000	526.1						526.1		
	W	123232000000100000	657.0							657.0	
	X	133131000000200000	393.4						393.4		
	Y	133232000000100000	654.1							654.1	
	Z	143232000000100000	651.1							651.1	

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
	AA	153232000000100000	688.0							688.0	
	AB	163132000000200000	143.4							143.4	
	AC	163232000000100000	147.3					53.0	94.3		
	AD	163232362000010010	27.3					7.1	20.2		
	AE	163232363000010010	27.4						23.6	3.8	
	AF	163232363100010010	25.2					14.0	11.2		
	AG	163232363200010010	27.3						27.3		
	AH	163233000000100000	643.8							643.8	
	AI	173132000000200000	473.0						473.0		
	AJ	173233000000100000	643.1							643.1	
	AK	183132000000100000	754.9					754.9			
	AL	183233000000100000	641.7							641.7	
	AM	193132000000100000	443.0					443.0			
	AN	193233000000100000	645.5							645.5	
	AO	203132000000100000	647.8						647.8		
	AP	203233000000100000	644.7						644.7		
	AQ	213132000000100000	562.8							562.8	
	AR	213232000000100000	240.5						240.5		
	AS	213233000000100000	645.5					645.5			
	AT	223132000000200000	500.0							500.0	
	AU	223232000000100000	679.5							679.5	

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
	AV	233132000000200000	151.6							151.6	
	AW	233232000000100000	651.9							651.9	
	AX	243232000000100000	653.5							653.5	
	AY	253132000000300000	459.8							459.8	
	AZ	253232000000100000	655.1						655.1		
	BA	263132000000100000	656.9							656.9	
	BB	263232000000100000	654.4						654.4		
	BC	273132000000100000	656.6						656.6		
	BD	273232000000100000	640.2					640.2			
	BE	283132000000100000	564.2						564.2		
	BF	283232000000100000	59.6					49.2	10.4		
	BG	283233000000100000	649.1					649.1			
	BH	293132000000100000	657.6						657.6		
	BI	293233000000100000	646.4					646.4			
	BJ	303132000000200000	560.9						560.9		
	BK	303133000000200000	153.4							153.4	
	BL	303233000000100000	649.1							649.1	
	BM	313132000000200000	280.4						280.4		
	BN	313133000000100000	560.6							560.6	
	BO	313233000000100000	655.0						655.0		
	BP	323132000000100000	665.7							665.7	

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
	BQ	323133000000200000	521.5							521.5	
	BR	323233000000100000	644.9					644.9			
	BS	333132000000100000	564.9						564.9		
	BT	333133000000300000	246.4						246.4		
	BU	333232000000200000	277.7					277.7			
	BV	333233000000100000	657.2						657.2		
	BW	343132000000100000	659.3						659.3		
	BX	343232000000100000	659.0					659.0			
	BY	353132000000100000	660.2							660.2	
	BZ	353232000000100000	654.5						654.5		
	CA	363132000000100000	658.9							658.9	
	CB	363232000000100000	654.3						654.3		
4				**154.4**	**Private**	**Fee Title**	**III**			**154.4**	**3d**
	A	313133000000200000	154.4							154.4	
5				**27,072.3**	**Private**	**Fee Title**	**I**	**17,531.8**	**5,942.9**	**3,597.6**	**3d**
	A	013233000000200000	322.3							322.3	
	B	023233000000200000	447.3							447.3	
	C	033233000000200000	602						602.0		
	D	053234000000200000	60.9						60.9		
	E	063234000000200000	198.7							198.7	
	F	073234000000100000	645.1						645.1		

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
	G	083234000000100000	636.1					636.1			
	H	093234000000200000	430.7					430.7			
	I	103233000000100000	657.0						657.0		
	J	103234000000400000	135.3					135.3			
	K	113233000000100000	649.1						649.1		
	L	123233000000100000	651.2							651.2	
	M	133233000000100000	652.8						652.8		
	N	143233000000100000	652.4							652.4	
	O	143234000000200000	1.0						1.0		
	P	143234000000300000	11.2						11.2		
	Q	143234000001200000	311.5					311.5			
	R	143234000001250000	5.0						5.0		
	S	153233000000100000	664.4							664.4	
	T	153234000000100000	643.6					643.6			
	U	163234000000100000	660.4					660.4			
	V	173234000000100000	652.3						652.3		
	W	183234000000100000	646.2						646.2		
	X	193234000000100000	645.6					645.6			
	Y	203234000000100000	651.7					651.7			
	Z	213234000000100000	659.1					659.1			
	AA	223233000000100000	670.8					670.8			

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
	AB	223234000000100000	642.5					642.5			
	AC	233233000000100000	656.0					656.0			
	AD	233234000000100000	555.4					555.4			
	AE	243233000000100000	655.3					655.3			
	AF	243234000000200000	70.9					70.9			
	AG	253233000000100000	658.3					658.3			
	AH	253234000000100000	534.2					534.2			
	AI	263233000000100000	659.0					659.0			
	AJ	263234000000100000	644.4					644.4			
	AK	273233000000100000	675.6					675.6			
	AL	273234000000100000	642.4					642.4			
	AM	283234000000100000	658.2					658.2			
	AN	293234000000100000	650.3					650.3			
	AO	303234000000100000	645.7					645.7			
	AP	313234000000100000	646.3					646.3			
	AQ	323234000000100000	648.0					648.0			
	AR	333234000000100000	655.9					655.9			
	AS	343133000000200000	21.9						21.9		
	AT	343233000000100000	677.5						677.5		
	AU	343234000000100000	644.1					644.1			
	AV	353233000000100000	660.9						660.9		

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
	AW	353234000000100000	642.1					642.1			
	AX	363233000000100000	661.3							661.3	
	AY	363234000000100000	502.4					502.4			
6				**3,634.3**	**Private**	**Fee Title**	**II**	**1,347.8**	**2,286.5**		**3d**
	A	10733340A0000001000	485.0						485.0		
	B	10833340A0000001000	460.4						460.4		
	C	11233330A0000001000	645.0						645.0		
	D	11333330A0000001000	659.8					659.8			
	E	11733340A0000001000	688.0					688.0			
	F	11833340A0000001000	696.1						696.1		
7				**21.5**	**Private**	**Fee Title**	**II**		**21.5**		**3d**
	A	11333330A0000002000	21.5						21.5		
8				**1,671.1**	**Private**	**Fee Title**	**II**		**1,671.1**		**3d**
	A	10433340A0000001000	664.0						664.0		
	B	10933340A0000001000	97.7						97.7		
	C	10933340A0000001A000	52.5						52.5		
	D	10933340A0000001B	52.5						52.5		

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
		000									
	E	10933340A0000001C000	52.4						52.4		
	F	10933340A0000001D000	52.3						52.3		
	G	10933340A0000001E000	52.5						52.5		
	H	10933340A0000001F000	52.4						52.4		
	I	10933340A0000001G000	82.3						82.3		
	J	10933340A0000001H000	165.2						165.2		
	K	11633340A00000010000	347.3						347.3		
9				**2,261.8**	**Private**	**Fee Title**	**II**	**814.6**	**1,447.2**		**3d**
	A	10133330A00000010000	667.5						667.5		
	B	10533340A00000010000	629.5						629.5		
	C	10633340A00000010000	657.5					657.5			
	D	10733340A0000001A000	157.1					157.1			
	E	10833340A0000001A000	150.2						150.2		
10				**348.6**	**Private**	**Fee Title**	**III**			**348.6**	**3d**
	A	11633340A0000001A	348.6							348.6	

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
		000									
11				**11,999.1**	**Private**	**Fee Title**	**II**	**3,991.2**	**6,330.5**	**1,677.4**	**3d**
	A	10133340A00000010000	648.1						648.1		
	B	10133340A0000001A000	3.7					3.7			
	C	10233340A00000010000	649.6						649.6		
	D	10333340A00000010000	649.3						649.3		
	E	10633350A00000010000	112.3						112.3		
	F	11033340A00000010000	633.8						633.8		
	G	11133340A00000010000	637.4						637.4		
	H	11233340A00000010000	659.0						659.0		
	I	11333340A00000020000	332.5							332.5	
	J	11433340A00000010000	660.3							660.3	
	K	11533340A00000010000	684.6							684.6	
	L	12133340A00000010000	674.0						674.0		
	M	12233340A00000010000	667.4						667.4		

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
	N	12333340A00000010000	658.7						658.7		
	O	12433340A00000020000	340.9						340.9		
	P	12633340A00000010000	665.1					665.1			
	Q	12733340A00000010000	657.9					657.9			
	R	12833340A00000010000	670.2					670.2			
	S	13333340A00000010000	660.7					660.7			
	T	13433340A00000010000	678.0					678.0			
	U	13533340A00000010000	655.6					655.6			
12				**6,251.5**	**Private**	**Fee Title**	**I**	**3,402**	**2,199.1**	**650.4**	**3e**
	A	10734320A00000010000	668.7						668.7		
	C	11234310A00000010000	664.0					664.0			
	D	11334310A00000010000	630.1					630.1			
	I	12434310A00000010000	138.0					138.0			
	B	10834320A00000010000	669.3						669.3		
	E	11734320A00000010000	667.4					667.4			

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
	F	11834320A00000010000	667.5					667.5			
	G	11934320A00000010000	635.0					635.0			
	H	12034320A00000010000	666.0						666.0		
	J	12934320A00000010000	650.4							650.4	
	K	13034320A00000010000	195.1						195.1		
13				**7,985.2**	**Private**	**Fee Title**	**I**	**5,998.1**	**1987.1**		**3e**
	A	10734330A00000010000	661.6					661.6			
	B	11134320A00000010000	664.3					664.3			
	C	11234320A00000010000	667.2					667.2			
	D	11334320A00000010000	665.7					665.7			
	E	11434320A00000010000	663.4					663.4			
	F	11834330A00000010000	671.3					671.3			
	G	11934330A00000010000	670.7					670.7			
	H	12334320A00000010000	663.8						663.8		
	I	12434320A00000010000	666.3					666.3			

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
	J	12534320A00000010000	660.9						660.9		
	K	12634320A00000010000	662.4						662.4		
	L	13034330A00000010000	667.6					667.6			
14				**826.9**	**Private**	**Fee Title**	**II**		**826.9**		**3e**
	A	11934320A00000020000	34.1						34.1		
	B	12434310A00000040000	237.0						237.0		
	C	12534310A00000040000	124.6						124.6		
	D	13034320A00000020000	431.2						431.2		
15				**595.3**	**Private**	**Fee Title**	**I**	**595.3**			**3e**
	A	11134310A00000010000	427.0					427.0			
	B	11434310A00000010000	168.3					168.3			
16				**459.5**	**Private**	**Donation**	**III**		**101.9**	**357.6**	**3f**
	A	283210000000011020	9.9							9.9	
	B	283210000000012000	39.8							39.8	
	C	283210000000014010	36.6							36.6	
	D	283210000000021000	40.0							40.0	
	E	283210000000023010	29.0							29.0	

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
	F	283211000000023010	40.0						40.0		
	G	283211000000034010	22.8							22.8	
	H	283211000000034020	17.9							17.9	
	I	283211000000041010	146.5							146.5	
	J	283211000000042010	15.1							15.1	
	K	283214000000011010	61.9						61.9		
17				**3,076.4**	**Private**	**Fee Title**	**I**	**2,135.8**	**910.9**	**29.7**	**3f**
	A	283209000000022020	29.7							29.7	
	B	283215000000020000	229.3						229.3		
	C	283215000000033000	115.4						115.4		
	D	283216000000010000	333.9						333.9		
	E	283216000000033010	43.8						43.8		
	F	283217000000021010	150.6					150.6			
	G	283217000000021020	75.7						75.7		
	H	283219000000012020	16.7						16.7		
	I	283219000000021030	11.7						11.7		
	J	283219000000022020	11.6						11.6		
	K	283220000000011000	525.6					525.6			
	L	283220000000033020	72.0						72.0		
	M	283223000000014010	190.7					190.7			
	N	283228000000013010	398.1					398.1			

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
	O	283229000000011000	290.0					290.0			
	P	283229000000021000	142.4					142.4			
	Q	283229000000023020	95.1					95.1			
	R	283229000000032010	69.8					69.8			
	S	283230000000011090	0.4						0.4		
	T	283230000000011100	0.4					0.4			
	U	283230000000011110	0.4					0.4			
	V	283230000000011150	0.4						0.4		
	W	283230000000011210	0.4					0.4			
	X	283230000000011220	0.7					0.7			
	Y	283230000000011250	21.2					21.2			
	Z	283230000000012070	0.4					0.4			
	AA	283230000000012110	0.4					0.4			
	AB	283232000000011030	49.9					49.9			
	AC	283233000000013000	199.7					199.7			
18				**1,943.0**	**Private**	**Fee Title (~1,933 acres)**	**I**	**1,511.5**	**431.5**		**3g**
	A	273225000000022010	2.6			**Donation (~10 acres, portion of**		2.6			
	B	273225000000022020	10.3					10.3			
	C	273225000000022030	1.3					1.3			
	D	273225000000022040	1.3					1.3			
	E	273225000000022050	1.3					1.3			

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
	F	273225000000022060	1.3			**18BK)**		1.3			
	G	273225000000022070	1.3					1.3			
	H	273225000000022080	1.3					1.3			
	I	273225000000022090	1.3					1.3			
	J	273225000000022100	1.3					1.3			
	K	273225000000022110	1.3					1.3			
	L	273225000000022120	1.3					1.3			
	M	273225000000022130	1.3					1.3			
	N	273225000000022140	1.3					1.3			
	O	273225000000022150	1.3					1.3			
	P	273225000000022160	1.3					1.3			
	Q	273225000000022170	1.3					1.3			
	R	273225000000022180	1.3					1.3			
	S	273225000000022190	1.3					1.3			
	T	273225000000022200	1.3					1.3			
	U	273225000000022210	1.3					1.3			
	V	273225000000022220	1.3					1.3			
	W	273225000000022230	125.3					125.3			
	X	273225000000023040	5.2					5.2			
	Y	273225000000032000	81.3						81.3		
	Z	273225000000041010	5.2					5.2			

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
	AA	273225000000043020	76.1						76.1		
	AB	273225000000043030	5.2						5.2		
	AC	273226000000012010	24.9						24.9		
	AD	273226000000012020	1.2						1.2		
	AE	273226000000012050	6.2						6.2		
	AF	273226000000021010	1.3						1.3		
	AG	273226000000021020	65.4						65.4		
	AH	273226000000021030	1.3						1.3		
	AI	273226000000021050	1.3						1.3		
	AJ	273226000000021060	1.3						1.3		
	AK	273226000000021070	2.5						2.5		
	AL	273226000000022010	5.0						5.0		
	AM	273236000000011010	82.9					82.9			
	AN	273236000000012010	66.1					66.1			
	AO	273236000000012020	1.3					1.3			
	AP	273236000000012030	1.3					1.3			
	AQ	273236000000012040	76.3					76.3			
	AR	273236000000014010	1.3					1.3			
	AS	273236000000014020	1.3					1.3			
	AT	273236000000014030	1.3					1.3			
	AU	273236000000014050	1.3					1.3			

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
	AV	273236000000014060	1.3					1.3			
	AX	273236000000014070	1.3					1.3			
	AY	273236000000031010	2.6					2.6			
	AZ	273236000000031030	1.3					1.3			
	BA	273236000000031040	1.3					1.3			
	BB	273236000000031060	1.3					1.3			
	BC	273236000000031050	1.3					1.3			
	BD	273236000000031070	1.3					1.3			
	BE	273236000000032010	1.3					1.3			
	BF	273236000000033010	1.3						1.3		
	BG	273236000000033030	1.3						1.3		
	BH	273236000000033040	38.8						38.8		
	BI	282825000000031010	235.7					235.7			
	BJ	282826000000011010	422.2					422.2			
	BK	282826000000031010	39.7						39.7		
	BL	282835000000011010	164.5					164.5			
	BM	282835000000013010	37.3					37.3			
	BN	282836000000031010	103.8					103.8			
	BO	282836000000032010	127.3					127.3			
	BP	283230000000041030	77.4						77.4		

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
19				**1.3**	**Private**	**Fee Title**	**I**	**1.3**			**3g**
	A	273236000000014040	1.3					1.3			
20				**1.3**	**Private**	**Fee Title**	**II**		**1.3**		**3g**
	A	273226000000021040	1.3						1.3		
21				**6.3**	**Private**	**Fee Title**	**II**		**6.3**		**3g**
	A	273225000000043010	1.3						1.3		
	B	273226000000012040	5.0						5.0		
22				**1.3**	**Private**	**Fee Title**	**I**	**1.3**			**3g**
	A	273236000000031020	1.3					1.3			
23				**1.3**	**Private**	**Fee Title**	**I**	**1.3**			**3g**
	A	273225000000041020	1.3					1.3			
24				**1.3**	**Private**	**Fee Title**	**II**		**1.3**		**3g**
	A	273226000000021080	1.3						1.3		
25				**2.3**	**Private**	**Fee Title**	**II**		**2.3**		**3g**
	A	273226000000012030	2.3						2.3		
26				**2,778.3**	**Private**	**Fee Title**	**I**	**2,554.5**	**223.8**		**3h**
	A	2526286140000A001 0	601.1					601.1			
	B	2526286143000A001 0	881.2					667.2	214.0		
	C	282814935310000001	97.7					97.7			
	D	282814935310000002	93.2					93.2			

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
	E	282814935310000004	9.8						9.8		
	F	292804988850001000	157.6					157.6			
	G	292804988850054000	113.0					113.0			
	H	292804988860001000	214.0					214.0			
	I	292804988860075010	158.4					158.4			
	J	292805988870001000	203.3					203.3			
	K	292805988870065010	249.0					249.0			
27				**50.8**	**Private**	**Fee Title**	**II**		**50.8**		**3h**
	A	282824000000022010	50.8						50.8		
28				**1,295.1**	**Private**	**Fee Title**	**II**		**1295.1**		**3h**
	A	282823000000000000	658.8						658.8		
	B	282824000000010000	337.5						337.5		
	C	292819000000030000	298.8						298.8		
29				**8.1**	**Private**	**Fee Title**	**I**	**8.1**			**3h**
	A	282826000000012010	8.1					8.1			
30				**0.2**	**Private**	**Fee Title**	**I**	**0.2**			**3h**
	A	282814935310870037	0.2					0.2			
31				**4,004.5**	**Private**	**Fee Title**	**II**	**1,302.4**	**2,702.1**		**3h**
	A	282825000000011010	382.1						382.1		
	B	282835000000014010	216.2					216.2			
	C	282835000000042010	38.3					38.3			

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
	D	282836000000011010	322.8					322.8			
	E	282836000000013010	99.9					99.9			
	F	282901000000011010	625.2					625.2			
	G	292829000000021010	190.8						190.8		
	H	292830000000013010	422.8						422.8		
	I	292831000000011010	658.8						658.8		
	J	292832000000011010	39.8						39.8		
	K	292832000000013010	367.7						367.7		
	L	292833000000033010	6.3						6.3		
	M	292906000000011010	633.8						633.8		
32				**2.0**	**Private**	**Fee Title**	**I**	**2.0**			**3h**
	A	282826000000012020	2.0					2.0			
33				**203.8**	**Private**	**Fee Title**	**II**		**203.8**		**3h**
	A	282824000000023010	203.8						203.8		
34				**973.6**	**Private**	**Fee Title**	**I**	**846.4**	**127.2**		**3h**
	A	282801934670000001	148.3					148.3			
	B	282801934670000002	188.3					188.3			
	C	282811935250001000	191.8					191.8			
	D	282811935250053010	263.9					263.9			
	E	282813935260001000	54.1					54.1			
	F	282813935260019010	127.2						127.2		

Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
35				**2.5**	**Private**	**Fee Title**	**I**	**2.5**			**3h**
	A	282830000000013010	2.5					2.5			
36				**5.0**	**Private**	**Fee Title**	**I**	**5.0**			**3h**
	A	282830000000013050	5.0					5.0			
37				**592.3**	**Private**	**Fee Title**	**I**	**442.2**	**150.1**		**3h**
	A	282819000000011040	61.5					61.5			
	B	282819000000013010	142.4					142.4			
	C	282819000000013040	9.2						9.2		
	D	282819000000021000	82.1					82.1			
	E	282820000000031020	133.4						133.4		
	F	282820000000033050	41.7					41.7			
	G	282820000000033100	7.5						7.5		
	H	282820000000034010	10.4					10.4			
	I	282820000000034020	10.4					10.4			
	J	282820000000044010	20.9					20.9			
	K	282830000000011020	10.0					10.0			
	L	282830000000011030	55.3					55.3			
	M	282830000000013030	7.5					7.5			
38				**2.5**	**Private**	**Fee Title**	**I**	**2.5**			**3h**
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Owner ID Number	Parcel Alpha Code	Parcel Id	Parcel Acres (estimate)	Owner Acres (estimate)	Type of Land Ownership	Preferred Method of Acquisition (minimum interest)	Overall Priority Ranking	Tier I Priority Group (acres, est.)	Tier II Priority Group (acres, est.)	Tier III Priority Group (acres, est.)	Figure
39				**30.7**	**Private**	**Fee Title**	**I**	**30.7**			**3h**
	A	282829000000033010	20.7					20.7			
	B	282830000000013080	5.0					5.0			
	C	282830000000013090	5.0					5.0			
40				**5.0**	**Private**	**Fee Title**	**I**	**5.0**			**3h**
	A	282830000000013070	5.0					5.0			
41				**2.5**	**Private**	**Fee Title**	**I**	**2.5**			**3h**
	A	282830000000013000	2.5					2.5			
42				**22.2**	**U.S. Gov't**	**Transfer**	**II**		**22.2**		**3h**
	A	282810000000042000	22.2						22.2		
43				**2.0**	**Private**	**Fee Title**	**II**		**2.0**		**3h**
	A	282824000000022000	2.0						2.0		
44				**10.0**	**Private**	**Fee Title**	**I**	**10.0**			**3e**
	A	10734330A00000020000	10.0					10.0			
45				**16.8**	**State of FL**	**Donation**	**III**			**17.7**	**3e**
	A	none	16.8							17.7	
			Total	**130,113.3**				**58,280.9**	**45,757.8**	**26,074.6**	

Figure 3a. Parcels included in the Conservation Focal Area, Planning Unit Overview

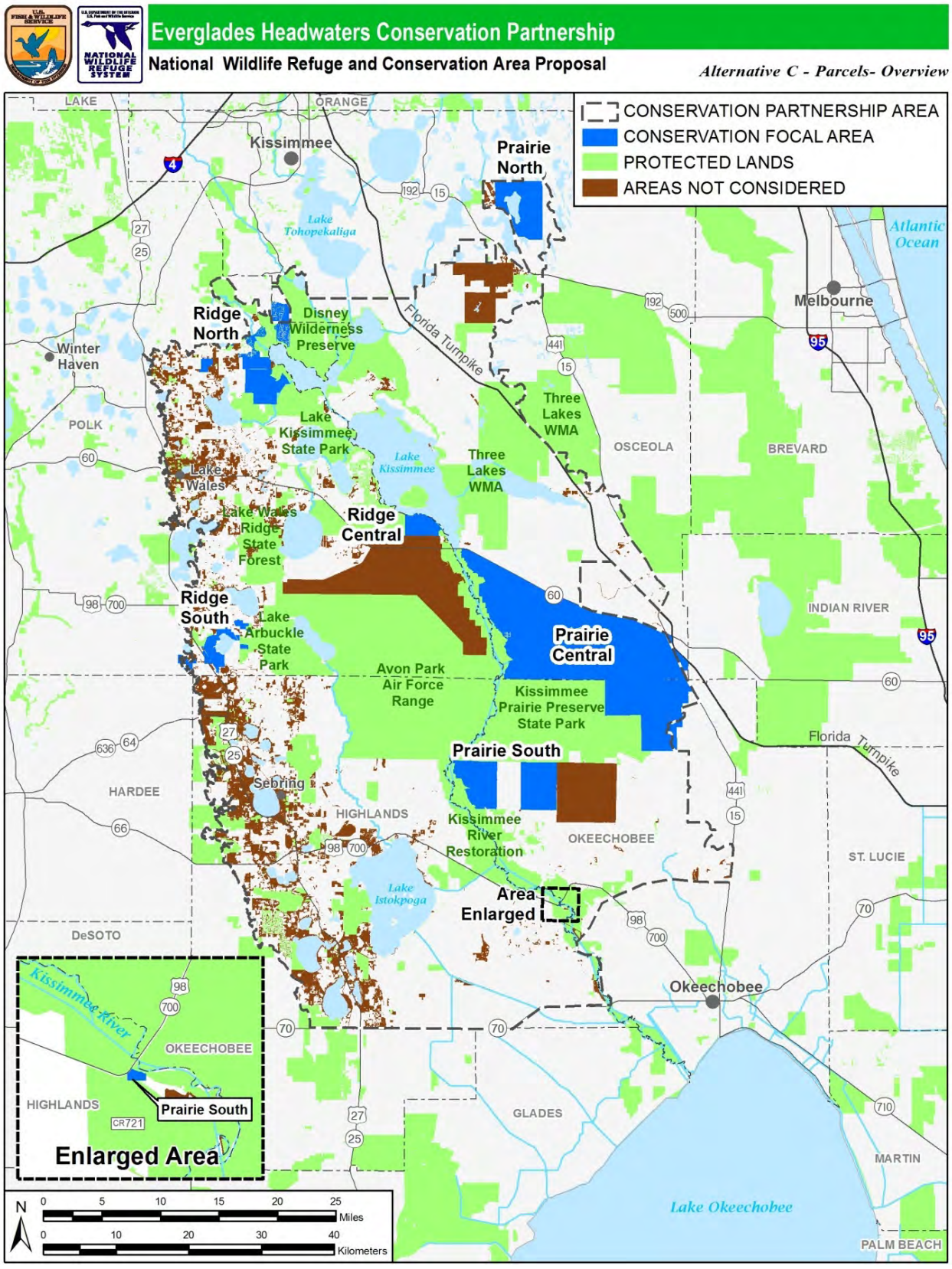


Figure 3b. Detail of parcels included in the Conservation Focal Area, Prairie North Planning Unit

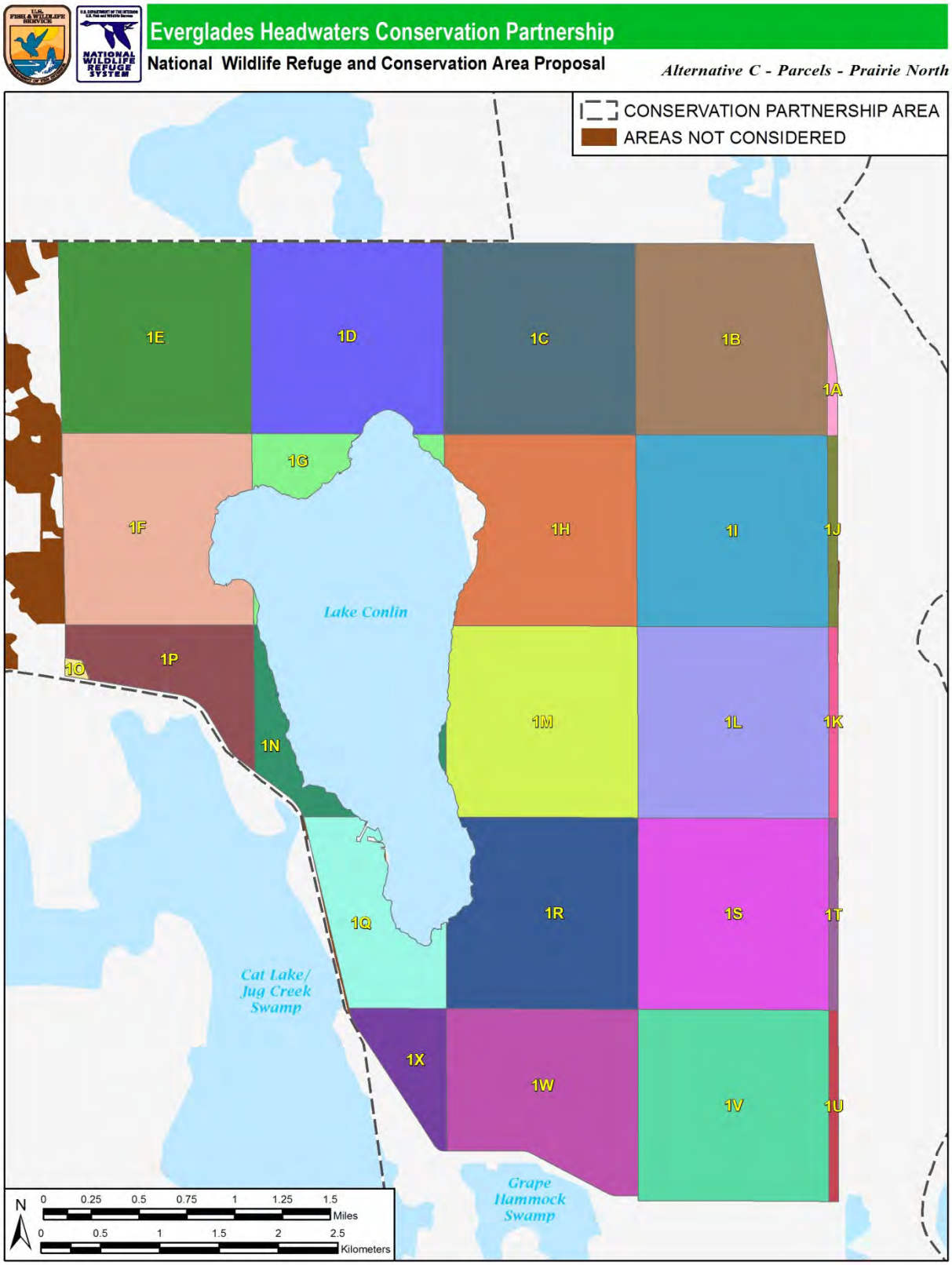


Figure 3c. Detail of parcels included in the Conservation Focal Area, Ridge Central Planning Unit

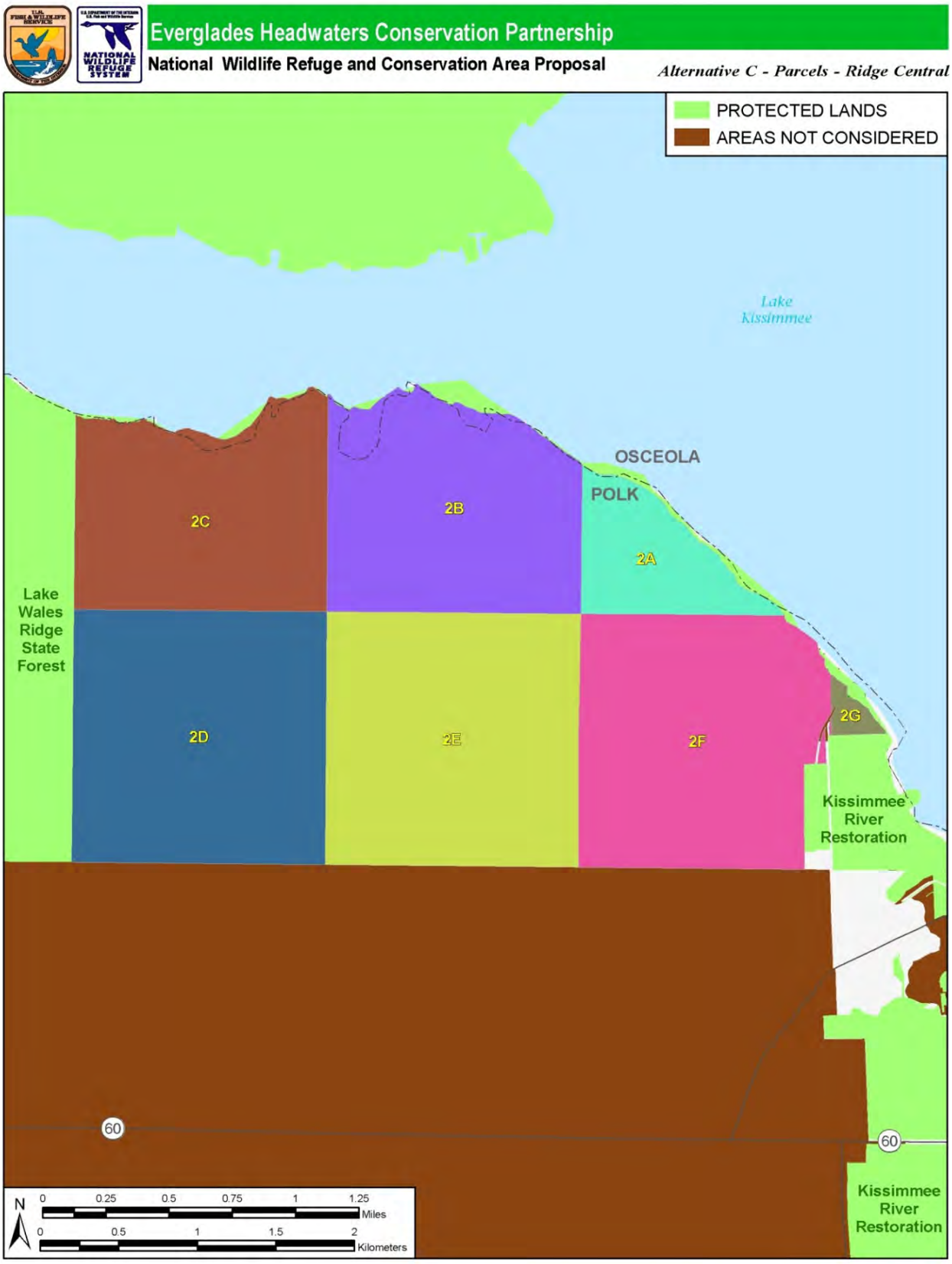


Figure 3d. Detail of parcels included in the Conservation Focal Area, Prairie Central Planning Unit

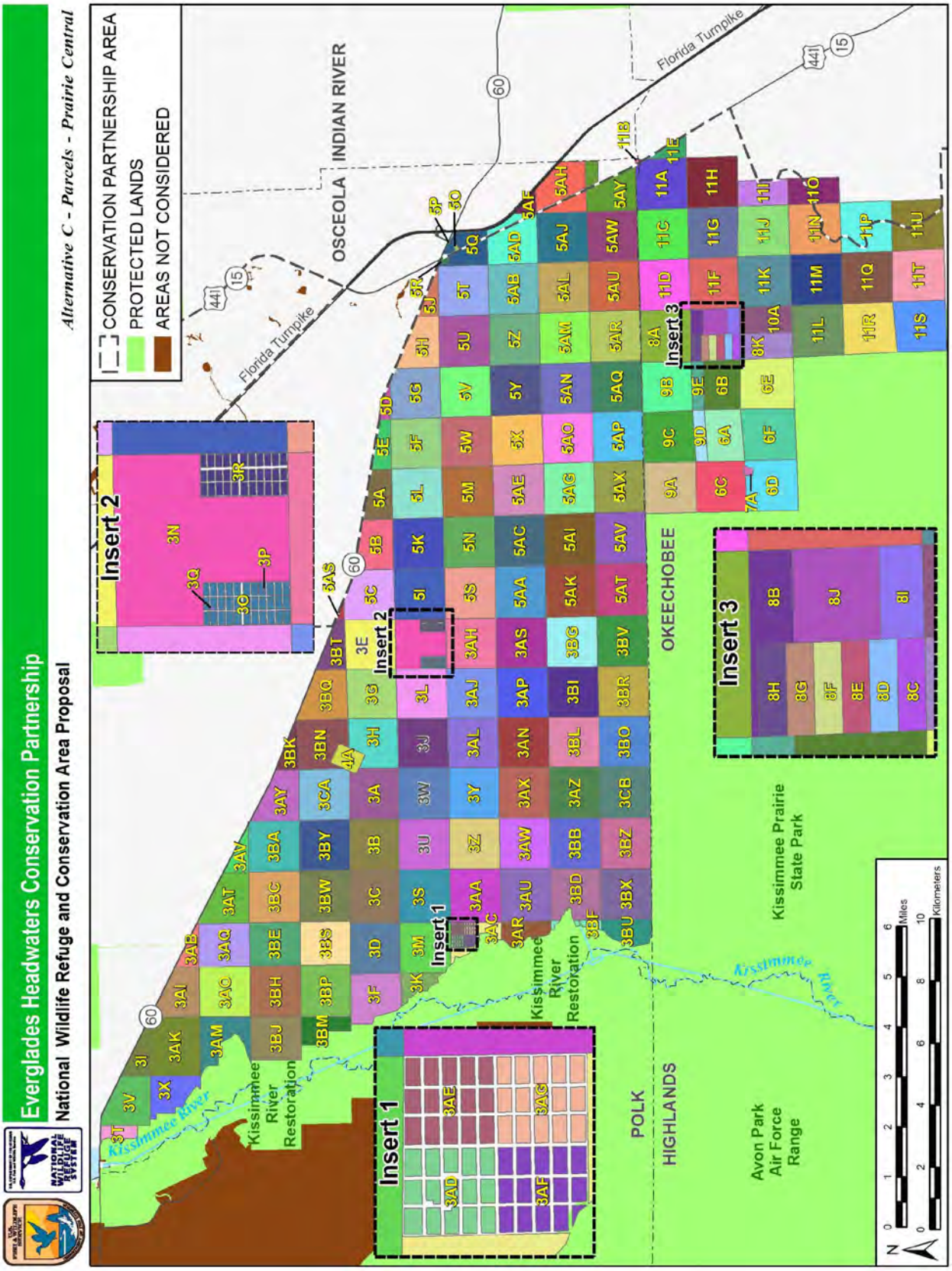


Figure 3e. Detail of parcels included in the Conservation Focal Area, Prairie South Planning Unit

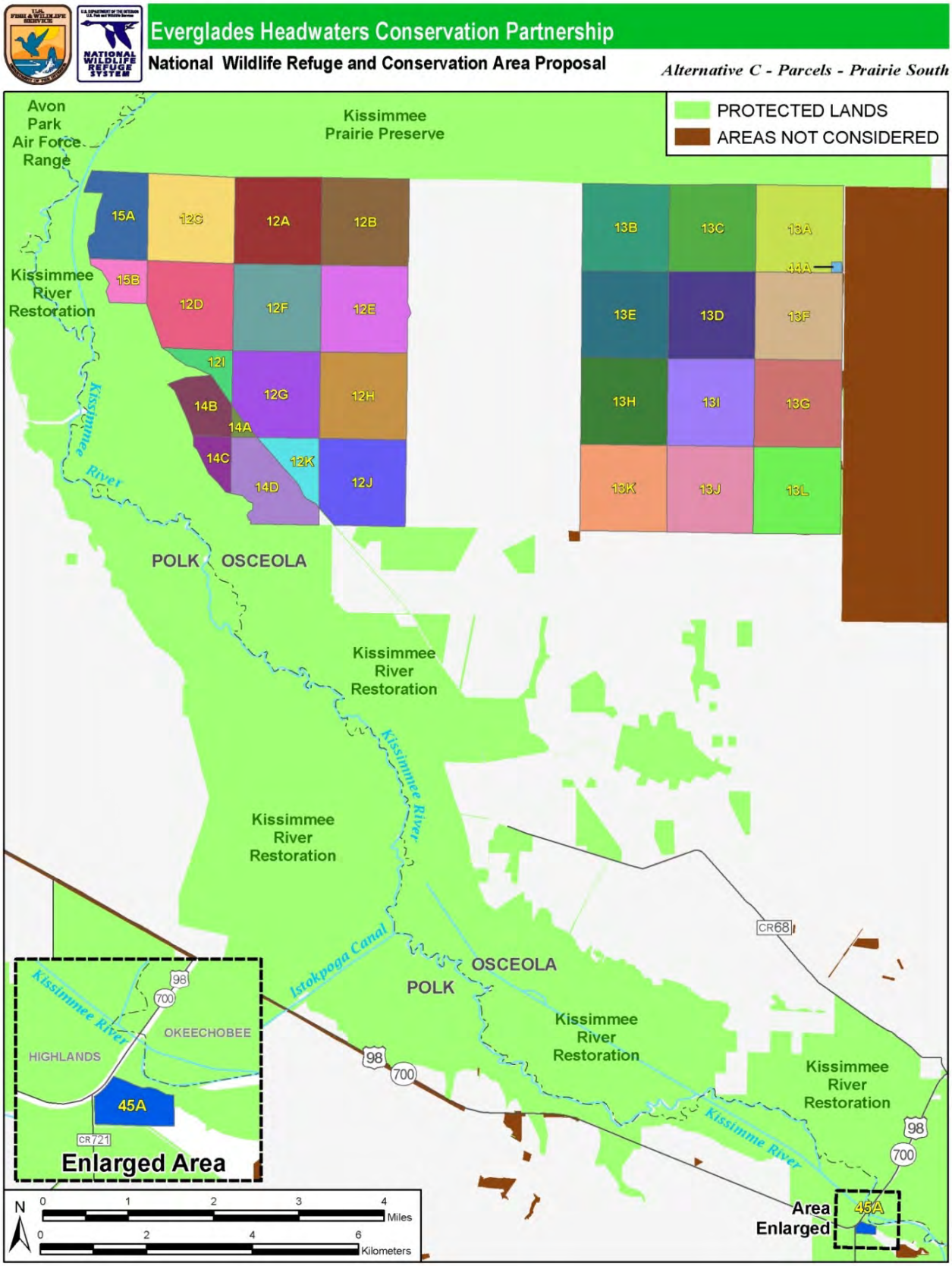


Figure 3f. Detail of parcels included in the Conservation Focal Area, Ridge South Planning Unit

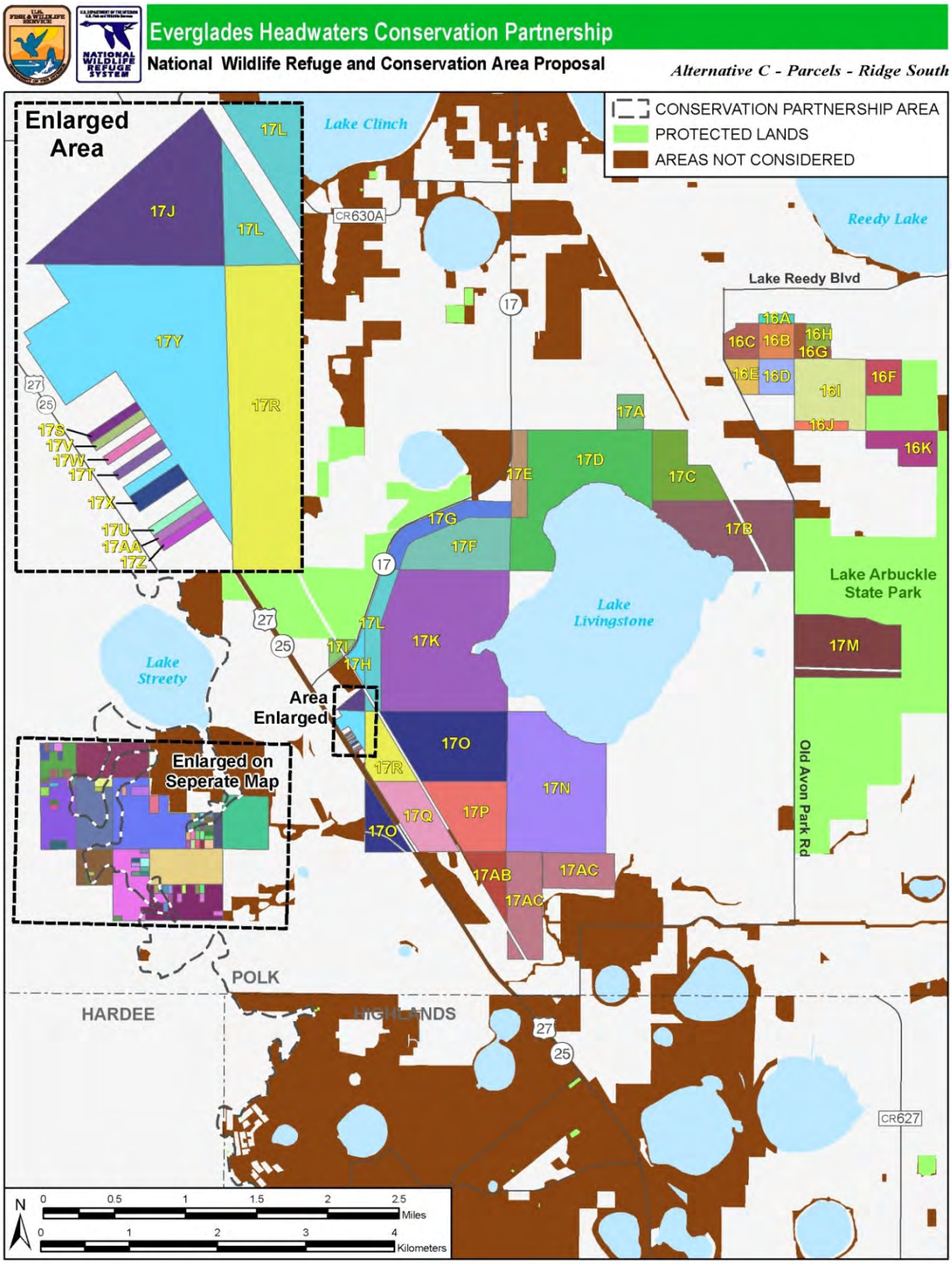


Figure 3g. Detail of parcels included in the Conservation Focal Area, Ridge South Planning Unit

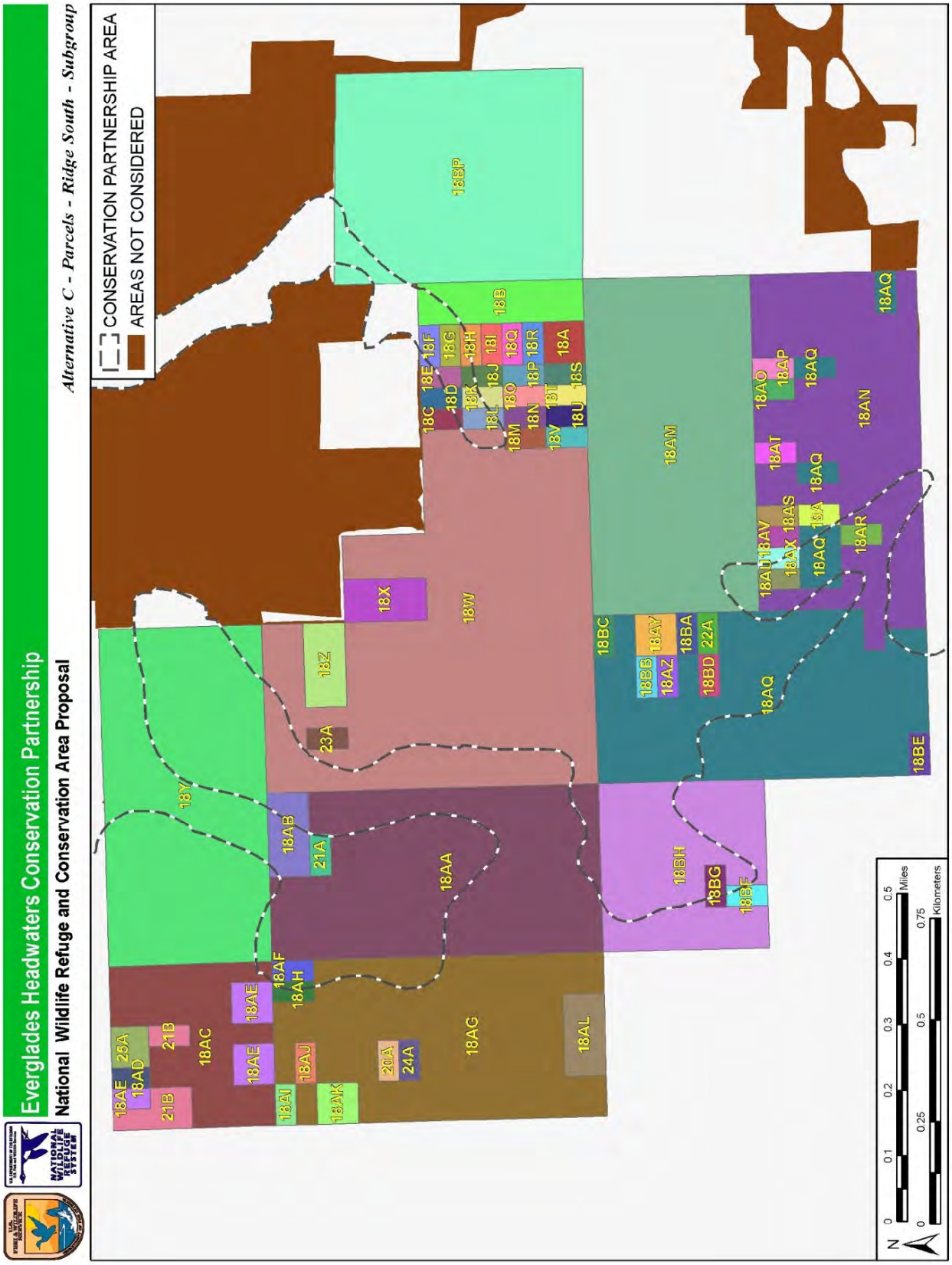


Figure 3h. Detail of parcels included in the Conservation Focal Area, Ridge North Planning Unit

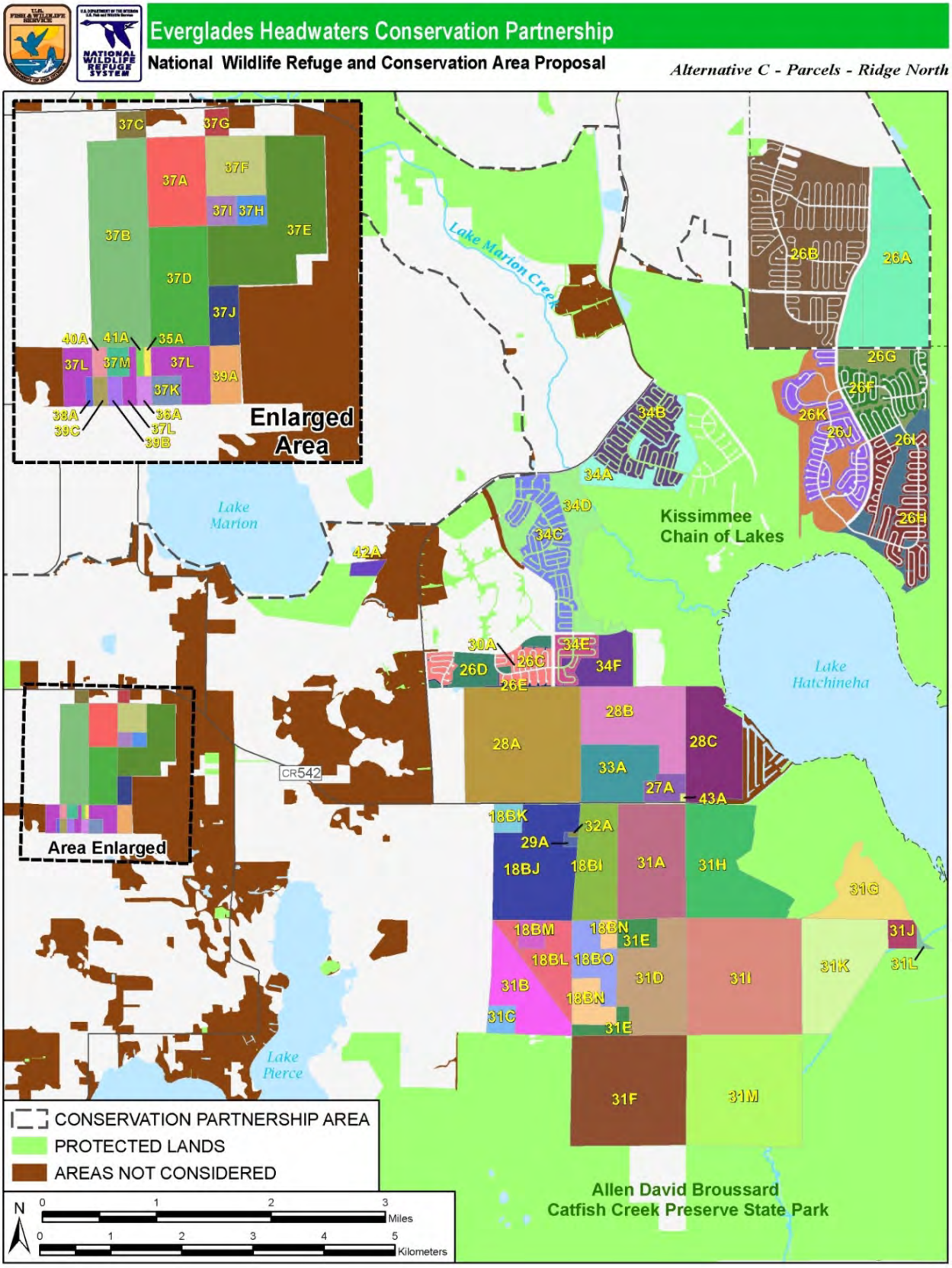


Figure 4a. Prairie North overall priorities

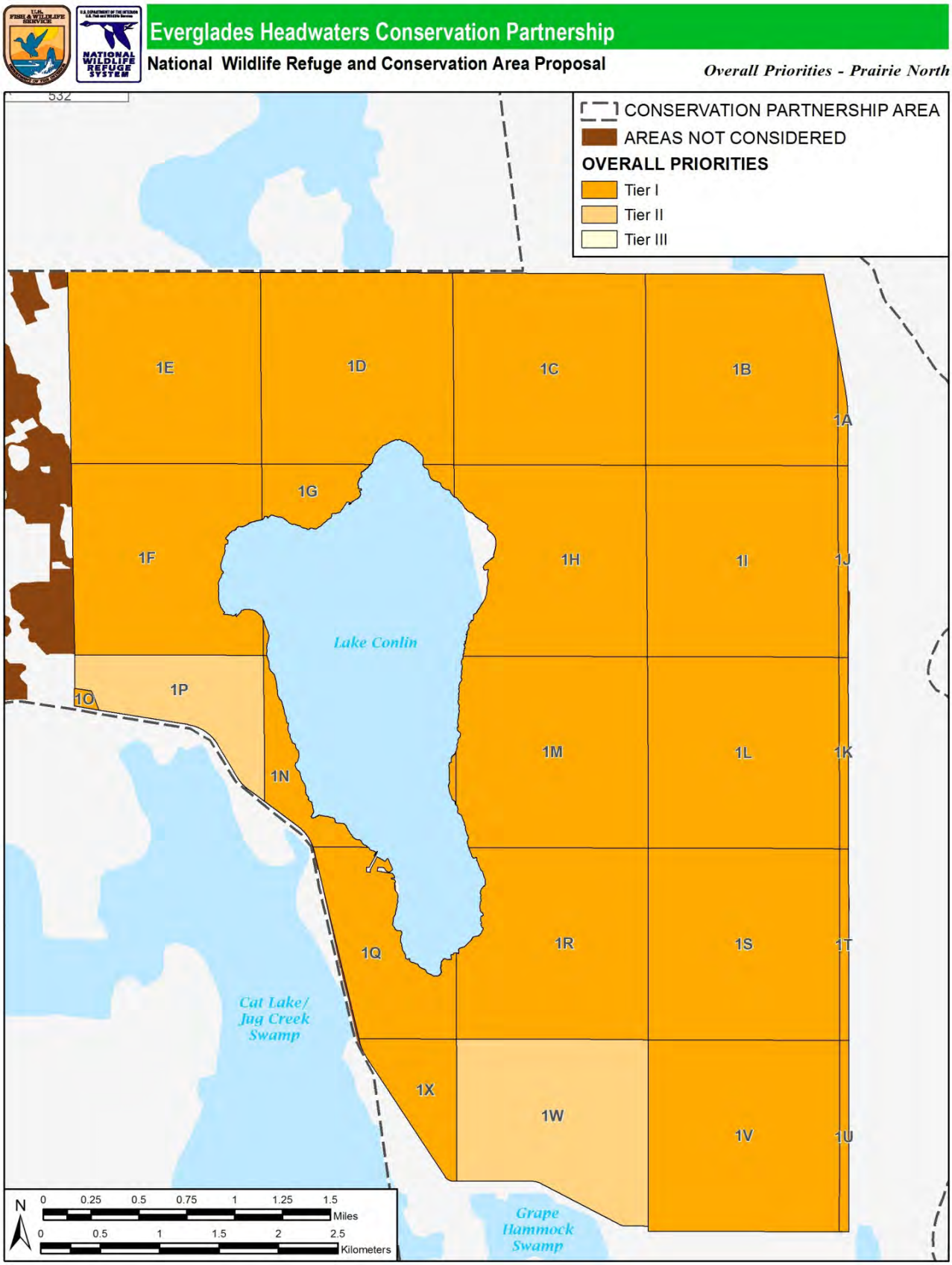


Figure 4b. Prairie Central overall priorities

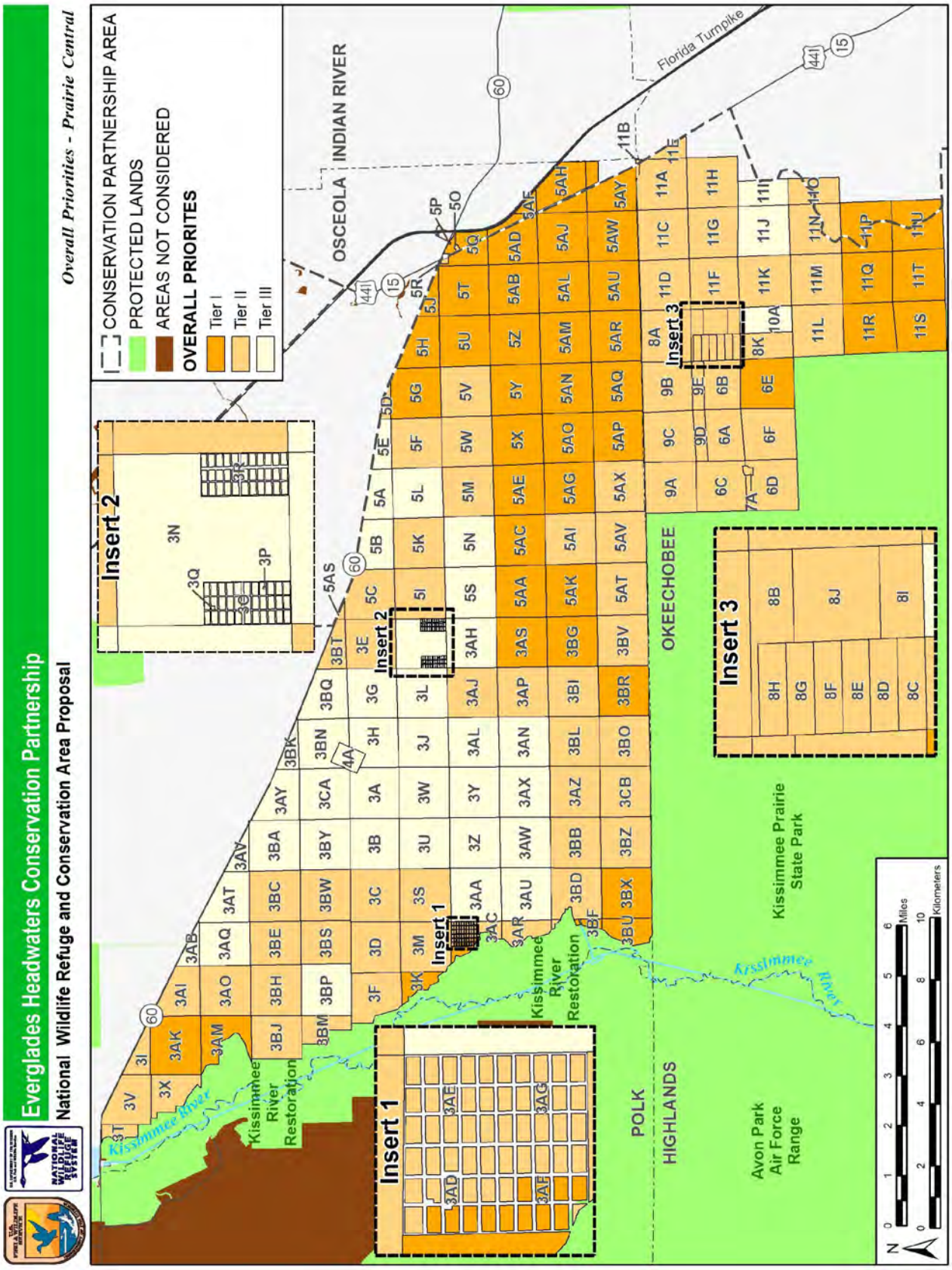


Figure 4c. Prairie South overall priorities

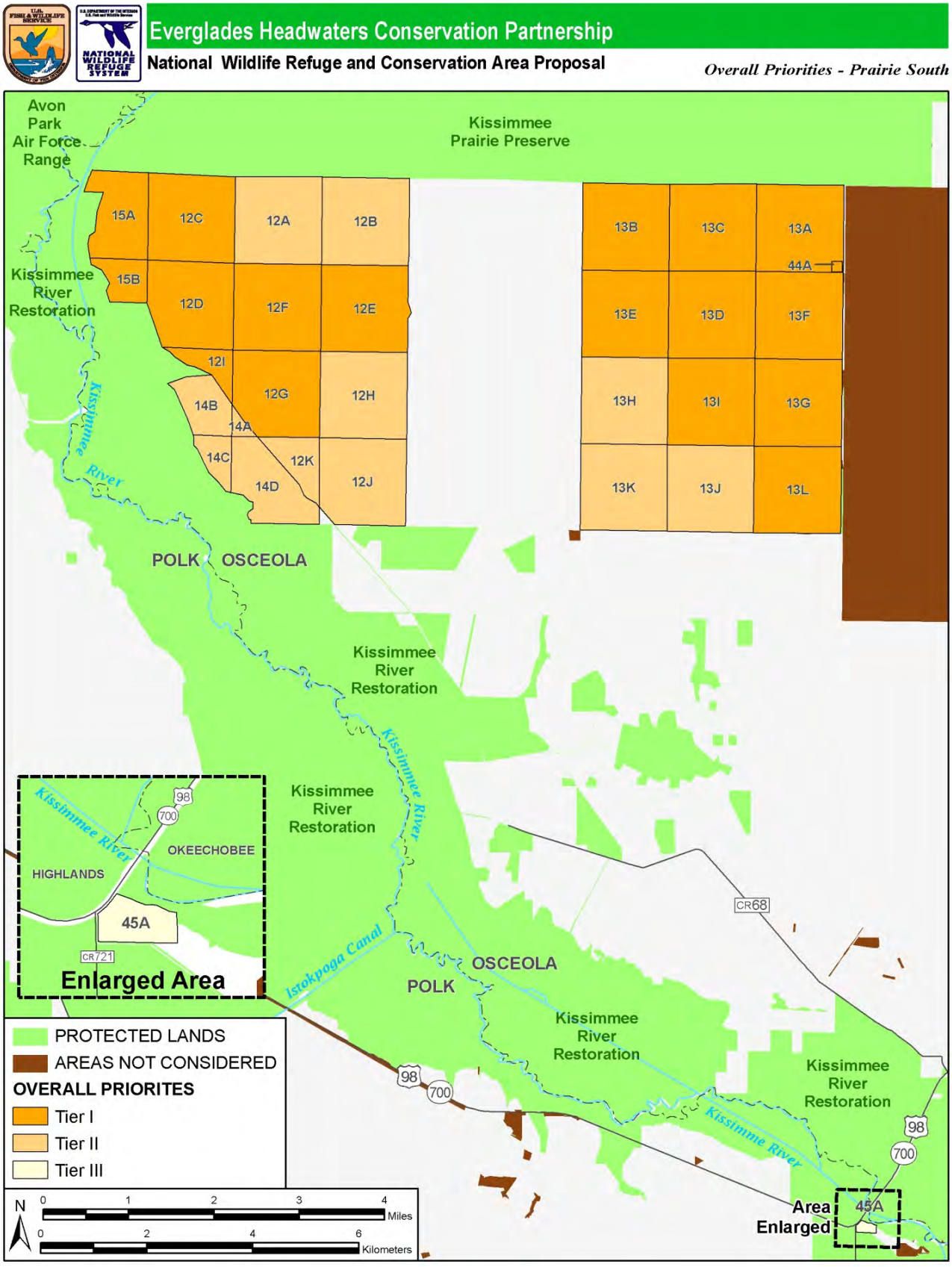


Figure 4d. Ridge North overall priorities

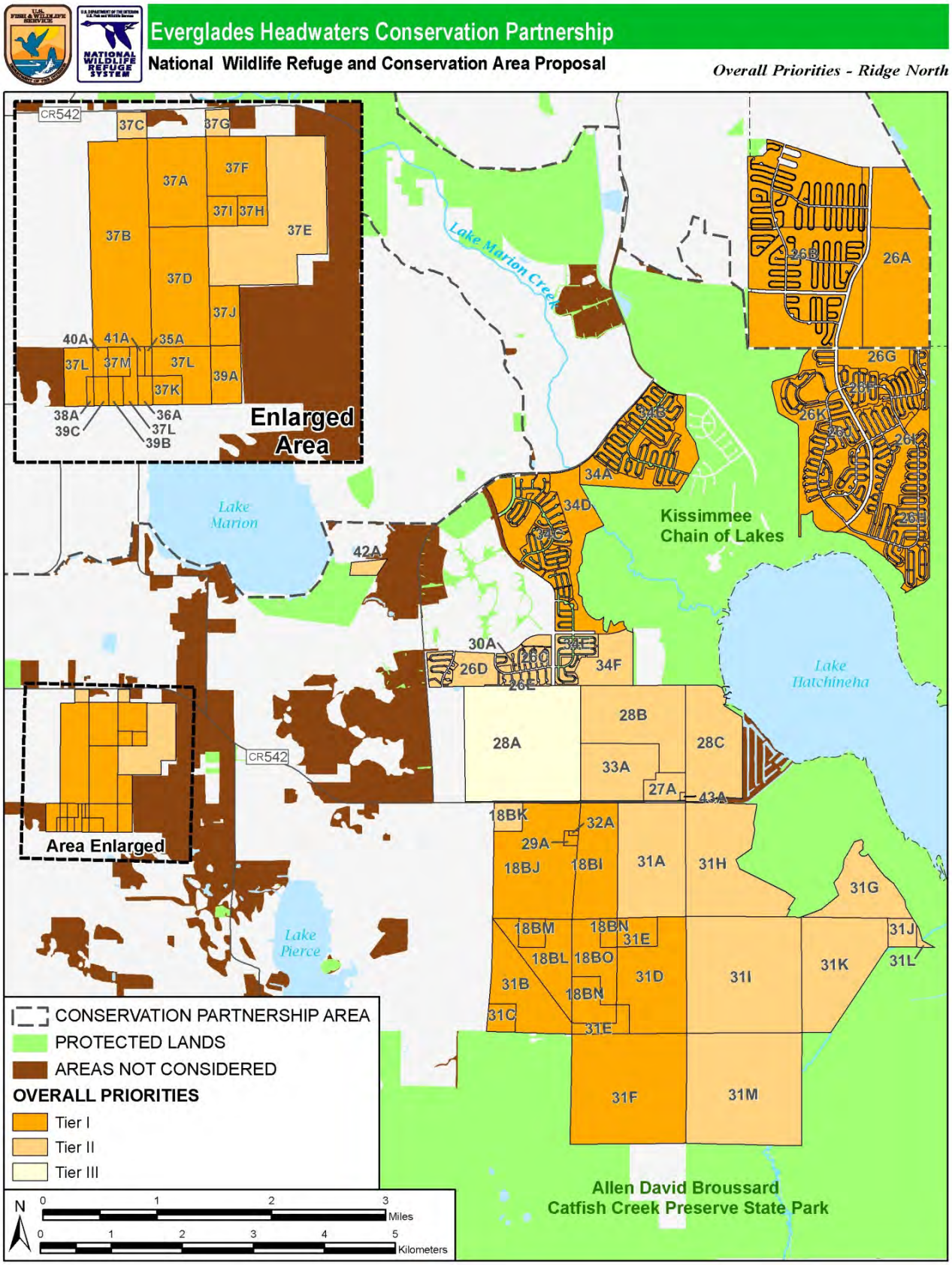


Figure 4e. Ridge Central overall priorities

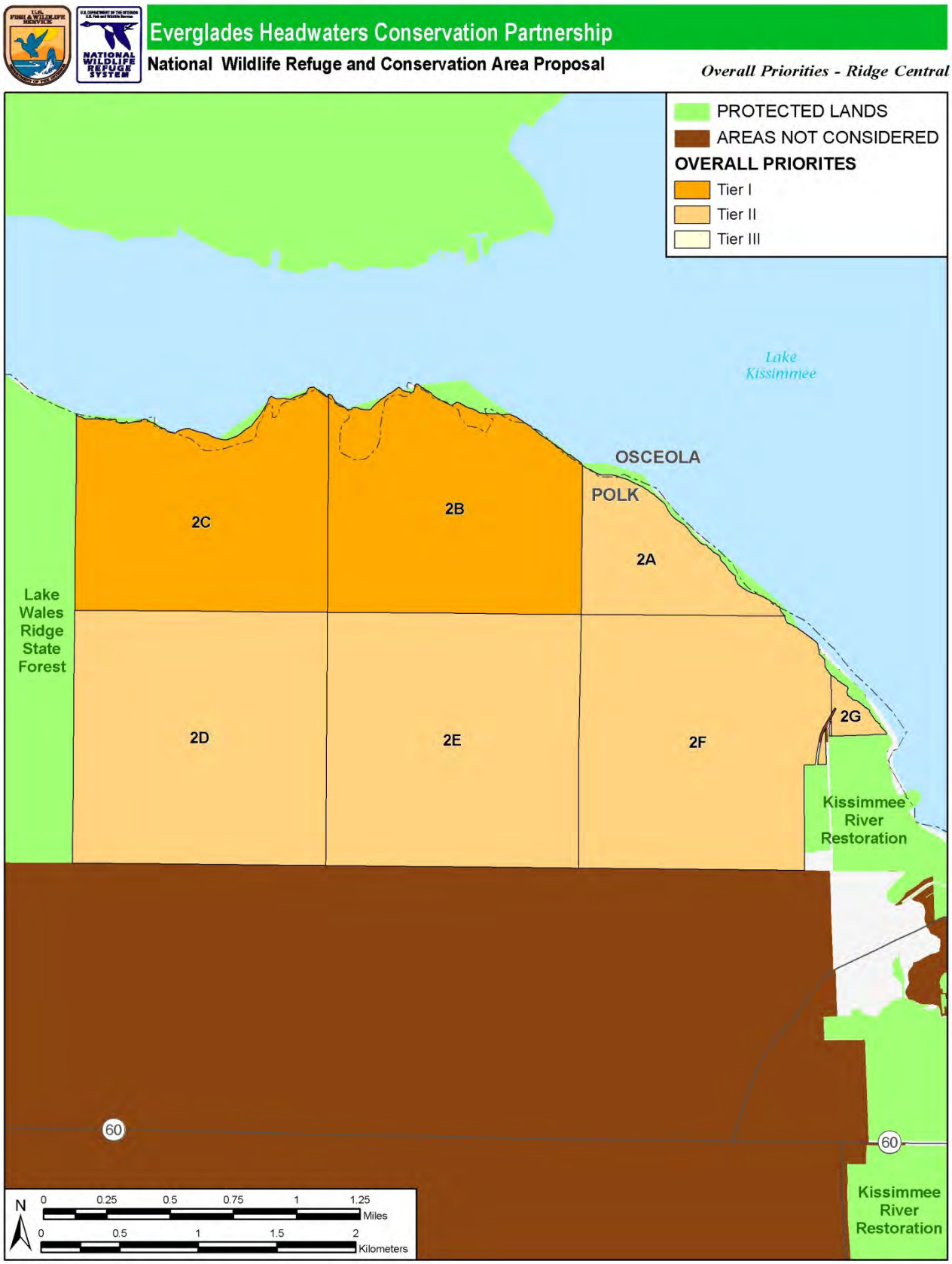


Figure 4f. Ridge South overall priorities

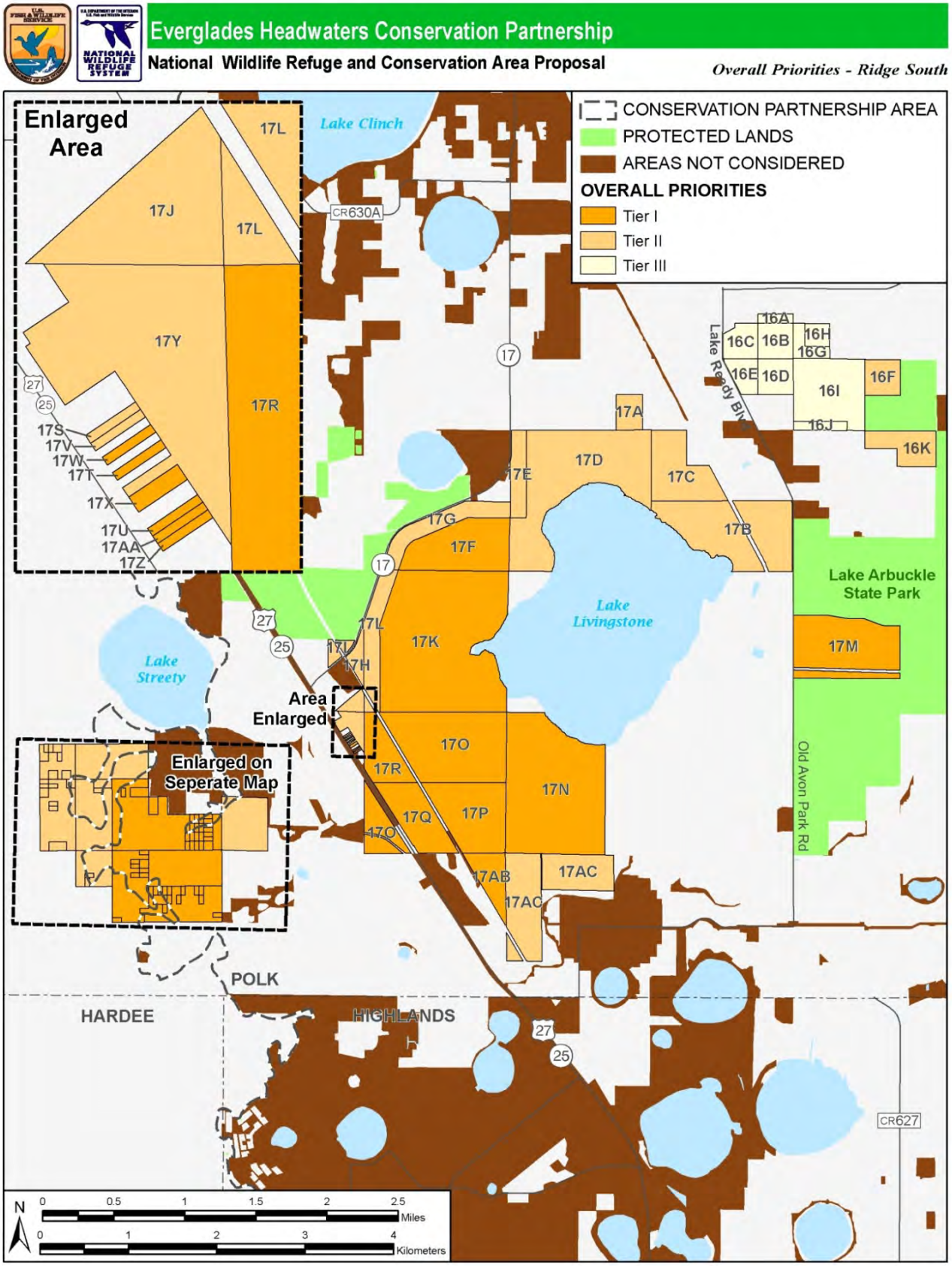


Figure 4g. Ridge South – enlargement overall priorities

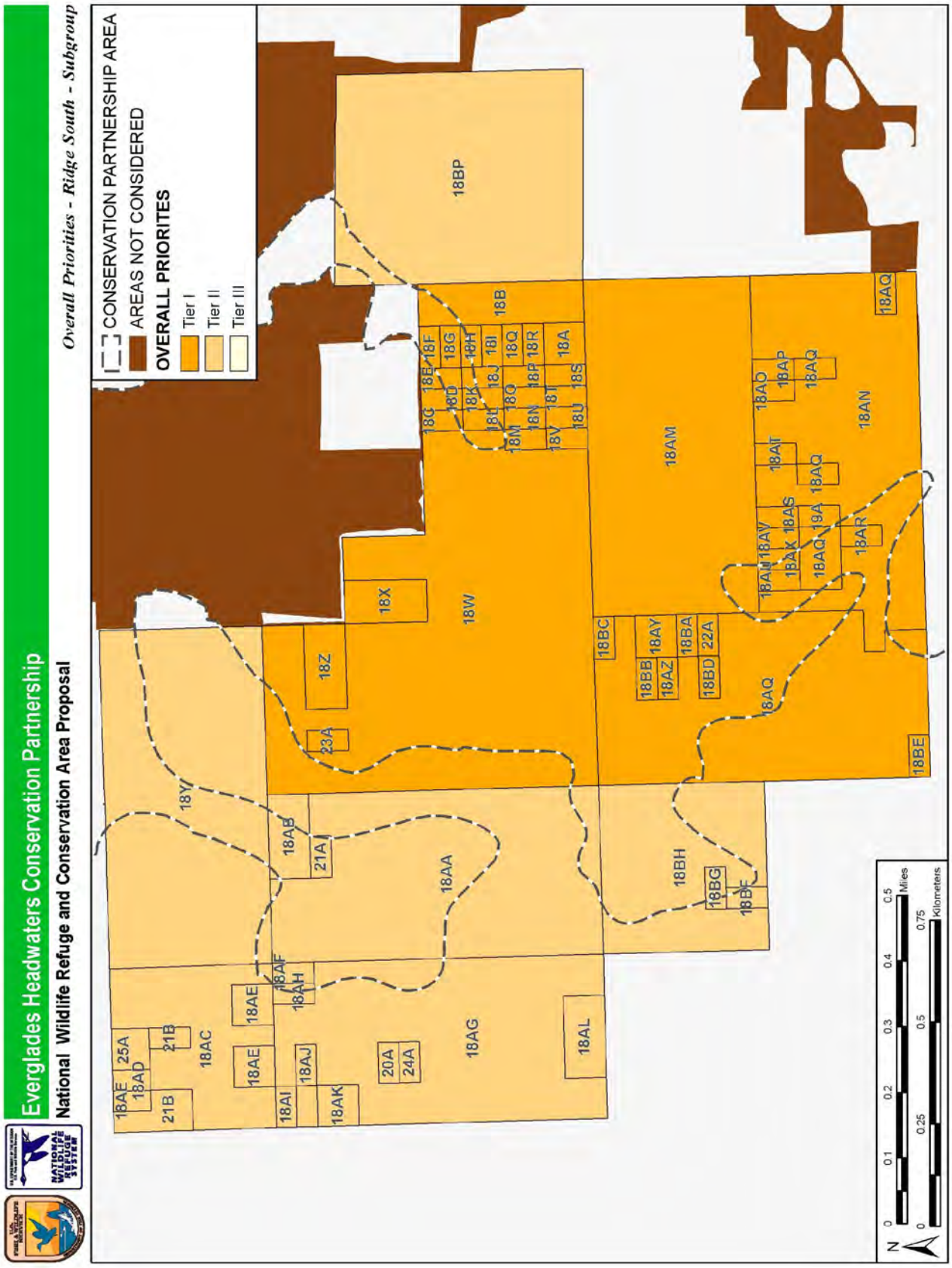
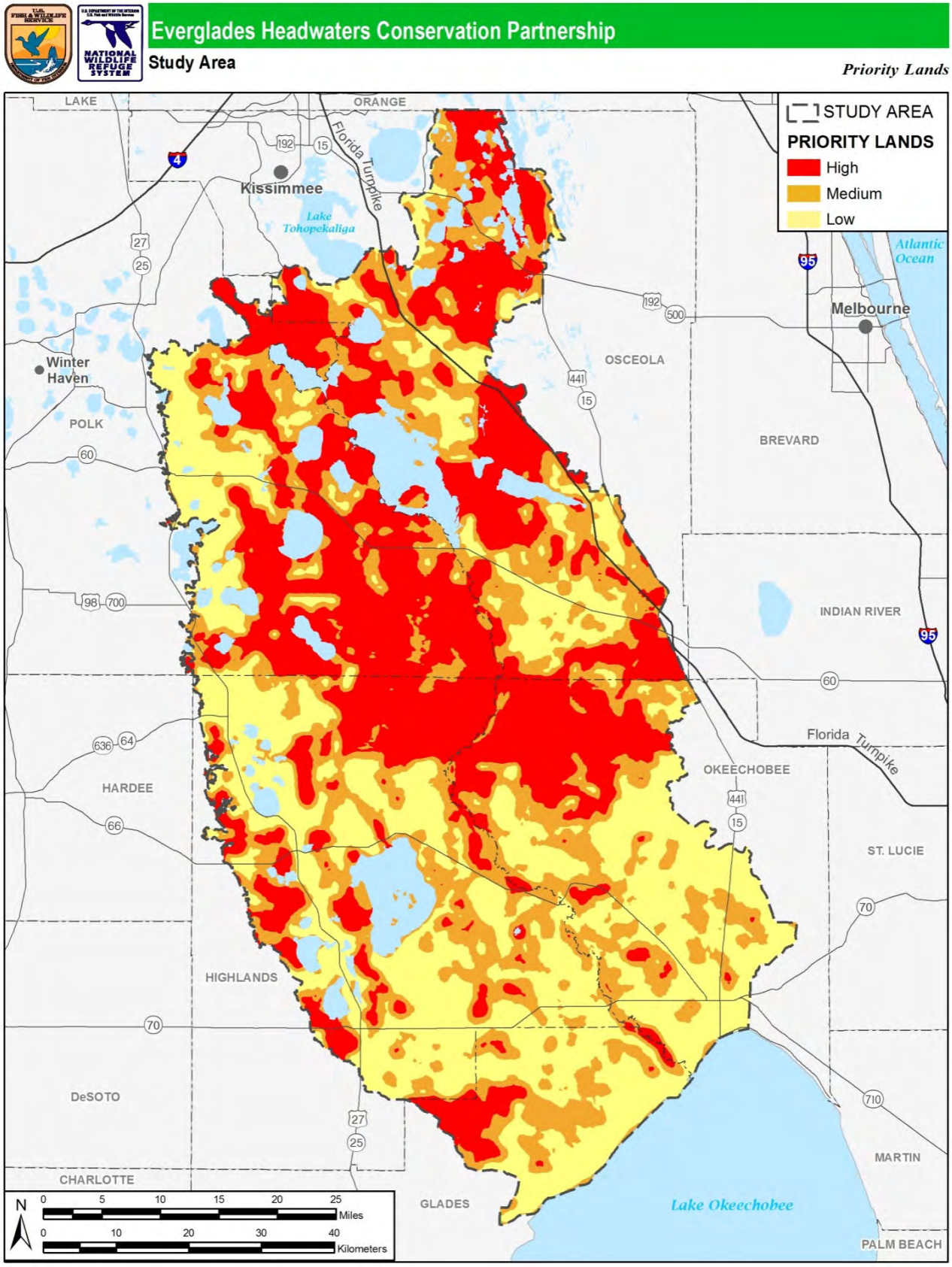


Figure 5. Land protection priority land covers within the Study Area



Appendix A. Conceptual Management Plan

INTRODUCTION

The Everglades Headwaters NWR and Conservation Area are located in south-central Florida within the counties of Osceola, Polk, Highlands, and Okeechobee, and will be geographically bounded by the Orlando metropolitan area to the north, Lake Wales Ridge to the west, Lake Okeechobee to the south, and the St. Johns River watershed to the east. The Everglades Headwaters NWR and Conservation Area will protect a combination of wetland and upland habitat supporting multiple species of management concern and imperiled habitats. The area is home to several federal listed species such as the Florida grasshopper sparrow and eastern indigo snake and will provide corridor linkages for wide-ranging species such as the Florida black bear. Important habitats of the upper Everglades watershed include sandhill and scrub, cutthroat seepage wetlands, dry and wet prairie, and pine flatwood forests. The Everglades Headwaters NWR and Conservation Area are comprised of approximately 150,000 acres of wildlife habitat that are protected, in perpetuity, through fee-title acquisition, conservation easements, or other ecosystem service instruments.

This Conceptual Management Plan (CMP) provides further details on the Service's Preferred Alternative and how the lands identified therein will be administered.

PURPOSE OF CONCEPTUAL MANAGEMENT PLAN

The Final LPP and Final EA examine the feasibility of establishing the Everglades Headwaters NWR and Conservation Area in the upper Everglades watershed. In Chapter III of the Final EA, three alternatives for the potential refuge are described, with Alternative C (Conservation Partnership Approach) presented as the Service's preferred management action.

The Everglades Headwaters NWR and Conservation Area will conserve approximately 150,000 acres, with up to approximately 50,000 acres being purchased in fee-title within a Conservation Focal Area of approximately 130,000 acres. The remaining 100,000 acres of less-than-fee-title conservation land will come from within a Conservation Partnership Area. The protocol described in Appendix C of the Final EA outlines the methodology used to identify priorities within both areas and ultimately provide priority acquisition ranking for individual parcels. For more specific information on the resources to be protected, please see Chapter II of the Final EA. The Service concludes that acquiring these lands over time will provide the needed protection of rare and unique habitats in south-central Florida, and build on the existing coalition of organizations and individuals that advocate conservation within the upper Everglades watershed. It will also provide ample opportunities for wildlife-dependent recreation, new and dynamic partnerships, and the preservation of the ranching traditions and culture in central Florida.

The Service developed this CMP to describe the management direction for the Everglades Headwaters NWR and Conservation Area and outlines possible interim habitat management priorities and interim compatible public uses on newly acquired lands. The activities described in this CMP will direct the way we pursue and manage acquisitions, conservation easements, and other land interests until a comprehensive conservation plan (CCP) is developed. By Service policy, a CCP must be developed within 15 years of the date of actual establishment of the refuge (i.e., acquisition of first land parcel). Any major changes in the activities described in this CMP, any new activities, and our development of the CCP will be subject to public review and comment in accordance with the provisions of Service refuge planning policy (602 FW 1, 2, and 3) and

Service and Departmental policy implementing the National Environmental Policy Act (NEPA) of 1969 (Department of the Interior Manual 516, Appendix 1).

MISSION OF THE SERVICE AND THE NATIONAL WILDLIFE REFUGE SYSTEM

FISH AND WILDLIFE SERVICE

The Service is responsible for conserving, enhancing, and protecting fish and wildlife and their habitats for the continuing benefit of people through federal programs relating to wild birds, endangered species, certain marine mammals, fisheries, aquatic resources, and wildlife management activities.

As part of its mission, the Service manages 553 national wildlife refuges and other units of the Refuge System covering 150 million acres (60.7 million ha). These areas comprise the Refuge System, the world's largest collection of lands and waters set aside specifically for fish and wildlife. The majority of these lands, 77 million acres (31 million ha), is in Alaska, while 54 million acres (21.8 million ha) are part of three marine national monuments in the Pacific Ocean. The remaining acres/hectares are spread across the other 49 states and several United States' territories. In addition to refuges, the Service manages thousands of small wetlands, 37 wetland management districts, 70 national fish hatcheries, 65 fishery resource offices, and 81 ecological services field stations. The Service enforces federal wildlife laws, administers the Endangered Species Act, manages migratory bird populations, restores nationally significant fisheries, conserves and restores wildlife habitat, and helps foreign governments with their conservation efforts. It also oversees the Federal Aid program that distributes hundreds of millions of dollars in excise taxes on fishing and hunting equipment to state fish and wildlife agencies.

NATIONAL WILDLIFE REFUGE SYSTEM

The mission of the Refuge System, as defined by the National Wildlife Refuge System Improvement Act of 1997 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."

Actions were initiated in 1997 to comply with the direction of this new legislation, including an effort to complete CCPs for all refuges. These plans, which are completed with full public involvement, help guide the future management of refuges by establishing natural resources and recreation/education programs. Consistent with the Improvement Act, approved plans will serve as the guidelines for refuge management for the next 15 years. The Improvement Act states that each refuge shall be managed to:

- Fulfill the mission of the Refuge System;
- Fulfill the individual purposes of each refuge;
- Consider the needs of wildlife first;
- Fulfill requirements of CCPs that are prepared for each unit of the Refuge System;
- Maintain the biological integrity, diversity, and environmental health of the Refuge System;

- Recognize that wildlife-dependent recreation activities including hunting, fishing, wildlife observation, wildlife photography, and environmental education and interpretation are legitimate and priority public uses; and
- Allow refuge managers authority to determine compatible public uses.

National wildlife refuges connect visitors to their natural resource heritage and provide them with an understanding and appreciation of fish and wildlife ecology to help them understand their role in the environment. Wildlife-dependent recreation on refuges also generates economic benefits to local communities. According to the report, *Banking on Nature 2006: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation*, approximately 35 million people visited national wildlife refuges in 2006, generating almost $1.7 billion in total economic activity and creating almost 27,000 private sector jobs producing about $543 million in employment income (Carver and Caudill 2007). Additionally, recreational spending on refuges generated nearly $185.3 million in tax revenue at the local, county, state, and federal levels (Carver and Caudill 2007). As the number of visitors grows, significant economic benefits are realized by local communities. In 2006, 87 million people, 16 years and older, fished (30 million), hunted (12.5 million), or observed wildlife (71 million), generating $120 billion (U.S. Department of the Interior, Fish and Wildlife Service; and U.S. Department of Commerce, U.S. Census Bureau 2007). In a study completed in 2002 on 15 refuges, visitation had grown 36 percent in 7 years. At the same time, the number of jobs generated in surrounding communities grew to 120 per refuge, up from 87 jobs in 1995, pouring more than $2.2 million into local economies. The 15 refuges in the study were Chincoteague (Virginia); National Elk (Wyoming); Crab Orchard (Illinois); Eufaula (Alabama); Charles M. Russell (Montana); Umatilla (Oregon); Quivira (Kansas); Mattamuskeet (North Carolina); Upper Souris (North Dakota); San Francisco Bay (California); Laguna Atacosa (Texas); Horicon (Wisconsin); Las Vegas (Nevada); Tule Lake (California); and Tensas River (Louisiana) the same refuges identified for the 1995 study. Other findings also validate the belief that communities near refuges benefit economically. Expenditures on food, lodging, and transportation grew to $6.8 million per refuge, up 31 percent from $5.2 million in 1995. For each federal dollar spent on the Refuge System, surrounding communities benefited with $4.43 in recreation expenditures and $1.42 in job-related income (Caudill and Laughland, unpublished data). Visitation is growing with 41 million visitors to national wildlife refuges in 2008.

Volunteers continue to be a major contributor to the success of the Refuge System. As of 2010, more than 39,000 volunteers and friends groups annually contributed nearly 1.4 million hours of support on national wildlife refuges nationwide. The value of their labor was about $26 million; their in-kind services total the equivalent of 665 full-time employees.

The Improvement Act stipulates that CCPs be prepared in consultation with adjoining federal, state, and private landowners and that the Service develop and implement a process to ensure an opportunity for active public involvement in the preparation and revision (every 15 years) of the CCPs. All lands of the Refuge System will be managed in accordance with an approved CCP that will guide management decisions and set forth strategies for achieving refuge unit purposes. Each CCP will be consistent with sound resource management principles, practices, and legal mandates including Service compatibility standards and other Service policies, guidelines, and planning documents (602 FW 1.1).

BACKGROUND AND RATIONALE FOR THE ESTABLISHMENT OF EVERGLADES HEADWATERS NWR

The land, water, and wildlife resources of the Everglades Headwaters landscape represent one of the great grassland and savanna landscapes in the eastern United States. These habitats are home to many rare and endemic plants and plant communities found nowhere else in the world. Wildlife is also varied and diverse and represents one of the highest densities of imperiled species with over 25 federal-listed and 126 state-listed plants and with 15 federal-listed and 68 state-listed animal species. Threats to these plants and animals range from habitat fragmentation and isolation of small breeding populations, to the drainage of wetlands and conversion of habitat to other uses such as housing development. Some of these plants such as cutthroat grass and wildlife such as the Florida grasshopper sparrow are in need of increased protection and management because of their limited and declining home ranges.

Wetland and water resources of the upper Everglades watershed are important for many reasons. Being the very first waters to enter the watershed, the quality and quantity of this water affects all downstream users, from the wildlife present in the Kissimmee River Basin, to the fishery of Lake Okeechobee, to the restoration efforts of the Everglades proper, and also to the human needs of millions of residents of central and south Florida. Many of the wetlands that are found in this landscape have been drained by shallow surface ditches. These drainage ditches aid in the quick removal of water from these wetlands, increasing the speed at which water enters the system, increasing the impacts and onset of drought conditions, reducing the ability of the land to absorb water and also to replenish groundwater aquifers. Species such as the Everglade snail kite which requires ample wetlands in order to find apple snails, its primary food source, are also negatively impacted by drainage. Restoration, however, is easily accomplished by filling or plugging ditches or placing stop log riser water control structures to allow the natural hydrology to return to the landscape.

Throughout this landscape there exists a multitude of existing conservation lands ranging from private preserves to military bases to state and federal parks and refuges. The historic use of this area by the ranching community also adds to this conservation landscape. Many of these conservation lands, however, are isolated from each other and the interconnecting ranching landscape is under continued and varied threats ranging from development pressure and unfavorable tax structures (e.g., inheritance tax issues). Impending climate change also creates land management challenges for ranchers and conservation land stewards as hydrology and climate patterns change. Consequently, partnerships between conservation agencies and landowners will be integral for the continued protection of wildlife corridors for species such as Florida black bear.

The Everglades Headwaters NWR and Conservation Area will provide additional opportunities for wildlife-dependent recreation and environmental education. Special emphasis will be placed on engaging local youth and their families in nature-based activities that would encourage a life-long attachment to America's outdoors.

It is envisioned that the Everglades Headwaters NWR and Conservation Area will accomplish many things, including the listed items.

- Conduct landscape-scale strategic habitat conservation for the important resources found within the Kissimmee River Basin region through partnerships between the Service, partner agencies and organizations, and with the support of the ranching and agricultural interests of this working rural landscape, to protect and enhance habitat corridors, link existing conservation lands, and implement other wildlife adaptation strategies to help buffer the impacts of climate change.

- Protect and enhance habitats for federal trust species and species of management concern, with special emphasis on federal listed and state listed species.
- Protect and restore the headwater wetlands, groundwater recharge, and watershed of the upper Everglades.
- Provide opportunities for hunting, fishing, wildlife observation, wildlife photography, and environmental education and interpretation, while promoting activities that complement the purposes of the refuge and other protected lands in the region.
- Protect historic properties; facilitate archaeological and historic investigations regarding human occupation, land use, and paleoecology; and interpret the region's history and culture.

LAWS GUIDING THE NATIONAL WILDLIFE REFUGE SYSTEM

A number of laws, policies and regulations, including the following, govern the acquisition and management of land in the Kissimmee River Valley landscape, including the National Wildlife Refuge System Improvement Act of 1997, the National Wildlife Refuge System Administration Act of 1966, the Endangered Species Act, and the Migratory Bird Treaty Act.

NATIONAL WILDLIFE REFUGE SYSTEM IMPROVEMENT ACT OF 1997

The National Wildlife Refuge System Improvement Act of 1997 (Improvement Act) guides the development and operation of the Refuge System. It clearly identifies the mission of the Refuge System; requires the Secretary of the Interior to maintain the biological integrity, diversity, and environmental health of refuge lands; mandates a "wildlife first" policy on refuges; and requires comprehensive conservation planning. It also designates six wildlife-dependent recreational uses as priority public uses of the Refuge System: hunting, fishing, wildlife observation, wildlife photography, and environmental education and interpretation. The Improvement Act amended the National Wildlife Refuge System Administration Act of 1966, which continues to serve as the parent legislation for the Refuge System.

NATIONAL WILDLIFE REFUGE SYSTEM ADMINISTRATION ACT OF 1966

The National Wildlife Refuge System Administration Act of 1966 (Administration Act) defines the Refuge System, including refuges, areas for the protection and conservation of fish and wildlife threatened with extinction, wildlife ranges, wildlife management areas, and waterfowl production areas. The Administration Act also authorizes the Secretary of the Interior to permit any use of an area, provided the use is compatible with the major purposes for establishing the area.

ENDANGERED SPECIES ACT OF 1973 (AS AMENDED)

The Endangered Species Act (ESA) directs all federal agencies to participate in endangered species conservation by protecting endangered and threatened species and restoring them to a secure status in the wild. Section 7 of the ESA charges federal agencies to aid in the conservation of species listed as threatened or endangered under the ESA, and requires federal agencies to ensure that their activities will not jeopardize the continued existence of ESA listed species or adversely modify designated, critical habitats.

MIGRATORY BIRD TREATY ACT

The Migratory Bird Treaty Act protects all migratory birds and their parts (including eggs, nests, and feathers) from illegal trade. The Migratory Bird Treaty Act is a domestic law that acknowledges the United States' involvement in four international conventions (with Canada, Japan, Mexico, and Russia) for the protection of a shared migratory bird resource. The bird resource is considered shared because these birds migrate between countries at some point during their annual life cycle.

NATIONAL ENVIRONMENTAL POLICY ACT OF 1969

The National Environmental Policy Act (NEPA) requires that all federal agencies consult fully with the public in planning any action that may significantly affect the quality of the human or natural environment. The Final EA that this document accompanies is formatted to assist the Service in complying with NEPA.

LAND AND WATER CONSERVATION ACT

The Land and Water Conservation Act authorizes the use of monies from certain user fees, the proceeds from the disposal of surplus federal property, the federal tax on motor boat fuels, and oil and gas lease revenues (primarily Outer Continental Shelf oil monies) to fund matching grants to states for outdoor recreation projects and to fund land acquisition for various federal agencies.

MIGRATORY BIRD CONSERVATION ACT

The Migratory Bird Conservation Act provides for the acquisition of suitable habitats for use as migratory bird refuges, and the administration, maintenance, and development of these areas, under the administration of the Secretary of the Interior.

ARCHAEOLOGICAL RESOURCES PROTECTION ACT OF 1979

The Archaeological Resources Protection Act of 1979 provides protection for archaeological resources on public lands by prohibiting the “excavation, removal, damage or defacing of any archaeological resource located on public or Indian lands,” and sets up criminal penalties for those acts. It also encourages the increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having archaeological resources or data obtained before 1979.

NATIONAL HISTORIC PRESERVATION ACT OF 1966

The National Historic Preservation Act of 1966 requires all federal agencies to consider the effects of their undertaking on properties meeting criteria for the National Register of Historic Places, and ensures that historic preservation fully integrates into the ongoing programs and missions of federal agencies.

PURPOSE OF ESTABLISHMENT AND LAND ACQUISITION AUTHORITY

Refuge lands can be acquired under various legislative and administrative authorities for specified purposes. Establishment of and land acquisition for the Everglades Headwaters NWR and Conservation Area is authorized under the National Wildlife Refuge System Administration Act, Endangered Species Act, Emergency Wetlands Resources Act, Migratory Bird Conservation Act, Fish and Wildlife Act, and Refuge Recreation Act. The purposes of a refuge are derived from legislative

authorities that established the refuge. The purposes guide the long-term management of the refuge, prioritize future land acquisition, and play a key role in determining the compatibility of proposed public uses. The purposes for the Everglades Headwaters NWR and Conservation Area are listed.

> *"... conservation, management, and ... restoration of the fish, wildlife, and plant resources and their habitats ... for the benefit of present and future generations of Americans..." 16 U.S.C. 668dd(a)(2) (National Wildlife Refuge System Administration Act)*
>
> *"…to conserve (A) fish or wildlife which are listed as endangered species or threatened species…or (B) plants…" 16 U.S.C. 1534 (Endangered Species Act of 1973)*
>
> *"…the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions ..." 16 U.S.C. 3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986)*
>
> *"…for use as an inviolate sanctuary, or for any other management purpose, for migratory birds…." 16 U.S.C. 715(d) (Migratory Bird Conservation Act)*
>
> *"…for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude..." 16 U.S.C. 742f(b)(1) "…for the development, advancement, management, conservation, and protection of fish and wildlife resources...." 16 U.S.C. 742f(a)(4), (Secretarial powers to implement laws related to fish and wildlife) (Fish and Wildlife Act of 1956)*
>
> *"…suitable for— (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species ..." 16 U.S.C. 460k-1 "... the Secretary ... may accept and use ... real ... property. Such acceptance may be accomplished under the terms and conditions of restrictive covenants imposed by donors ..." 16 U.S.C. 460k-2 [Refuge Recreation Act (16 U.S.C. 460k-460k-4), as amended]*

VISION FOR THE EVERGLADES HEADWATERS NATIONAL WILDLIFE REFUGE AND CONSERVATION AREA

The vision for the Everglades Headwaters NWR and Conservation Area is to conserve, protect, and manage one of the great grassland and savanna landscapes of eastern North America for current and future generations, protecting the important wildlife and habitats of the working rural landscape of central Florida's Kissimmee River Basin that is home to abundant fish and wildlife resources; that is vital to restoration and protection of the water quality and quantity for the Everglades ecosystem; that is resilient to the effects of global climate change; and that offers outdoor recreational opportunities important to the region's economy.

GOALS OF THE EVERGLADES HEADWATERS NATIONAL WILDLIFE REFUGE AND CONSERVATION AREA

Four overarching goals were developed for the Everglades Headwaters NWR and Conservation Area, as listed.

> **Goal 1. Functional Conservation Landscape.** The upper Everglades watershed will become a more connected and functional conservation landscape that will provide effective habitat connections between existing conservation areas and allow habitats and species to shift in response to urban development pressures and global climate change.
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> **Goal 2. Habitat for Fish and Wildlife.** The Everglades Headwaters NWR and Conservation Area will provide a wide range of quality Kissimmee River Basin habitats to support migratory birds, federal and state listed species, state designated species of conservation concern, and native wildlife diversity.
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> **Goal 3. Enhanced Water Quality, Quantity, and Storage.** Focusing on restoring or mimicking natural hydrologic processes, the Everglades Headwaters NWR and Conservation Area will contribute to water quality, water quantity, and water storage capacity of the upper Everglades watershed to support Everglades restoration goals and objectives and water quality and supply for central and south Florida.
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> **Goal 4. Wildlife-dependent Recreation and Education.** Refuge visitors of all abilities will enjoy opportunities for hunting, fishing, wildlife observation, wildlife photography, and environmental education and interpretation, while increasing knowledge of and support for conservation of the important grassland and savanna landscape of the headwaters of the Everglades.

How each goal will be achieved through the Everglades Headwaters NWR and Conservation Area is summarized and described below.

GOAL 1. FUNCTIONAL CONSERVATION LANDSCAPE

The upper Everglades watershed will become a more connected and functional conservation landscape that will provide effective habitat connections between existing conservation areas and allow habitats and species to shift in response to urban development pressures and global climate change.

This goal will complement the management of adjacent and nearby conserved lands, both public and private, thus enhancing the Service's wildlife management contribution to the regional landscape and helping to make the entire landscape a more functional conservation landscape. Links to existing conserved lands will also provide the opportunity for species to migrate and adapt to changes in habitats anticipated to occur from the impacts of global climate change. The Everglades Headwaters NWR and Conservation Area in central Florida will provide local and regional benefits to wildlife by working in concert with existing conservation areas and partners, including SFWMD's Kissimmee River Restoration efforts, Avon Park Air Force Range, Disney Wilderness Preserve, Kissimmee Prairie Preserve State Park, Three Lakes WMA, and various designated trails throughout this area.

The Service will work with the public and private partners to restore and maintain key habitat connections throughout the landscape; restore and maintain native habitat for resident and migratory species; and promote and protect the historical, cultural, and active ranching community in this area. Without the stewardship of the ranching community, the opportunity to conserve the multiple species and habitats found in this landscape would likely not exist today. This partnership approach to

conserving these resources, as well as the habitat and wildlife resources described above, are keys to successfully meeting this goal and are fundamental to the philosophy of how the Service envisions the management of the Everglades Headwaters NWR and Conservation Area. Fully two-thirds of the acreage, approximately 100,000 acres, are specifically designated to be protected using less-than-fee-title means (e.g., through conservation easements), thereby providing the opportunity for conservation of wildlife and habitats, while at the same time providing the opportunity to assure a healthy and vibrant ranching community and economy.

GOAL 2. HABITAT FOR FISH AND WILDLIFE

The Everglades Headwaters NWR and Conservation Area will provide a wide range of quality Kissimmee River Basin habitats to support migratory birds, federal and state listed species, state designated species of conservation concern, and native wildlife diversity.

Habitats

Diverse habitats and their respective ecological systems for trust species and species of conservation concern will be protected. Of the 150,000 acres to be protected, the estimated acreage of key habitats to be protected is as follows: 13,415 acres of dry prairie; 10,123 acres of pine flatwoods; 2,177 acres of sandhill and scrub habitats; and 34,414 acres of various wetland types. Protecting these habitats will contribute to the conservation of wetland birds; waterfowl; shorebirds; grassland birds; neotropical migratory birds; native bird species such as turkey and bobwhite; white-tailed deer; Florida black bear; and the occasional Florida panther. The following is a description of some of the most important habitat types found within the Everglades Headwaters NWR and Conservation Area.

Sandhill and Scrub

Approximately 2,177 acres of sandhill and scrub habitat will be restored, managed, and conserved. Sandhill habitats and scrub occur on well-drained, nutrient-poor sandy soils. Grasses and scrubby oaks dominate this fire-dependent landscape. The sandy soils typical of these habitats allow for rainfall to enter the groundwater system. Discharge from these habitats gives rise to cutthroat seepage wetlands. Several of the species found on these habitats are endemic to central peninsular Florida and many are federally listed species, such as Florida scrub-jay, sand skink, Florida ziziphus, and Garrett's mint.

Pine Flatwoods

Approximately 1,123 acres of pine flatwoods habitat will be restored, managed, and conserved. Pine flatwoods are characterized by level topography and poorly drained soils. These pine forests vary greatly depending on hydrology and can have a dominant understory of wiregrass, saw palmetto, or other low shrubs. The overstory of pine flatwoods can be of longleaf, slash, or pond pine and cabbage palm. They are important for a variety of vertebrate and invertebrate species, such as neotropical migratory birds, red-cockaded woodpecker, Florida black bear, Florida panther, fox squirrels, and white-tailed deer.

Dry Prairie

Approximately 13,415 acres of dry prairie habitat will be restored, managed, and conserved. Dry prairie is endemic to central peninsular Florida, occurring on poorly drained soils. It is fire-dependent and typically treeless with a low ground cover of wiregrass, stunted saw palmetto, and

low-growing runner oak. It harbors numerous endemic vertebrates. The Florida grasshopper sparrow is the flagship species of this habitat.

Wet Prairie and Freshwater Marsh

Approximately 25,233 acres of wet prairie and freshwater marsh habitats will be restored, managed, and conserved. Freshwater marshes and wet prairie are both seasonal wetlands that differ by the duration of inundation and fire regime. Sawgrass, sedges, rushes, and dwarf cypress dominate wet prairie, whereas cattail, sawgrass, pondweeds, water lilies, and numerous sedges and rushes dominate freshwater marshes. The Everglade snail kite, wood stork, whooping crane, and Audubon's crested caracara are noted residents of these habitats.

Forested Wetlands

Approximately 9,181 acres of forested wetlands habitat will be restored, managed, and conserved. Forested wetlands range from isolated depression swamps and shoreline to flowing water swamps. Bald cypress, red maple, and bay trees may dominate the overstory, while a mix of shrub species forms the understory. Many smaller isolated swamps have been converted to agricultural uses, and many of the remaining swamps are degraded by drainage and nutrient runoff. The wood stork, eastern indigo snake, and Florida panther can be found in these habitats.

Threatened, Endangered, and Species of Conservation Concern

There are 15 federally listed wildlife species and three candidate species found within the Study Area and 68 state listed threatened, endangered, and species of special concern. Their habitat needs vary greatly across the landscape, some being exclusively dependent on the habitats that are endemic to central Florida, such as dry prairie and scrub. The Study Area lies within the Atlantic Flyway for migratory birds with the refuge being located within NABCI's Bird Conservation Region 31, the Atlantic Coast Joint Venture, and the operational area for the Peninsular Florida Landscape Conservation Cooperative.

The following is a brief description of some of the focal species expected to benefit from the Everglades Headwaters NWR and Conservation Area.

Audubon's Crested Caracara

The federally threatened Audubon's crested caracara occurs within the wet and dry prairie habitat of central peninsular Florida, but is also found in the improved pastures with scattered cabbage palm. It often feeds on wetland species, but is also noted to feed on road-killed animals as well.

Everglade snail kite

The federally endangered Everglade snail kite forages almost exclusively on apple snails. Apple snails can be found in a variety of wetlands ranging from permanent wetlands and lakes to seasonal wetlands and ditches. While several larger wetlands throughout the Study Area provide nesting habitat, restoration and management of wetlands for the refuge and conservation area are focused on providing improved foraging opportunities.

Florida Grasshopper Sparrow

The federally endangered Florida grasshopper sparrow occurs throughout the prairie region of peninsular Florida. They are closely associated to the fire-dependent dry prairie and are now found on only a few parcels of public land and nearby ranches. Opportunities for conservation easements and restoration of improved pasture may provide the opportunity to link these isolated populations.

Wood Stork

The federally endangered wood stork forages and breeds within the marshes and cypress swamps of southern Florida. It shares these habitats with other more common wading birds, such as the great egret and white ibis. Only two active nest colonies exist within the Study Area, but five abandoned colony locations can be found in the area.

Florida Black Bear

Listed by the state as a threatened species, the Florida black bear once ranged throughout Florida and the southeast states, but now occupies only 18 percent of its historic range. Using a wide variety of habitats, the Florida black bear is known to wander widely in search of food, cover, mates, and other resources. The population found within the Study Area is isolated and opportunity exists within the refuge and conservation area to link them with a larger population found within the St. Johns River watershed.

Other Migratory Birds

Two subspecies of sandhill crane, a state listed threatened species, can be found within the Study Area. The Florida sandhill crane is a non-migratory, year-round breeding resident, while the greater sandhill crane is migratory and only winters in Florida. Both subspecies use a wide variety of wetlands and pastures throughout the Study Area.

Blue-winged teal and mottled duck are the two most commonly observed waterfowl species, with many other species of waterfowl noted throughout the winter period.

Resident Wildlife

A wide variety of resident wildlife species can be found throughout the Study Area. Bobwhite quail, wild turkey, white-tailed deer, grey squirrels, and rabbits occur in abundance, providing ample hunting and wildlife observation opportunities. Wild hog, although a nonnative and nuisance species, is also considered a game species and can be found in overabundance in many areas throughout Florida.

Listed Plant Species

There are approximately 25 federal listed and 34 state listed plant species found throughout the landscape with most occurring in scrub habitat. Nearly all species are fire-dependent and their populations have been impacted by fire suppression, which has allowed brush and overstory species to become established. Some of the federally listed species found within the Study Area include beautiful pawpaw, scrub lupine, Florida ziziphus, and Garrett's mint.

GOAL 3. ENHANCED WATER QUALITY, QUANTITY, AND STORAGE.

Focusing on restoring or mimicking natural hydrologic processes, the Everglades Headwaters NWR and Conservation Area will contribute to water quality, water quantity, and water storage capacity of the upper Everglades watershed to support Everglades restoration goals and objectives and water quality and supply for central and south Florida.

The Service will add 150,000 acres of conservation lands to this landscape, supporting the enhancement of water quality, quantity, and storage within this landscape. An estimated 23,065.4 acres of degraded wetlands could be restored within the Conservation Area. The three primary wetland types that will be restored are seasonal, semi-permanent, and cutthroat seepage wetlands. Seasonal and semi-permanent wetland basins occur throughout the prairie and savannah landscape, and cutthroat seepage wetlands are associated with the sandhill and scrub habitats of the Lake Wales Ridge.

The primary method of wetland modification has been surface ditching to quickly remove standing water from wet and dry prairie systems. These surface ditches are rarely more than 2 to 3 feet deep and are easily restored through the reestablishment of the original surface contours of the landscape by either filling the ditch or placing a stop log riser water control structure in the ditch. Restoration of these types of wetlands will help serve multiple ecosystem service functions. By blocking surface flow, additional water will be stored in the wetland basin, allowing for slower water discharge, groundwater recharge, and nutrient uptake. Other agencies and organizations, such as NRCS also have wetland restoration programs. Opportunities to complement these restoration activities with Service restoration activities will further serve to benefit the overall watershed, including that of the Kissimmee River, Lake Okeechobee, and the Everglades.

Cutthroat seepage wetlands are an endemic wetland type found at the base of the slope of sandhill habitat in south-central Florida. Groundwater entering underground aquifers sometimes expresses itself at the ground surface, creating a mosaic of seasonal wetlands ranging from marshes to pine forests dominated by an understory of cutthroat grass. Many of these wetland types have been ditched and drained, while others have been fire suppressed, allowing for hardwoods to encroach. Estimates of acreage figures of degraded cutthroat wetlands have not been estimated because of their distribution within multiple habitat types. Regardless, restoration of habitats such as pine flatwoods will benefit this plant community.

GOAL 4. WILDLIFE-DEPENDENT RECREATION AND EDUCATION

Refuge visitors of all abilities will enjoy opportunities for hunting, fishing, wildlife observation, wildlife photography, and environmental education and interpretation, while increasing knowledge of and support for conservation of the important grassland and savanna landscape of the headwaters of the Everglades.

With the addition of approximately 50,000 acres of Service-managed lands within the Kissimmee River Basin, wildlife-dependent recreation and education opportunities will increase. The Service will work cooperatively with FWC and other partners to provide a variety of wildlife-dependent activities for the public.

The Improvement Act established six priority public uses on refuges: hunting, fishing, wildlife observation, wildlife photography, and environmental education and interpretation. Although these priority uses must receive consideration in planning for public use, they also must be compatible with the purposes for which a refuge is established and the mission of the Refuge System. Compatibility determinations, which evaluate the effects of a particular use or activity in the context of species or habitats on a refuge, aid in

making those decisions. As refuge lands are acquired, compatibility determinations will be used to decide which, where, and how public use opportunities will be permitted.

Public use opportunities contribute to the long-term protection of wildlife resources by promoting understanding, appreciation, and support for wildlife conservation. The six priority public uses will be accommodated to the maximum extent possible, without significant negative effects on wildlife or habitat. All of the public use activities are contingent upon availability of staff and funding to develop and implement these programs. The Service will promote opportunities for volunteers and develop community interpretive materials and programs to enhance awareness of and appreciation for the area's resources. School and other group programs will be encouraged. An increase in public use on the acquired lands will be expected due to the development of new public facilities and programs including: hunting, hiking trails, fishing access, observation platforms and overlooks, and other support facilities (e.g., parking lots, trailheads, and visitor contact stations). Most public access will be limited to daylight-use only, but the Service will consider overnight access as a component of other public use activities (e.g., hunting in remote locations). See Appendix B for the Interim Compatibility Determinations.

Hunting and Fishing

The Service will open designated tracts of newly acquired lands for hunting and fishing in accord with the state's regulations after reviewing and evaluating the biological, ecological, and human safety impacts. Newly acquired lands that traditionally have provided hunting and fishing opportunities will remain open, at their current level, under interim compatibility determinations until the Service has completed the planning process to formally open the refuge, no later than 3 years from acquiring lands suitable to sustain these opportunities. To this end, the Service will continue discussions with FWC regarding co-management opportunities of the hunting, fishing, and other recreational activities associated with the refuge. If possible, the Service will provide American with Disabilities Act (ADA)-compliant hunts and youth hunt opportunities. Generally, the Service will allow hunting, based on state hunting seasons and consistent with the refuge's CCP and Hunt Plan (once developed). The Service will cooperate with FWC in establishing a state wildlife management area for hunting and fishing. Youth fishing opportunities will be encouraged.

Wildlife Observation, Photography, Environmental Education, and Interpretation

The refuge will provide opportunities for wildlife observation, wildlife photography, and environmental education and interpretation (Appendix B). Working with state and local agencies (e.g., FWC), the Service will study the feasibility of connecting existing hiking, bicycling, and horseback riding trails through refuge lands. A refuge could also provide interpretive and environmental education programs and increase partnership opportunities to interpret the cultural and natural resources, including the role Native Americans and European settlers contributed to the environment of central Florida.

Environmental education, one of the six priority wildlife-dependent uses encouraged on refuge lands, incorporates onsite, offsite, and distance-learning materials, activities, programs, and products that address the audience's course of study, the mission of the Refuge System, and the management purposes of the refuge. The goal of environmental education is to promote an awareness of the basic ecological foundations of the interrelationship between human activities and natural systems. Specific programs of study could include water quality and habitat restoration and the land stewardship of the ranching community. Through curriculum-based environmental education, on- and off-refuge, refuge staff, educators, and partners hope to motivate students and other persons interested in learning the role of management in the maintenance of healthy ecosystems, working landscapes, and conservation of our fish and wildlife resources

President Obama launched the America's Great Outdoors (AGO) Initiative to develop a 21st Century conservation and recreation agenda for our Nation. Lasting conservation solutions should rise from the American people; protection of our natural heritage is a non-partisan objective shared by all Americans. The vision of the AGO Initiative involves connecting Americans to the great outdoors, conserving and restoring America's great outdoors, and working together for America's great outdoors. AGO seeks to empower all Americans—citizens, young people, and representatives of community groups; the private sector; nonprofit organizations; and local, state, and tribal governments—to share in the responsibility to conserve, restore, and provide better access to our lands and waters in order to leave a healthy, vibrant outdoor legacy for generations yet to come. The Everglades Headwaters NWR and Conservation Area serve the conservation initiative outlined by the AGO Initiative (http://americasgreatoutdoors.gov/.)

For years, national wildlife refuges have been connecting children with the land, teaching a conservation ethic. It is now apparent that such connections are of immense importance. The Service is committed to engaging children with nature for numerous reasons, including mental and physical health and awareness and understanding of the natural world.

The Service will attempt to work with local school districts to develop environmental education programs featuring the unique species and communities of the Kissimmee River Basin, including contributions of the ranching and farming culture in sustaining a healthy environment and economy. The Service will work with the partners to promote environmental education, thereby maximizing the use of resources and time commitments for each partner organization. The Service will also consider the role of a refuge in other potential opportunities such as small habitat restoration projects through the use of our Partners for Fish and Wildlife program in and around local schools, docent-led trail walks, birding festivals, guest lectures, youth hunting and fishing efforts, and even simple monitoring of various forms of wildlife on and off the refuge.

ADMINISTRATION

The refuge may be managed as part of a refuge complex and later as stand-alone refuge. Further, management functions such as fire will be supported by area refuges such as Merritt Island NWR, Arthur R. Marshall Loxahatchee NWR, and Florida Panther NWR. As part of a refuge complex, the Everglades Headwaters NWR will have less on-site staff initially and will share staff and equipment with one or more other refuges. Sometimes, refuges initially are part of a refuge complex, but as they grow in size and complexity, they become stand-alone refuges. Under the refuge complex scenario, the refuge staff of the Pelican Island NWR sub-complex will have the responsibility for managing the newly established refuge (note, the Pelican Island NWR sub-complex is part of the Merritt Island NWR Complex, which currently oversees six national wildlife refuges). During the interim period, the Service will seek funding for refuge staff within the project boundary. Generally, a standalone refuge has a dedicated staff and equipment and is based in local facilities. The Conservation Area will require additional staff to administer conservation easement programs.

The Everglades Headwaters NWR and Conservation Area will be easily accessible via state and local roads. The east and west flank of the Conservation Area is bordered by U.S. 441 and U.S. 27, respectively. Beginning in the south, the east-to-west corridors include SR 70, US 98, SR 60, and SR 500. All of these roads are either directly connected or easily reached by Florida's Turnpike or Interstate 95 along the east flank of the Study Area. Existing access roads on acquired properties will be evaluated for use depending on access needs, presence of sensitive species and/or habitats, public use, and other potential future needs. Some roads may be retained and improved, while others may be abandoned and removed. Legal access to inholdings and homes will be maintained.

The refuge manager will not initiate or permit a new use of a national wildlife refuge or expand, renew, or extend an existing use of a national wildlife refuge unless it has been determined that the use is consistent with the mission of the Refuge System and the purposes of each specific refuge. Further, the same use may be deemed compatible on some refuges, but not others due to refuge-specific differences. [See Appendix B for the Interim Compatibility Determinations that outline the uses authorized to continue to occur during the interim period between acquisition of a property and the development of appropriate management plan(s) for a particular property.]

FACILITIES

Because no actual lands have been acquired as of yet, it is difficult to discuss specifics of facilities and improvements that may be needed to manage the refuge. The strength of the Everglades Headwaters NWR and Conservation Area is the potential private-public partnerships and innovative cost-sharing opportunities that could result in multipurpose and multiagency facilities.

Conversion of existing trails and ranch roads to public use and/or refuge management access corridors will occur as lands are acquired. Use of such roads for public-only or government-only access will be evaluated based on the conditions of roads/trails, protection of sensitive or protected habitat, and/or need of access to areas to facilitate permitted public uses. Roads and trails may only be open seasonally, or may have other restrictions to protect wildlife resources or to provide access for visitor programs, such as hunting activities. Vehicle access to refuge resources will only be allowed on designated roads and trails. Improvements, such as small parking areas, boat ramps, boardwalks and observation platforms, and information kiosks, could be constructed in some areas.

Because of the potential wide geographic distribution of refuge lands across this landscape, one or more refuge headquarters and visitor contact stations may be established through the adaptive reuse of buildings acquired through land acquisition (e.g., a ranch house or hunt lodge may be used as a refuge office or education facility; a pole building or barn may be used for equipment storage). Other potential future on-site improvements, including additional trails, improved access roads, observation platforms, photography blinds, and parking areas, may be discussed in a future CCP. The construction of new facilities or conversion of existing structures is contingent upon availability of funds and acquisition of appropriate land.

Restoration of wetland habitats may provide the opportunity for the construction of low-level berms and water control structures to further refuge management goals and objectives. Such structures will be managed and maintained to minimize adverse impacts to threatened and endangered species and species of conservation concern.

Where facility construction, operation, or maintenance may conflict with the conservation of federally listed species, appropriate measures (e.g., buffers and seasonal restrictions) will be identified and implemented to avoid adverse effects. This will be done in consultation with the Service's endangered species program

Generally, public use areas will be open from dawn to dusk. Some areas of the refuge could be closed to the public to protect important habitat areas or for safety reasons. Special use permits will be issued to researchers, educational groups, and others on an as needed basis, providing that the activities are compatible with refuge purposes, goals, and objectives and contribute to the ecological understanding, biological survey, or baseline data needs. Refuge areas could be opened to the public year-round, seasonally, or for special events, or closed due to hazards or for biological and ecological reasons.

FUNDING

We will maintain a current inventory of management needs in appropriate Service database(s) and update the associated costs and priorities annually. Those databases provide a mechanism for each unit of the Refuge System to identify its essential staffing, mission-critical projects, and major needs and form a realistic assessment of the funding needed to meet each refuge's goals, objectives, and strategies.

No funding has yet been identified or approved to support management. Any funding will be dependent upon a variety of factors, including national and regional budget priorities and allocations.

STAFFING

Staffing on national wildlife refuges is based on a number of factors including refuge size and complexity, proximity to other refuges, and funding. Based on these and other factors, the refuge may be managed as a unit of a refuge complex or as a stand-alone refuge. At this time, it is difficult to delineate staffing specifics, because of the uncertainties associated with the refuge's land acquisition activity, management program complexity, resource issues, funding, and other factors. Because of this uncertainty, two staffing models are described. These models may serve to guide how this refuge may grow in staff over time. Initially, however, the Everglades Headwaters NWR and Conservation Area will be managed as a unit under the supervision and management of the Pelican Island NWR Complex, a unit of the larger Merritt Island NWR Complex. Staff from nearby refuges may also be used to support needed staffing functions. Under any scenario, the Service's Southeast Region evaluates and determines staffing needs and priorities.

Refuge Complex Staffing Model

The initial staffing strategy for the Everglades Headwaters NWR and Conservation Area will be under the refuge complex scenario which identifies complex staff support and a few new positions. The primary oversight and leadership for management will be from the Pelican Island Complex, managed as a unit of the larger Merritt Island NWR Complex, with GS-14 and GS-13 refuge managers and their supporting staff. New positions include: a refuge manager (GS-11/12) to assist in providing direction, supervision, and coordination for all management activities, ensuring effective oversight and community outreach and successful management of fee-title and conservation easement acquisitions; a maintenance worker (WG-7/8) to assure management projects are completed, such as invasive species control, mowing, boundary maintenance, and other general maintenance activities; a fish and wildlife biologist (GS-9) to assist in delivering the full range of wildlife conservation and restoration projects on public land, provide technical assistance, assist in the restoration and management of new acquisitions, and conduct baseline wildlife and habitat monitoring. All other refuge functions such as office administration, law enforcement, and outreach will be provided by the overlying refuge complex staff. Fire management staffing will be as outlined below.

Refuge Stand-Alone Staffing Model

At full acquisition, an independent, stand-alone refuge staff will be comprised of the following eight positions: refuge manager GS-13/14 to provide oversight for operation and maintenance of the refuge and conservation area; deputy refuge manager GS-12/13 to assist in all management activities; refuge law enforcement officer (park ranger, GS-9) to ensure the safety of the visiting public, coordinate with the FWC officers and other local law enforcement, and assure that wildlife laws are enforced to protect an ever-increasing federal interest; an administrative office assistant (GS-7/9) to handle the administrative workload of operating an independent refuge (e.g., purchasing, budget, and personnel support); a maintenance worker (WG-7/8) to assure management projects are

completed, such as invasive species control, mowing, boundary maintenance, and other general maintenance activities, and a visitor services staff member (park ranger, GS-7/9) to provide the needed link with local community educational institutions for wildlife-dependent education and oversee plans for any public use activities such as the coordination of a hunting program; an assistant refuge manager (GS-7/9) to administer and implement the conservation easement program; and a private lands biologist (GS-9/11) to assist landowners with implementing conservation activities on privately owned lands within the Conservation Partnership Area. Fire staffing will be as outlined below in the Fire Management Staffing section.

Additionally, collaborative staffing approaches, such as a co-located multi-agency/organization visitor service facility and program, will also be under the direction of the refuge manager. In the long term, the Service's Southeast Regional Office will evaluate the need for additional full-time staff based on management needs, project loads, public use activities, and other factors, and could move forward with providing additional staff, if justified.

Fire Management Staffing

Under either the initial or full implementation staffing scenario, fire management activities will be supported not only from Merritt Island NWR, but likely also from Arthur R. Marshall Loxahatchee NWR and Florida Panther NWR. The Service will also coordinate with the Central Florida Ecosystem Restoration Team. Also under either staffing scenario, the approach for fire management will be to use the existing fire staff member for Lake Wales Ridge NWR as the coordination point for both Everglades Headwaters and Lake Wales Ridge NWRs. Once 10,000 acres (20 percent of the total) are acquired for the refuge, a prescribed fire specialist (GS-9/11) will also need to be located in the landscape to coordinate wildfire response. At full acquisition, fire staffing in the landscape to support both Everglades Headwaters and Lake Wales Ridge NWRs will need to include: a prescribed fire specialist/fire management officer (GS-9/11) to oversee a fire operations specialist (GS-7/8), three forestry technicians (GS-5), and an engineering equipment operator (WG-8).

PARTNERSHIPS

The establishment of the Everglades Headwaters NWR and Conservation Area is one component of a larger landscape-scale, partnership-driven initiative, the Greater Everglades Partnership Initiative (Initiative). The Service currently is facilitating Initiative discussions with multiple agencies and organizations. This Initiative is built upon the premise that many conservation partners in this landscape have programs that are complimentary to one another, and that it is not only important, but critical for any individual agency or organization to work collaboratively toward conservation in the greater Everglades landscape. These partner discussions have led to the overall development of the project, and also will play an integral part in future activities. Examples of these partnerships activities include those listed below.

INVASIVE SPECIES MANAGEMENT

The Service currently actively participates on the Lake Wales Ridge Ecosystem Working Group and the recently formed Heartland Cooperative Invasive Species Management Area. These teams are composed of local land management agencies and organizations with an interest in the conservation of central Florida's natural resources. Invasive species monitoring and control activities are coordinated and implemented through these two groups. The Service will continue its participation in these two cooperative efforts.

FIRE MANAGEMENT

Currently, The Nature Conservancy (TNC), with assistance and support from multiple state and federal agencies, manages the Central Florida Ecosystem Restoration Team. This group of firefighters is available to all participating agencies to conduct prescribed burning activities on lands they manage in the Lake Wales Ridge area. This team also has the capability to assist with prescribed fire activities on private lands with appropriate management agreements. Additionally, TNC is hosting a Service firefighter position assigned to Lake Wales Ridge NWR, to be co-located at TNC's Tiger Creek Preserve office. It is anticipated that if a Service-sponsored fire team is established to support the refuge, that the co-location and co-staffing of that team will complement the existing Central Florida Ecosystem Restoration Team. Additionally, the Service traditionally enters into mutual-aid agreements with local and municipal fire departments that provide for fire support from the local departments on-refuge and assistance from Service fire staff on off-site wildland fires.

LAW ENFORCEMENT

A federal refuge officer will be the primary law enforcement officer on refuge lands. The Service will establish formal, cooperative agreements with local law enforcement departments, the county sheriff's departments, and FWC to assist with protection and appropriate law enforcement response for the refuge.

CONSERVATION SERVICE CENTER

Part of the Greater Everglades Partnership Initiative includes development of a Conservation Service Center, or one-stop-shop approach to conservation within the landscape. Because many partners currently have existing facilities and share similar conservation objectives, co-location of these partners, either physically or virtually via electronic media, will facilitate the public being able to interact and seek the most appropriate agency, organization, or conservation program for any conservation and/or wildlife-dependent recreation, regulatory, and/or education need. This approach will also reduce duplication of conservation program efforts among agencies and organizations, thereby allowing all agencies and organizations to become more fiscally efficient.

WILDLIFE-DEPENDENT RECREATIONAL OPPORTUNITIES

The Service recognizes the need to provide increased opportunities for wildlife-dependent recreation and education and has included this as one of the primary goals for the refuge. Hunting and fishing are two wildlife-dependent recreational activities that both the Service and FWC fully support. The hunting and fishing resources found within the Study Area are well-known. In an effort to continue and expand these opportunities for the public, the Service is discussing with FWC the opportunity to identify and manage lands that the Service might acquire as wildlife management areas (WMAs). As the lead state agency for administering hunting programs, FWC has the expertise, experience, and established protocol for managing WMAs and the Service will look into the opportunity of entering into a cooperative agreement with FWC for the management of Service-owned lands as WMAs.

SUMMARY

In summary, working partnerships with surrounding landowners; conservation organizations; and municipal, state, and federal agencies will be critical to successful refuge management and the conservation of the greater Everglades landscape. We will continue to cooperate with our conservation partners, all of whom are instrumental in helping us accomplish habitat management

goals and objectives. It is clear that partnerships with the public; landowners; neighbors; conservation organizations; and tribal, state, municipal, and other federal agencies will be the only path to a successful Everglades Headwaters NWR and Conservation Area.

MANAGEMENT OF EVERLADES HEADWATERS NWR AND CONSERVATION AREA

Goal 1. Functional Conservation Landscape.

The upper Everglades watershed will become a more connected and functional conservation landscape that will provide effective habitat connections between existing conservation areas and allow habitats and species to shift in response to urban development pressures and global climate change.

Objectives:

- Link four current conservation lands using easement and fee-title purchases within 4 years of refuge establishment date. Conserve one corridor for wildlife movement across Lake Wales Ridge using easement and fee-title purchases within 5 years of refuge establishment date.
- Conserve one additional corridor for wildlife movement between Kissimmee River and St. Johns River watersheds within 7 years of refuge establishment date, with particular emphasis on Florida black bear.
- Conserve lands between two known populations of Florida grasshopper sparrow within 5 years of refuge establishment date.
- Evaluate and conserve 25 percent of wildlife corridor along east slope of Lake Wales Ridge using easement, other less-than-fee-title, and fee-title purchases within 10 years of refuge establishment date.

Rationale

The landscape of the upper Everglades watershed exhibits multiple conservation lands, managed by a network of conservation agencies and organizations. However, many gaps currently exist between these conservation lands. These gaps present the threat of development, negating any habitat corridor and wildlife movement across the landscape. There are a few corridors of wildlife movement that traverse the landscape. The east side of Lake Wales Ridge and the Kissimmee River both allow movement of animals in a north-south direction. Several areas which traverse Lake Wales Ridge have conservation lands in place and will benefit from additional conservation lands in order to complete the conservation landscape.

Additionally, there are a few key parcels surrounding Lake Hatchineha which would complete the conservation picture in the northwest corner of the Conservation Focal Area, and a large contiguous block, centrally located along the east side of Kissimmee River, could effectively link the habitats of Kissimmee Prairie Park Preserve State Park and Three Lakes Wildlife Management Area, bringing together isolated populations of Florida grasshopper sparrow. This area would also serve to bridge species like Florida black bear from southwestern Florida with the populations of bears found in the St. Johns River watershed.

Some of the management activities might include the listed actions.

- Evaluate and rank all interested landowner parcels to assure the highest conservation value lands and connectivity with existing conservation lands are protected.
- Work with partner agencies to identify key habitat corridors for focused conservation efforts.

- Integrate climate change predictions, as they become available, into land conservation priorities.
- Document the movement patterns of various species of wildlife, including Florida black bear, Florida panther, and whooping crane, to better identify landscape connectivity and corridors.

Goal 2. Habitat for Fish and Wildlife.

The Everglades Headwaters NWR and Conservation Area will provide a wide range of quality Kissimmee River Basin habitats to support migratory birds, federal and state listed species, state designated species of conservation concern, and native wildlife diversity.

Objectives:

- Complete baseline inventory and document degraded and high-quality habitat necessary for trust species on all refuge and easement lands within 2 year of acquisition.
- Restore 10 percent annually of dry prairie and cutthroat wetland habitat within 5 years of acquisition of refuge lands.
- Reestablish historic fire regime on 10 percent annually of pine flatwoods, dry prairie, and scrub habitats.
- Within 5 years, begin restoration on all other habitats on refuge lands.
- Initiate restoration activities (e.g., modified grazing rotation, native planting) on all dry prairie and cutthroat wetland habitat within 4 years of acquisition on less-than-fee-title lands (applicable only to those less-than-fee-title acquisitions which included provisions for habitat restoration).
- Initiate restoration activities (e.g., native planting, timber harvest) within 4 years on all other habitats on less-than-fee-title lands.
- Reduce nutrient loading (phosphorus and nitrogen) on any improved pasture conserved by fee-title acquisition by 50 percent within 4 years of refuge establishment date.
- Restore improved pasture to native pasture on all refuge lands.
- Monitor and initiate control activities for invasive plants and animals upon acquisition
- Continue Service participation on the Lake Wales Ridge Ecosystem Working Group and Heartland Cooperative Invasive Species Management Area.

Rationale

The habitats associated with the existing conservation lands are well-known and well-surveyed. However, little of the private landholdings have been surveyed for wildlife or habitat. An initial baseline monitoring and ground truthing of lands within the Conservation Focal Area needs to be completed in order to assess the validity of the computer models used to identify high-, medium-, and low-priority habitats. Additionally, wetland, grassland, forest, and scrub restoration potential needs to be assessed in order to prioritize restoration activities.

Most habitats in this landscape require frequent low-intensity fires. Reduced fire frequency or complete fire suppression is one of the primary negative impacts in this landscape; wetland drainage being the other. Grassland habitats, such as dry prairie and cutthroat wetland, can have more of an immediate positive response to restoration activities, whereas forest and scrub restoration may take several years and repeated fire treatments to realize a positive response. The initiation of restoration activities takes these timeframes into account when prioritizing areas to restore.

Conservation banks provide a unique opportunity for the Service to manage lands as part of the Refuge System that provide dedicated and completely restored endangered species habitat, while at the same time being provided dedicated resources (funds) to carry out the restoration, management, and monitoring activities associated with managing the land base. Trust funds management would reside elsewhere (e.g., land trusts and non-governmental organizations) and the Service will provide management expertise in getting work done on the ground.

To ensure proper habitat conditions and persistence of certain species, management actions for some species will need to occur in a very timely manner once a particular property is acquired (e.g., management actions for Florida grasshopper sparrow should occur within six months of acquisition of a site supporting this species, nonnative plant control activities should occur soon after an acquisition, and skink and Florida scrub-jay surveys should be conducted within 3 to 5 years of an acquisition).

Some of the management activities might include the listed actions.

- Work cooperatively with partners and partner programs to secure grassland and forest conservation easements.
- Manage lands, in consultation with the Service's Ecological Services Vero Beach Office, of all new conservation banks for endangered species critical habitat, upon completion of conservation bank requirements.
- Seek opportunities with partner agencies and organizations to co-locate and cooperate on habitat restoration and management activities.

Goal 3. Enhanced Water Quality, Quantity, and Storage.

Focusing on restoring or mimicking natural hydrologic processes, the Everglades Headwaters NWR and Conservation Area will contribute to water quality, water quantity, and water storage capacity of the upper Everglades watershed to support Everglades restoration goals and objectives and water quality and supply for central and south Florida.

Objectives:

- Complete baseline inventory and document drained wetlands on all Everglades Headwaters NWR and Conservation Area properties within 2 year of acquisition.
- Restore 70 percent of all drained wetlands within 5 years of acquisition of refuge properties.
- Restore 50 percent of all drained wetlands within 4 years of acquisition of Conservation Area properties.
- Reduce nutrient runoff from wetland basins by 50 percent within 4 years of refuge establishment date.

Rationale

Much of what is known of wetland restoration potential on private land is derived from aerial photography. As properties come into ownership, initial evaluations are required to document restoration opportunities and design restoration activities. Much of what is known does indicate, however, that most

restoration would consist of simple ditch plugs and construction of stop log riser structures, possibly some low-level earthen berms. Opportunities for these activities, although not quantified, are known to abound. Larger drained wetlands and stream channelization will require Service staff to work with other partners (e.g., NRCS) to design and construct more sophisticated projects.

The needs for water quantity, quality, timing, and distribution for refuge management activities are unknown at this time. However, the primary source of freshwater would be derived from rainfall or runoff from the surrounding fields. The Service will collaborate with state agencies and water management districts to work toward strategies that are supported by all stakeholders. The Service is also committed to improve water quality, quantity, timing, and distribution to downstream users and will participate in reduction strategies identified through the state's Total Maximum Daily Load and Basin Management Action Plan process. Additionally, the Service will assure that conservation easements will provide specific language that will allow the placement of structures and practices which are part of the state's Total Maximum Daily Load and Basin Management Action Plan process.

Conservation banks provide a unique opportunity for the Service to manage lands as part of the Refuge System that provide dedicated and completely restored endangered species habitat, while at the same time being provided dedicated resources (funds) to carry out the restoration, management, and monitoring activities associated with managing the land base. Trust funds management will reside elsewhere (e.g., land trusts, non-governmental organizations), and the Service will provide management expertise in getting management activities completed.

Some of the management activities might include the listed actions.

- Work cooperatively with partners and partner programs to secure wetland conservation easements.
- Manage wetlands, in consultation with the Service's Ecological Services Vero Beach Office, of all new wetland mitigation banks, upon completion of bank requirements.
- Seek opportunities with partner agencies and organizations to co-locate and cooperate on wetland restoration and management activities.

Goal 4. Wildlife-dependent Recreation and Education.

Refuge visitors of all abilities will enjoy opportunities for hunting, fishing, wildlife observation, wildlife photography, and environmental education and interpretation, while increasing knowledge of and support for conservation of the important grassland and savanna landscape of the headwaters of the Everglades.

Objectives:

- Immediately upon fee-title acquisition, work cooperatively with FWC on the designation of refuge lands as WMAs.
- Develop a Hunt Plan within 3 year of acquisition of acreage suitable to support hunt programs.
- Within 3 years of suitable land acquisition, identify up to three sites suitable for development or restoration of facilities to engage public in outdoor recreation and educational programs.
- Within 3 years, develop step-down management plans to address all aspects of outdoor wildlife-dependent recreation identified in the interim compatibility determinations.

Rationale

The Service has a long history of supporting wildlife-dependent recreation, ranging from hunting and fishing to environmental education and interpretation. The hunting and fishing traditions of local residents and visitors to this landscape area are well-known, and the Service anticipates hosting a full complement of recreational activities. To this end, the Service has been communicating with FWC about managing any suitable fee-title lands within Florida's WMA program.

Access to public lands is of concern to the public, and the Service will seek to accommodate opportunities for mobility impaired and youths to visit the refuge. Being in close proximity to urban areas, the Service also hopes to engage local residents and schools in multiple educational opportunities, ranging from self-guided interpretive trails to formal curriculum for local schools.

Facilities are keys in the Service being able to engage and interact with the public. Because the landscape of interest is widespread, several facilities may be necessary to reach all of those in the vicinity. Since many conservation partners have similar missions and interests, it is important to seek out mutually beneficial opportunities to co-locate facilities and staff to be more cost efficient and effective.

Some of the management activities might include the listed actions.

- Incorporate opportunities, under a cooperative agreement with FWC, for youth, mobility impaired, and other hunting and fishing programs.
- Actively participate and host FWC-sponsored wildlife-dependent recreational workshops.
- Evaluate opportunities, under a cooperative agreement with FWC and other partner groups, to connect and expand trail networks.
- Seek cooperative opportunities with partner agencies and organizations to co-locate and cooperate on educational and interpretive programs and facilities.

ACQUISITION MANAGEMENT

Protection of lands will be accomplished by targeting up to approximately 50,000 acres of fee-title acquisition within the approximately 130,000-acre Conservation Focal Area; and target approximately 100,000 acres of less-than-fee-title acquisition within the Conservation Partnership Area. Less-than-fee-title acquisitions (e.g., conservation easements) will be acquired in perpetuity.

PUBLIC USE MANAGEMENT

The initial decision-making process a refuge manager follows when first considering whether or not to allow a proposed use on a refuge involves an evaluation of the appropriateness of a given activity on a national wildlife refuge. The refuge manager must find a use to be appropriate before undertaking a compatibility review of the use. If a proposed use is not found to be appropriate, the refuge will not allow the use and will not prepare a compatibility determination. By screening out proposed uses that are not appropriate to the refuge, the refuge manager avoids unnecessary compatibility reviews. By following the process for finding the appropriateness of a use, we strengthen and fulfill the Refuge System mission. The collection of interim appropriateness reviews for this project can be found in Appendix B.

The Improvement Act established six priority public uses on refuges. These priority uses depend on the presence, or the expectation of the presence of wildlife. These uses are: hunting, fishing, wildlife observation, wildlife photography, and environmental education and interpretation. Although these priority uses must receive our consideration in planning for public use, they also must be compatible with the purposes for which the refuge was established and the mission of the Refuge System. Compatibility determinations, which evaluate the impacts of a use that has been determined to be appropriate in the context of species or habitats, aid in making those decisions. As lands are acquired in the upper watershed of the Everglades ecosystem, compatibility determinations will be used to decide what public use opportunities are compatible and can be permitted. The Interim Compatibility Determinations for these priority public uses, which will allow existing uses to continue until such time that a comprehensive conservation plan is developed, can be found in Appendix B.

Appendix A, Table 1, summarizes the public uses that will be evaluated during the interim phase and their potential limitations under current conditions. More specific discussion of these public use activities follows.

Appendix A. Table 1. Interim public uses

Public Use Activity	Would this use be provided during the interim phase?
Public Hunting	Yes, limited by available hunting areas and potentially by wildlife management area restrictions.
Public Fishing	Yes, limited by available access and potentially by wildlife management area restrictions.
Environmental Education	Yes, limited due to staffing, partnership development, and facilities.
Interpretation	Yes, limited due to staffing, partnership development, and facilities.
Wildlife Observation	Yes, limited due to staffing, partnership development, and facilities.
Wildlife Photography	Yes, limited due to staffing, partnership development, and facilities.
Camping	Yes, limited to designated existing campsites and as component of other approved uses.
Horseback Riding (trails)	Yes, limited to designated existing trails.
Bicycling (trails)	Yes, limited to designated existing trails.
Hiking (trails)	Yes, limited to designated existing trails.
Off-road Vehicle	Yes, limited to designated existing roads and trails in support of hunting, fishing, and research. No, general off-road vehicle use would not be allowed.
Boating	Service has no jurisdiction over navigable waters.

Hunting

Hunting is a popular and traditional activity of many residents and non-residents of the State of Florida. Private lands within the Conservation Partnership Area are typically subject to hunting leases or reserved by family members for their own hunting activities, thus largely limiting general public hunting access today. In general, newly acquired lands that become part of the Everglades Headwaters NWR will be open for public hunting as part of the WMA program administered by FWC, increasing the amount of lands open to public hunting in this area. The Improvement Act provides the opportunity for compatible public uses on newly acquired lands to continue on an interim basis (until a more detailed hunt plan or comprehensive conservation plan is developed) at the same level of activity that existed prior to Service acquisition of the land (Appendix B). Several options exist under the WMA program that could be selected to match the individual circumstance of a given land acquisition parcel without exceeding the current level of activity. Once an adequate, manageable land base is acquired, the Service will then conduct a more detailed hunt plan as soon as possible and not more than 3 years after acquisition of a property on which hunting will be allowed. The Service will work closely with FWC to establish a hunt program beyond the initial interim basis. Beyond the Interim Compatibility Determinations, the Service will work with the partners and the public to develop long-term plans to provide opportunities for hunting on the Everglades Headwaters NWR.

Fishing

The Kissimmee River and the Kissimmee Chain of Lakes is a world-renowned freshwater fishery. Access to the navigable waters in this region is governed primarily by public and private boat ramps, which are numerous and scattered throughout the region. However, many of the smaller lakes and ponds do not have public access. The Service, working through the WMA program administered by FWC, will provide opportunities for fishing access that are compatible with the reasons for which the refuge was established. A cursory review of the lands within the planning units that are important for the Service to conserve reveals that the majority of shoreline and boat access to the major waterways is currently protected and managed by the SFWMD, thus providing the Service limited opportunities to increase fishing and boating access to these areas. Beyond the Interim Compatibility Determinations, the Service will work with the partners and the public to develop long-term plans to evaluate and provide opportunities for fishing on the Everglades Headwaters NWR.

Wildlife Observation

The upper Everglades watershed provides a wealth of opportunities for wildlife observation; however, safe viewing opportunities are limited by state and county roads that do not provide adequate pull-offs. Until such time as better wildlife observation opportunities can be provided and a detailed visitor services plan is written and based on the Interim Compatibility Determinations, wildlife observation will be allowed to continue on an interim basis on parcels acquired by the Service at the same level of activity that existed prior to Service acquisition of the land. Beyond the Interim Compatibility Determinations, the Service will work with partners and the public to develop long-term plans to provide opportunities for wildlife observation on the Everglades Headwaters NWR.

Wildlife Photography

Until such time as better wildlife photography opportunities can be provided and a detailed public use plan is written, photography will be allowed to continue based on the Interim Compatibility Determinations, on parcels acquired by the Service at the same level of activity that existed prior to

Service acquisition of the land. Beyond the Interim Compatibility Determinations, the Service will work with the partners and the public to develop long-term plans to provide opportunities for photography on the Everglades Headwaters NWR.

Environmental Education

Environmental education is limited by the lack of support facilities in the upper Everglades watershed. Shortfalls in environmental education opportunities may be overcome with partnerships with local schools and conservation groups. Until such time as better environmental education opportunities can be provided and a detailed visitor services plan is written, environmental education will be allowed to continue based on the Interim Compatibility Determinations on parcels acquired by the Service at the same level of activity that existed prior to Service acquisition of the land. Beyond the Interim Compatibility Determinations, the Service will work with the partners and the public to develop long-term plans to provide opportunities for environmental education on the Everglades Headwaters NWR.

Interpretation

Interpretation is limited by the lack of support facilities in the upper Everglades watershed. Shortfalls in interpretation opportunities may be overcome with partnerships with local schools and conservation groups. Until such time as better interpretation opportunities can be provided and a detailed visitor services plan is written, environmental education will be allowed to continue based on the Interim Compatibility Determinations on parcels acquired by the Service at the same level of activity that existed prior to Service acquisition of the land. Beyond the Interim Compatibility Determinations, the Service will work with the partners and the public to develop long-term plans to provide opportunities for interpretation on the Everglades Headwaters NWR.

Other Uses

Where any of the priority public uses may conflict with the conservation of federally listed, endangered or threatened species, appropriate measures (e.g., buffers and seasonal restrictions) will be identified and implemented to avoid adverse effects. This will be done in consultation with the Service's Endangered Species Program. Additionally, public uses other than the six priority public uses, such as horseback riding, biking, and hiking trails, must pass the same standards of appropriateness, compatibility, and planning. While activities such as camping and ORV use (on designated road and trails in support of hunting and research) may not pass standards of appropriateness and compatibility in and of themselves, these uses may be allowed as components in support of other compatible uses (e.g., camping in remote locations during hunting seasons and ORV access on designated trails and roads during hunting seasons). Until such time as these opportunities can be assessed for compatibility and a detailed visitor services plan is written, and based on the Interim Compatibility Determinations these other public uses will be allowed to continue on parcels acquired by the Service at the same level of activity that existed prior to Service acquisition of the land.

CULTURAL RESOURCES

Given the potential of cultural resources on the refuge and given the importance of this landscape to both the Seminole Tribe of Florida and the Miccosukee Tribe of Indians of Florida, the Service will develop a cultural resources management plan for the refuge. The cultural resource management plan will include, but is not limited to, identification of relevant historic contexts, reviews of the Florida Master Site Files and available technical literature, oral history interviews, Phase I archaeological and historical surveys of lands acquired in fee-title by the Service, and follow-up testing of identified historic properties to ascertain their eligibility for inclusion on the National Register of Historic Places.

OPERATIONS AND PLANNING

Refuges are managed according to an annual work plan that summarizes goals and objectives for the upcoming year. Specific actions for on-the-ground-work, such as operation procedures, wildlife inventory plans, habitat management actions, public use, and other management activities are covered in detail in refuge-specific management plans. An annual work plan may generally state, for example, that 1,000 acres of invasive plant species will be controlled on the refuge, thus setting a target and goal for invasive species, control methods, timing of control, monitoring of effectiveness of the application, retreating areas, monitoring, and other actions for the year.

Long-term planning, outlined earlier, includes the preparation of a CCP, which describes the desired future conditions of a refuge and provides long-range guidance and management direction to achieve the purposes of the refuge.

CONCLUSION

The Service will work towards achieving the overarching goals outlined in the Final EA. Partnerships with landowners; neighbors; conservation organizations; and local, state, tribal, and other federal government agencies will be a crucial component of a successful Everglades Headwaters NWR and Conservation Area.

Conceptual Management Plan Signatures:

Refuge Manager: _____ 12/9/2011
Signature/Date

Project Leader: _____ 12/9/2011
Signature/Date

Refuge Supervisor: _____ 12/9/11
Signature/Date

Regional Chief, National Wildlife Refuge System, Southeast Region: _____ 12-9-11
Signature/Date

Appendix B. Interim Appropriateness Findings and Interim Compatibility Determinations

APPROPRIATE USE FINDINGS

An appropriate use finding is the initial decision process a refuge manager follows when first considering whether or not to allow a proposed use on a refuge. An interim appropriate use is used as the initial step during the time period when land is first acquired and continuing until such time, no later than 15 years, when either a comprehensive conservation plan or step-down management plan is developed, so that ongoing public use activities can continue during this interim period. The refuge manager must find that a use is appropriate before undertaking a compatibility review of the use. This process clarifies and expands on the compatibility determination process by describing when refuge managers should deny a proposed use without determining compatibility. If a proposed use is not appropriate, it will not be allowed and a compatibility determination will not be undertaken.

Except for the uses noted below, the refuge manager must decide if a new or existing use is an appropriate refuge use. If an existing use is not appropriate, the refuge manager will eliminate or modify the use as expeditiously as practicable. If a new use is not appropriate, the refuge manager will deny the use without determining compatibility. Uses that have been considered and administratively determined to be appropriate or not appropriate are listed.

- Six wildlife-dependent recreational uses - As defined by the National Wildlife Refuge System Improvement Act of 1997, the six wildlife-dependent recreational uses (i.e., hunting, fishing, wildlife observation, wildlife photography, and environmental education and interpretation) are determined to be generally appropriate for refuges. However, a particular refuge may have none, some, or all of these uses and the refuge manager must still determine if these uses are compatible.

- Take of fish and wildlife under state regulations - States have regulations concerning the take of wildlife that includes hunting, fishing, and trapping. The Service considers take of wildlife under such regulations appropriate. However, the refuge manager must determine if the activity is compatible before allowing it on a refuge.

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Proposed Everglades Headwaters NWR

Use: Grazing

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

Decision Criteria:	YES	NO
(a) Do we have jurisdiction over the use?	✓	
(b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?	✓	
(c) Is the use consistent with applicable Executive orders and Department and Service policies?	✓	
(d) Is the use consistent with public safety?	✓	
(e) Is the use consistent with goals and objectives in an approved management plan or other document?	✓	
(f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?	✓	
(g) Is the use manageable within available budget and staff?	✓	
(h) Will this be manageable in the future within existing resources?	✓	
(i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources?	✓	
(j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future?	✓	

Where we do not have jurisdiction over the use ("no" to (a)), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ("no" to (b), (c), or (d)) may not be found appropriate. If the answer is "no" to any of the other questions above, we will generally not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes ✓ No ___

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate ___ Appropriate ✓

Refuge Manager: [signature] Date: 12/9/11

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use.

If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence.

If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: [signature] Date: 12/9/11

A compatibility determination is required before the use may be allowed.

FWS Form 3-2319
02/06

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Proposed Everglades Headwaters NWR

Use: Research

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

Decision Criteria:	YES	NO
(a) Do we have jurisdiction over the use?	✓	
(b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?	✓	
(c) Is the use consistent with applicable Executive orders and Department and Service policies?	✓	
(d) Is the use consistent with public safety?	✓	
(e) Is the use consistent with goals and objectives in an approved management plan or other document?	✓	
(f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?	✓	
(g) Is the use manageable within available budget and staff?	✓	
(h) Will this be manageable in the future within existing resources?	✓	
(i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources?	✓	
(j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future?	✓	

Where we do not have jurisdiction over the use ("no" to (a)), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ("no" to (b), (c), or (d)) may not be found appropriate. If the answer is "no" to any of the other questions above, we will generally not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes ✓ No ___

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate ___ Appropriate ✓

Refuge Manager: _____ Date: 12/9/2011

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use.

If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence.

If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: _____ Date 12/9/2011

A compatibility determination is required before the use may be allowed.

FWS Form 3-2319
02/06

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Proposed Everglades Headwaters NWR

Use: Camping

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997

Decision Criteria:	YES	NO
(a) Do we have jurisdiction over the use?	✓	
(b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?	✓	
(c) Is the use consistent with applicable Executive orders and Department and Service policies?	✓	
(d) Is the use consistent with public safety?	✓	
(e) Is the use consistent with goals and objectives in an approved management plan or other document?	✓	
(f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?	✓	
(g) Is the use manageable within available budget and staff?	✓	
(h) Will this be manageable in the future within existing resources?	✓	
(i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources?	✓	
(j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future?	✓	

Where we do not have jurisdiction over the use ("no" to (a)), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ("no" to (b), (c), or (d)) may not be found appropriate. If the answer is "no" to any of the other questions above, we will generally not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes ✓ No ___

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate ___ Appropriate ✓

Refuge Manager: _____ Date: 12/9/11

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use.

If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence.

If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: _____ Date: 12/9/11

A compatibility determination is required before the use may be allowed.

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02/06

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Proposed Everglades Headwaters NWR

Use: Horseback Riding (trails)

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997

Decision Criteria:	YES	NO
(a) Do we have jurisdiction over the use?	✓	
(b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?	✓	
(c) Is the use consistent with applicable Executive orders and Department and Service policies?	✓	
(d) Is the use consistent with public safety?	✓	
(e) Is the use consistent with goals and objectives in an approved management plan or other document?	✓	
(f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?	✓	
(g) Is the use manageable within available budget and staff?	✓	
(h) Will this be manageable in the future within existing resources?	✓	
(i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources?	✓	
(j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future?	✓	

Where we do not have jurisdiction over the use ("no" to (a)), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ("no" to (b), (c), or (d)) may not be found appropriate. If the answer is "no" to any of the other questions above, we will generally not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes ✓ No ___

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate ___ Appropriate ✓

Refuge Manager: _____ Date: 12/9/11

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use.

If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence.

If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: _____ Date: 12/9/11

A compatibility determination is required before the use may be allowed.

FWS Form 3-2319
02/06

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Proposed Everglades Headwaters NWR

Use: Bicycling (trails)

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

Decision Criteria:	YES	NO
(a) Do we have jurisdiction over the use?	✓	
(b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?	✓	
(c) Is the use consistent with applicable Executive orders and Department and Service policies?	✓	
(d) Is the use consistent with public safety?	✓	
(e) Is the use consistent with goals and objectives in an approved management plan or other document?	✓	
(f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?	✓	
(g) Is the use manageable within available budget and staff?	✓	
(h) Will this be manageable in the future within existing resources?	✓	
(i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources?	✓	
(j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future?	✓	

Where we do not have jurisdiction over the use ("no" to (a)), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ("no" to (b), (c), or (d)) may not be found appropriate. If the answer is "no" to any of the other questions above, we will generally not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes ✓ No ___

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate ___ Appropriate ✓

Refuge Manager: _____ Date: 12/9/11

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use.

If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence.

If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: _____ Date: 12/9/11

A compatibility determination is required before the use may be allowed.

FWS Form 3-2319
02/06

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Proposed Everglades Headwaters NWR

Use: Hiking (trails)

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

Decision Criteria:	YES	NO
(a) Do we have jurisdiction over the use?	✓	
(b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?	✓	
(c) Is the use consistent with applicable Executive orders and Department and Service policies?	✓	
(d) Is the use consistent with public safety?	✓	
(e) Is the use consistent with goals and objectives in an approved management plan or other document?	✓	
(f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?	✓	
(g) Is the use manageable within available budget and staff?	✓	
(h) Will this be manageable in the future within existing resources?	✓	
(i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources?	✓	
(j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future?	✓	

Where we do not have jurisdiction over the use ("no" to (a)), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ("no" to (b), (c), or (d)) may not be found appropriate. If the answer is "no" to any of the other questions above, we will generally not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes ✓ No ___

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate ___ Appropriate ✓

Refuge Manager: _____ Date: 12/9/11

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use.

If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence.

If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: _____ Date: 12/9/11

A compatibility determination is required before the use may be allowed.

FWS Form 3-2319
02/06

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Proposed Everglades Headwaters NWR

Use: Off-road vehicles (off-trail use)

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

Decision Criteria:	YES	NO
(a) Do we have jurisdiction over the use?	✓	
(b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?	✓	
(c) Is the use consistent with applicable Executive orders and Department and Service policies?		✓
(d) Is the use consistent with public safety?	✓	
(e) Is the use consistent with goals and objectives in an approved management plan or other document?		✓
(f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?	✓	
(g) Is the use manageable within available budget and staff?		✓
(h) Will this be manageable in the future within existing resources?		✓
(i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources?		✓
(j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future?		✓

Where we do not have jurisdiction over the use ("no" to (a)), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ("no" to (b), (c), or (d)) may not be found appropriate. If the answer is "no" to any of the other questions above, we will generally not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes ✓ No ___

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate ✓ Appropriate ___

Refuge Manager: _____ Date: 12/9/11

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use.

If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence.

If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: _____ Date: 12/9/11

A compatibility determination is required before the use may be allowed.

FWS Form 3-2319
02/06

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Proposed Everglades Headwaters NWR

Use: Off-road vehicles (on designated roads and trails in support of uses determined to be compatible, specifically hunting and research)

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

Decision Criteria:	YES	NO
(a) Do we have jurisdiction over the use?	✓	
(b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?	✓	
(c) Is the use consistent with applicable Executive orders and Department and Service policies?	✓	
(d) Is the use consistent with public safety?	✓	
(e) Is the use consistent with goals and objectives in an approved management plan or other document?	✓	
(f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?	✓	
(g) Is the use manageable within available budget and staff?	✓	
(h) Will this be manageable in the future within existing resources?	✓	
(i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources?	✓	
(j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future?	✓	

Where we do not have jurisdiction over the use ("no" to (a)), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ("no" to (b), (c), or (d)) may not be found appropriate. If the answer is "no" to any of the other questions above, we will **generally** not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. **Yes** ✓ **No** ___

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate ___ **Appropriate** ✓

Refuge Manager: _____ Date: 12/9/2011

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use.
If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence.
If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: _____ Date: 12/9/11

A compatibility determination is required before the use may be allowed.

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: **Proposed Everglades Headwaters NWR**

Use: **Boating (airboat, motorboat, self-propelled)**

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

Decision Criteria:	YES	NO
(a) Do we have jurisdiction over the use?		✓
(b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?		
(c) Is the use consistent with applicable Executive orders and Department and Service policies?		
(d) Is the use consistent with public safety?		
(e) Is the use consistent with goals and objectives in an approved management plan or other document?		
(f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?		
(g) Is the use manageable within available budget and staff?		
(h) Will this be manageable in the future within existing resources?		
(i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources?		
(j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future?		

Where we do not have jurisdiction over the use ("no" to (a)), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ("no" to (b), (c), or (d)) may not be found appropriate. If the answer is "no" to any of the other questions above, we will generally not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes ___ No ___

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate ___ Appropriate ___

Refuge Manager: _____ Date: 12/9/11

If found to be Not Appropriate, the refuge supervisor does not need to sign concurrence if the use is a new use.

If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence.

If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: _____ Date: _____

A compatibility determination is required before the use may be allowed.

FWS Form 3-2319
02/08

INTERIM COMPATIBILITY DETERMINATIONS

Introduction: The Service reviewed several uses for compatibility during the development of the Everglades Headwaters NWR and Conservation Area. The descriptions, anticipated impacts, and approval of each use are addressed separately. These Interim Compatibility Determinations are used during the time period when land is first acquired and continuing until such time, no later than 15 years, when a comprehensive conservation plan is developed or earlier when an appropriate step-down management plan is developed. This will ensure that ongoing public use activities can continue during this interim period at levels similar to those that existed prior to acquisition by the Service. During the acquisition of a particular property, the Service will develop an understanding of the types, conditions, and levels of use(s) that previously occurred on that property to determine which use(s) will continue to occur under these Interim Compatibility Determinations.

Uses: The following uses were evaluated to determine their compatibility with the mission of the National Wildlife Refuge System and the purposes of the refuge: hunting, fishing, environmental education and interpretation, wildlife observation and photography, research, off-road vehicle use (on designated roads and trails in support of hunting and research), camping, hiking, horseback riding, bicycling, and grazing.

Refuge Name: Everglades Headwaters National Wildlife Refuge

Date Established: January 18, 2012

Establishing and Acquisition Authorities:
Endangered Species Act of 1973 (16 U.S.C. 1531)
National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd)

Refuge Purposes:

> *"... conservation, management, and ... restoration of the fish, wildlife, and plant resources and their habitats ... for the benefit of present and future generations of Americans..." 16 U.S.C. 668dd(a)(2) (National Wildlife Refuge System Administration Act)*
>
> *"…to conserve (A) fish or wildlife which are listed as endangered species or threatened species…or (B) plants…" 16 U.S.C. 1531 (Endangered Species Act of 1973)*
>
> *"…the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions ..." 16 U.S.C. 3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986)*
>
> *"…for use as an inviolate sanctuary, or for any other management purpose, for migratory birds…." 16 U.S.C. 715d (Migratory Bird Conservation Act)*
>
> *"…for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude..." 16 U.S.C. 742f(b)(1) "…for the development, advancement, management, conservation, and protection of fish and wildlife resources...." 16 U.S.C. 742f(a)(4), (Secretarial powers to implement laws related to fish and wildlife) (Fish and Wildlife Act of 1956)*

"…suitable for— (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species ..." 16 U.S.C. 460k-1 "... the Secretary ... may accept and use ... real ... property. Such acceptance may be accomplished under the terms and conditions of restrictive covenants imposed by donors ..." 16 U.S.C. 460k-2 [Refuge Recreation Act (16 U.S.C. 460k-460k-4), as amended]

National Wildlife Refuge System Mission:

The mission of the Refuge System, as defined by the National Wildlife Refuge System Improvement Act of 1997, 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."

Other Applicable Laws, Regulations, and Policies:

- Antiquities Act of 1906 (34 Stat. 225)
- Migratory Bird Treaty Act of 1918 (15 U.S.C. 703-711; 40 Stat. 755)
- Migratory Bird Conservation Act of 1929 (16 U.S.C. 715r; 45 Stat. 1222)
- Migratory Bird Hunting Stamp Act of 1934 (16 U.S.C. 718-178h; 48 Stat. 451)
- Refuge Trespass Act of June 25, 1948 (18 U.S.C. 41; 62 Stat. 686)
- Fish and Wildlife Act of 1956 (16 U.S.C. 742a-742j; 70 Stat.1119)
- Refuge Recreation Act of 1962 (16 U.S.C. 460k-460k-4; 76 Stat. 653)
- Wilderness Act of 1964 (16 U.S.C. 1131-1136; 78 Stat. 890)
- Land and Water Conservation Fund Act of 1964
- National Historic Preservation Act of 1966, as amended (16 U.S.C. 470, et seq.; 80 Stat. 915)
- National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd, 668ee; 80 Stat. 927)
- National Environmental Policy Act of 1969, NEPA (42 U.S.C. 4321, et seq; 83 Stat. 852)
- Use of Off-Road Vehicles on Public Lands (Executive Order 11644, as amended by Executive Order 10989)
- Endangered Species Act of 1973 (16 U.S.C. 1531 et seq; 87 Stat. 884)
- Refuge Revenue Sharing Act of 1935, as amended in 1978 (16 U.S.C. 715s; 92 Stat. 1319)
- The Property Clause of the U.S. Constitution Article IV 3, Clause 2
- The Commerce Clause of the U.S. Constitution Article 1, Section 8
- The National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57, U.S.C. 668dd)
- Executive Order 12996, Management and General Public Use of the National Wildlife Refuge System, March 25, 1996

Definitions:

Appropriate Use

A proposed or existing use on a refuge that meets at least one of the listed four conditions:

1. The use is a wildlife-dependent recreational use as identified in the Improvement Act.
2. The use contributes to fulfilling the refuge purpose(s), the Refuge System mission, or goals or objectives described in a refuge management plan approved after October 9, 1997, the date the Improvement Act was signed into law.
3. The use involves the take of fish and wildlife under state regulations.
4. The use has been found to be appropriate as specified in 603 FW 1 1.11.

Native American

American Indians in the conterminous United States and Alaska Natives (including Aleuts, Eskimos, and Indians) who are members of federally recognized tribes.

Priority General Public Use

A compatible wildlife-dependent recreational use of a refuge involving hunting, fishing, wildlife observation, wildlife photography, and environmental education and interpretation.

Quality

The criteria used to determine a quality recreational experience include:

- Promotes safety of participants, other visitors, and facilities.
- Promotes compliance with applicable laws and regulations and responsible behavior.
- Minimizes or eliminates conflicts with fish and wildlife population or habitat goals or objectives in a plan approved after 1997.
- Minimizes or eliminates conflicts with other compatible wildlife-dependent recreation.
- Minimizes conflicts with neighboring landowners.
- Promotes accessibility and availability to a broad spectrum of the American people.
- Promotes resource stewardship and conservation.
- Promotes public understanding and increases public appreciation of America's natural resources and the Service's role in managing and protecting these resources.
- Provides reliable/reasonable opportunities to experience wildlife.
- Uses facilities that are accessible and blend into the natural setting.
- Uses visitor satisfaction to help define and evaluate programs.

Wildlife-Dependent Recreational Use

As defined by the Improvement Act, a use of a refuge involving hunting, fishing, wildlife observation, wildlife photography, and environmental education and interpretation.

Compatibility Determinations for the Refuge: Compatibility determinations for each use listed were considered separately and descriptions appear between the two drawn lines. Although the preceding sections from "Uses" through "Definitions" and the ending sections from "Public Review and Comment" section through the final signatures are only written once within this Final LPP, they are part of each descriptive use and become part of each compatibility determination.

Description of Use: *Hunting (big game, upland game, and waterfowl)*

This interim compatibility determination serves as our commitment to allow hunting activities to continue, where they are pre-existing and owner-authorized, on lands that will be acquired by the Service.

Hunting is a traditional use in this landscape. Hunting has been identified as a priority wildlife-dependent activity under the National Wildlife Refuge System Improvement Act of 1997. With the implementation of the Land Protection Plan, the Service, in cooperation with the state, will take the steps necessary (e.g., develop needed regulations and publish the appropriate *Federal Register* notice) to open the refuge to upland hunting for deer, feral hog, turkey, waterfowl, and other small game in accordance with state regulations. However, the Improvement Act also provides the opportunity for existing public uses to continue, at the same level of activity, during an interim period until such time that a detailed plan is developed (e.g., hunt plan and/or comprehensive conservation plan). This will provide additional opportunities for a priority recreational activity. Big game hunting potential will consist of refuge-sponsored or state-managed wildlife management area (WMA) hunts for deer, wild turkey, and feral hog. Upland game (e.g., gray squirrel, rabbit, and raccoon) and waterfowl (e.g., ducks, coot, and geese) hunting will consist of refuge-sponsored or state-managed WMA hunts. Any or all hunt programs will be administered as part of the WMA program and will be in accordance with state regulations.

Availability of Resources: The cost of administering a hunt program is unknown at this time, but revenue will be generated from fees collected from hunters. Refuge law enforcement, public use, administrative, managerial, and biological staff will allocate a portion of their time to support this program (e.g., with existing staff from existing refuges). Maintenance of roads and potential building of hunt check stations also are costs that will be absorbed within the refuge operating budget. The Service is currently working to partner with the Florida Fish and Wildlife Conservation Commission (FWC) to administer the hunt program as part of the state's WMA program through the development of a memorandum of understanding.

Anticipated Impacts of the Use: By policy, all activity addressed by this interim compatibility determination will not exceed the current use occurring on the land. Therefore there will be no additional anticipated impacts. Existing impacts will be identified and evaluated based on best professional judgment and published scientific papers. Many of the impacts associated with upland hunting are similar to those considered for other public use activities, such as waterfowl hunting and wildlife viewing and photography, with the exception of direct mortality to game species, short-term changes in the distribution and abundance of game species, and unrestricted travel through the hunt area. Direct mortality can impact isolated, resident game species populations by reducing breeding populations to a point where the isolated population can no longer be sustained. This can result in localized extirpation of isolated populations. The structure and length of hunt seasons can minimize or eliminate these anticipated impacts.

The harvest of feral hogs on the refuge may have a beneficial impact to native wildlife and habitat, since hogs compete for mast; destroy native plants; and prey upon bird nests, small vertebrates, and invertebrates. Deer hunting can maintain herd size and sex ratios at a healthy population level commensurate with available habitat. Spring turkey hunting can disrupt nesting. Impacts of recreational small game hunting include harvest of target species--gray squirrel, rabbit, and raccoon. In addition to the harvest of legal game, killing of non-target species, such as snakes, is known to occur. Other impacts of hunting may include littering, disturbing wildlife, trampling vegetation, and removing dead/down wood. (For more information regarding potential impacts associated with public use activities, please refer to the Final EA.)

Determination (check one below):

_____ Use is Not Compatible

__X__ Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility: Hunting will be in accordance with applicable state regulations and will not exceed the scope of current hunting activity until such time as a refuge hunt plan or comprehensive conservation plan is developed. A hunt plan will be developed within 3 years of acquisition of property sufficient in size to support hunting activities. Hunting programs will be administered as a state-managed WMA unit or a refuge-sponsored management program. For all hunts, weapon restrictions will be in accordance with State of Florida regulations. Vehicles will be restricted to existing designated roads and trails. Off-road vehicle (ORV) use may be allowed for access along designated roads and trails. (See the interim compatibility determination for ORVs for additional details.) Camping may be allowed to access remote areas during the hunting season. All hunts will be designed in cooperation with state biologists and managers, to provide quality user opportunities based upon estimated wildlife population levels and biological parameters. Hunt season dates and bag limits will be adjusted to meet current hunter densities and activities and may be adjusted as needed to achieve balanced population levels within carrying capacities, regardless of impacts to user opportunities. As additional data are collected and a hunt plan or comprehensive conservation plan is developed, additional refuge-specific regulations or changes to the WMA could be implemented. These changes to the regulations could include, but may not be limited to the following: season dates that differ from those in surrounding state zones; permit requirements; and closed areas on a permanent or seasonal basis to reduce disturbance to specific wildlife species or habitats, such as bird rookeries, wintering waterfowl, or threatened or endangered species, as well as to provide for public safety. If evidence of unacceptable impacts begins to appear, it may be necessary to change the activity, move the activity, or eliminate the activity.

Justification: Under the Improvement Act, hunting is a priority public use. Hunting is an acceptable form of wildlife-dependent recreation compatible with the purposes of the refuge. The harvest of surplus animals is one tool used to maintain wildlife populations at a level compatible with habitat. Overabundance of animals, such as hogs and deer, can have detrimental impacts to native habitats. In addition to recreational opportunities, hunting to control populations of feral hogs and deer will be beneficial to native species and habitats, and will therefore be considered compatible with refuge purposes.

Mandatory 15-year Re-evaluation Date: 12/09/2026

Description of Use: *Fishing*

This interim compatibility determination serves as our commitment to allow fishing activities to continue, where they are pre-existing and owner-authorized, on lands that will be acquired by the Service.

Fishing is a traditional use in this landscape. Fishing has been identified as a priority wildlife-dependent activity under the National Wildlife Refuge System Improvement Act and is a traditional use on refuges. Recreational freshwater fishing will be allowed on refuge lakes, rivers, and/or ponds. The refuge will not have jurisdiction over state navigable waters, thus boating and access to

navigable waters will continue according to state regulations. There may be the potential for visitors to fish from the banks of the refuge or by boat. This wildlife-dependent recreational use is supported by boating; therefore, boating impacts which are associated with fishing are also considered in this review. Motorized and non-motorized boating activities support fishing. The Service is currently working with the FWC to manage fishing access through the state's WMA program.

Availability of Resources: The cost of administering a fishing program is unknown, but revenue may be generated from potential access fees. Refuge law enforcement, public use, administrative, managerial, and biological staff will allocate a portion of their time to this program (e.g., with existing staff from existing refuges).

Anticipated Impacts of the Use: The primary impacts of this use are disturbance to and the taking of non-target wildlife species, vandalism (e.g., removal of stoplogs from water control structures), littering, habitat disturbance (e.g., trampling of bank vegetation), and water pollution from boat motors. Some wildlife may be injured or killed by discarded fishing line and hooks. (For more information regarding potential impacts associated with public use activities, please refer to the Final Environmental Assessment.)

Determination (check one below):

_____ Use is Not Compatible

__X__ Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility: Fishing within state navigable waters will continue. Fishing will adhere to state fishing laws and regulations should help maintain fish populations at a healthy, sustainable level. Fishing programs will be administered as a component of a state-managed WMA unit or a refuge-sponsored management program. Disturbance to non-target species and water pollution problems could be minimized by an electric trolling boat motor or no motor restriction for refuge lakes and ponds that are not considered state navigable waters. Fishing on non-navigable waters will be restricted to daylight hours. Closure of sensitive areas within or adjacent to refuge waters may be necessary at certain times of the year to protect the wildlife resources. If evidence of unacceptable impacts begins to appear, it may be necessary to change the activity, move the activity, or eliminate the activity.

Justification: Fishing is a priority public use under the Improvement Act and a wildlife-dependent activity that will be compatible with refuge purposes.

Mandatory 15-year Re-evaluation Date: 12/09/2026

Description of Uses: *Environmental Education and Interpretation*

This interim compatibility determination serves as our commitment to allow environmental education and interpretation activities to continue, where they are pre-existing and owner-authorized, on lands that will be acquired by the Service.

Formal and informal environmental education and interpretation will continue to occur in this landscape. Environmental education and interpretation comprise a variety of activities and facilities that seek to increase the public's knowledge and understanding of wildlife and to promote wildlife conservation. These are tools used to inform the public of resource values and issues. Examples of environmental education activities include staff or teacher-led events, student and teacher workshops, and nature studies. Interpretive programs and facilities could include special events, visitor center displays, interpretive trails, visitor contact stations, auto tour routes, and signs.

Environmental education and interpretation consist primarily of youth and adult education and interpretation of the natural resources of the refuge. Activities may include on-site refuge-led or refuge-approved environmental education programs; teacher workshops; and interpretation of wildlife, habitat, other natural features, and/or management activities occurring in the refuge. These activities seek to increase the public's knowledge and understanding of wildlife and their habitats and to contribute to wildlife conservation and support of the refuge. Environmental education and interpretation are identified in the Improvement Act as priority public activities, provided they are appropriate and compatible with the purposes of the refuge.

Environmental education and interpretation programs will be conducted by the Service or by a Service-approved member. Any non-Service environmental education and interpretation activities must be reviewed and approved by the Service through a special use permit issued by the refuge. These permits will contain conditions to minimize impacts and ensure compatibility. The Service will work with the local schools and others to develop an understanding of existing environmental education and interpretation activities for particular sites during the acquisition process.

Availability of Resources: Annual refuge operation and maintenance funds provided for the Pelican Island NWR Sub-complex of the Merritt Island NWR Complex will be used to support the visitor services programs, including environmental education and interpretation opportunities, during planned programs and events.

Facilities, such as visitor centers, trails, and environmental education shelters will require funding to build and staff to maintain them, but they are a necessary expense to carry-out the refuge's mission. The management of a volunteer program will be essential to implement environmental education and interpretive programs.

Anticipated Impacts of the Use: Disturbance promulgated by refuge specific, limited programs, managed through and with direct oversight by refuge or refuge-approved members will be considered short-term and discrete disturbances due to the low anticipated frequency of use; the utility of existing infrastructure, such as fire lines and unimproved access roads; and the ability to move sites to new areas if the habitat shows signs of impact. It is anticipated that by utilizing existing resources and guiding all aspects of use, vegetation trampling, alteration of structure and species composition, and temporal wildlife impacts to species will be minimal. The minimal impact associated with conducting limited environmental educational and interpretation programs is generally determined to be acceptable. Specific sites will be evaluated on a case-by-case basis following acquisition.

The use of the refuge for on-site, hands-on, action-oriented activities by large groups to accomplish environmental education objectives may impose low-level impacts on the sites used for the activities. Impacts may include trampling of vegetation and temporary disturbance to wildlife species in the immediate use area. Such impacts will not be permanent or long-lasting. Most of the interpretive activities will be self-guiding and will pose minimal threat to wildlife and habitat. (For more information regarding potential impacts associated with public use activities, please refer to the Final Environmental Assessment.)

Determination (check one below):

_____ Use is Not Compatible

__X__ Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility: While the anticipated impacts are expected to be minimal, stipulations are required to ensure that wildlife resources are adequately protected. The environmental education program and interpretation activities will avoid sensitive sites and vulnerable wildlife and plant populations. Environmental education and interpretive programs and activities will be held and conducted at or near disturbed areas, including, but not limited to, fire lines and unimproved access roads where impacts can be minimized.

Activities will be held on sites where minimal impact will occur. Periodic evaluation of the sites and program will be conducted to assess whether the program objectives are being met and whether resources are being degraded. If adverse impacts become evident, environmental education and interpretive activities may need to be rotated or moved. Certain areas of the refuge may be restricted seasonally for breeding or nesting purposes or to protect habitat. If evidence of unacceptable impacts begins to appear, it may be necessary to change the activity or program, move the activity or program, or eliminate the activity or program.

As long as stipulations to ensure compatibility are followed, the programs should remain compatible with the purposes of the refuge. The refuge will modify or eliminate any use that results in unacceptable impacts.

Justification: Environmental education and interpretation represent two priority wildlife-dependent recreational activities under the Improvement Act. Environmental education and interpretation are key components of the Service's initiative to connect children with nature and are used to encourage all citizens to act responsibly in protecting natural resources. Both will be compatible with refuge purposes.

Mandatory 15-year Re-evaluation Date: 12/09/2026

Description of Uses: *Wildlife Observation and Photography*

This interim compatibility determination serves as our commitment to allow wildlife observation and photography activities to continue, where they are pre-existing and owner-authorized, on lands that will be acquired by the Service.

Wildlife observation and photography are traditional uses in this landscape. For the purposes of this compatibility determination, non-consumptive wildlife observation uses include wildlife watching and nature photography by walking or using motorized or non-motorized vehicles and boats, bicycles, or horses. Foot travel will generally be allowed on refuge roads, levees, and trails.

Wildlife observation and photography are considered simultaneously in this compatibility determination. Wildlife observation and photography have been identified in the National Wildlife Refuge System Improvement Act as priority wildlife-dependent recreational uses provided they are compatible with the purposes of the refuge. This compatibility determination applies only to personal photography and not to other forms of photography (e.g., commercial photography and

filming). Commercial photography or videography, if allowed, will be covered under a separate Commercial Services compatibility determination (not being considered at this time) and will require a special use permit issued by the refuge with specific restrictions. The Service will develop an understanding of wildlife observation and photography activities for a particular site during the acquisition process.

Availability of Resources: Annual refuge operation and maintenance funds provided for the Pelican Island NWR Sub-complex of the Merritt Island NWR Complex will be used to support the visitor services program, including wildlife observation and photography opportunities.

Anticipated Impacts of the Use: The purpose of this section is to critically and objectively evaluate the potential effect that wildlife observation and photography could have on wildlife and habitat based on available information and best professional judgment. Each activity has the potential to have impacts, but the focus is to minimize impacts to levels within acceptable limits. This is based on the impacts at the existing and projected level of use.

Even the most controlled wildlife observation and photography programs designed in-part to limit wildlife disturbance have the potential for disturbing wildlife species. In general, activities that occur outside of vehicles tend to increase the disturbance potential for most wildlife species (Klein 1993; Gabrielson and Smith 1995; Burger 1981; Pease et al. 2005) as compared to similar activities conducted within vehicles. Refuge-led or refuge-approved-and-led visitors will typically access refuge habitats on-foot via fire lines and/or unimproved roads and foot trails. Although this type of access could potentially disturb wildlife, it is expected to be minimal as a result of the limited and controlled character of such events and opportunities. Among wetland habitats, out-of-vehicle approaches can reduce wildlife foraging times and can cause water birds to avoid foraging habitats adjacent to the out-of-vehicle disturbance (Klein 1993). One possible reason for this result is that vehicle activity is usually brief, while walking requires a longer period of time to cover the same distance. Similarly, walking on wildlife observation trails tends to displace birds and can cause localized declines in the richness and abundance of wildlife species (Riffell et al. 1996). Wildlife photographers tend to have the largest disturbance impacts (Klein 1993; Morton 1995; Dobb 1998). While wildlife observers frequently stop their vehicles to view wildlife, wildlife photographers are much more likely to leave their vehicles and approach wildlife on foot (Klein 1993). Even a slow approach by wildlife photographers tends to have behavioral consequences to wildlife (Klein 1993). Other impacts include the potential for photographers to remain close to wildlife for extended periods of time (Dobb 1998) and the tendency of casual photographers with low power lenses to get much closer to their subject than other activities would require (Morton 1995). (For more information regarding potential impacts associated with public use activities, please refer to the Final Environmental Assessment.)

Determination (check one below):

_____ Use is Not Compatible

__X__ Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility: By design, wildlife observation and photography should have minimal species and habitat impacts. Nonetheless, as uses increase, species impacts are more likely to occur. Evaluation of the sites and programs will be conducted annually to determine if objectives are being met, if habitat impacts are minimized, and if wildlife populations are being adversely affected. If evidence of unacceptable impacts begins to appear, it may be necessary to change the activity or the program, relocate the activity or the program, or eliminate the program.

Stipulations that may be employed include those listed.

- Providing limited refuge-led and/or refuge-approved wildlife observation and photography opportunities during refuge events and/or through special use permit will lessen species impacts.
- Providing access only on designated roads and trails will lessen species impacts.
- Vegetation that effectively conceals visitors and provides cover for birds can help minimize impacts of people in busy areas.
- Establishing buffer zones that minimize disturbance around sensitive areas and establishing no-entry zones during refuge approved events and opportunities will help minimize impacts.
- Rerouting, modifying, or eliminating activities which have demonstrated direct species impacts should be employed.
- Education is critical for making visitors aware that their actions can have negative impacts on plants and wildlife.

Justification: Wildlife observation and photography are priority public uses of the Refuge System. Providing quality, appropriate, and compatible opportunities for these activities help fulfill the provisions of the Improvement Act. Wildlife observation and photography will provide excellent forums for promoting increased awareness, understanding, and support of refuge resources relative to wildlife/human interactions. The stipulations outlined above should minimize potential impacts relative to wildlife/human interactions. Under a controlled level of limited visitation, these wildlife-dependent uses will not conflict with the national policy to maintain the biological diversity, integrity, and environmental health of the refuge.

Mandatory 15-year Re-evaluation Date: 12/09/2026

Description of Use: *Research*

This interim compatibility determination serves as our commitment to allow research activities to continue, where they are pre-existing and owner-authorized, on lands that will be acquired by the Service.

Research is a regular activity in this area, with various ongoing research projects, topics, habitat types, and species. Research is the planned, organized, and systematic gathering of data to discover or verify facts. In principle, research conducted on the refuge by universities, co-op units, non-profit organizations, partners, and other research entities furthers refuge management and serves the purposes, vision, and goals of the refuge. The refuge will likely host research from a variety of research institutions, including various universities, Native American tribe(s), and private research groups. All research activities, whether conducted by governmental agencies, public research entities, universities, private research groups, or any other entity, will be required to obtain special use permits from the refuge. Approved refuge special use permits will contain conditions under which researchers must operate to help minimize negative impacts to refuge resources. All research activities will be overseen by the wildlife biologist/botanist, refuge manager, or staff member as assigned by the refuge manager or designee. Projects that are fish and wildlife management-oriented, which will provide needed information to refuge operation and management, will receive priority consideration and may even be solicited. A research policy will be established to provide guidance for the refuge's research program. The types of research activities conducted on the refuge might cover wildlife, habitat, climate change, water resources, cultural resources, and/or public use activities. The Service will work with area

researchers and others to develop an understanding of the research activities associated with a particular site during the acquisition process.

Availability of Resources: The Merritt Island NWR Complex maintains geographic information system databases and a library of pertinent biological texts, published scientific and biological papers, reports, and reprints. Other than the administration of associated special use permits, no refuge resources are generally required for this use. The refuge may provide some type of housing for researchers if resources become available.

Anticipated Impacts of the Use: Generally, adverse impacts from research are minimal. An anticipated method of accessing research sites throughout the refuge may include off-road vehicles (ORVs) s or similar vehicles. A critical and objective evaluation of the potential effects that ORVs could have on wildlife and habitat will be based on the most current information available and best professional judgment. (See interim compatibility determination for ORVs for additional details.) Occasionally, slight or temporary wildlife or habitat disturbances may occur (e.g., minor trampling of vegetation may occur when researchers access monitoring plots). However, these impacts are not considerable, nor are they permanent. Also, a small number of individual plants or animals might be collected for further scientific study, but these collections will be anticipated to have minimal impact on the populations from which they came. All collections will adhere to the Service's specimen collection policy (Director's Order 109, dated March 28, 2005). (For more information regarding potential impacts associated with public use activities, please refer to the Final Environmental Assessment.)

Determination (check one below):

_____ Use is Not Compatible

__X__ Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility: All research conducted on the refuge must further the purposes of the refuge and the mission of the Refuge System. All research will adhere to established refuge policy on research and policy on collecting specimens (Directors Order Number 109). To ensure that research activities are compatible, the refuge will require that a special use permit be obtained before any research activity may occur. Research proposals and/or research special use permit applications will be required to be submitted in advance of the activity to allow for review by refuge staff to ensure minimal impacts to the resources, staff, and programs of the refuge. Each special use permit may contain conditions under which the research will be conducted. Each special use permit holder will submit annual reports or updates to the refuge on research activities, progress, funding, and other information. Further, each special use permit holder will provide copies of findings, final reports, publications, and/or other documentation at the end of each project. Limiting use of ATVs primarily to designated trails and roads will minimize anticipated impacts. The refuge will deny permits for research proposals that are determined to not serve the purposes of the refuge and mission of the Refuge System. The refuge will also deny permits for research proposals that are determined to negatively impact resources or that materially interfere with or detract from the purposes of the refuge. All research activities will be subject to the conditions of their respective permits. If evidence of unacceptable impacts begins to appear, it may be necessary to change the activity, move the activity, or eliminate the activity.

Justification: Research activities provide benefits to the refuge and to the natural resources supported by the refuge. Research conducted on the refuge can lead to new discoveries, new facts, verified information, and increased knowledge and understanding of resource management, as well as track current trends in fish and wildlife habitat and populations to enable better management

decisions. Research has the potential to further the purposes and goals of the refuge and the mission of the Refuge System.

Mandatory 10-year Re-evaluation Date: 12/09/2021

Description of Use: *Off-road Vehicle Use* (on designated roads and trails in support of hunting, fishing, and research)

This interim compatibility determination serves as our commitment to allow off-road vehicle (ORV) activities on designated roads and trails in support of hunting, fishing, and research activities on lands that will be acquired by the Service. General ORV use by the public off of designated roads and trails and not in support of hunting, fishing, or research will not be allowed.

For hunting activities, the Service will work with the Florida Fish and Wildlife Conservation Commission (FWC) to evaluate a particular property, the specific resources protected on that property, and hunting activities and access to help design the hunting program for that particular property (e.g., access roads and trails suitable for ORV access where minimal impacts to wildlife and habitat are anticipated). (See the interim compatibility determination for hunting for more information about hunting on the refuge.)

ORVs could be used by non-Service scientists to conduct research on the refuge. Many areas are inaccessible to larger vehicles and researchers might be required to use ORVs as part of their scientific studies. Special use permits issued by the refuge will be required, as these contain conditions under which researchers and their use of ORVs will be required to operate to help minimize negative impacts to refuge resources. (See the interim compatibility determination for research for more information about research on the refuge.)

Availability of Resources: Operational funds to support this activity will be minimal and limited to coordinating with FWC to evaluate and designate specific sites, certain existing roads, and certain existing trails for ORV use; evaluating and issuing special use permits to researchers; and enforcing regulations prohibiting general recreational ORV use.

Anticipate Impacts of Use: A critical and objective evaluation of the potential effects that ORVs could have on the wildlife, habitat, and other public use activities is based on the most current information available and best professional judgment. Although ORVs have the potential to have impacts, the focus will be to minimize their negative effects. This is based on the impacts resulting from the projected level of use. Improperly used ORVs can have very serious and long-term consequences due to destruction of habitat and disturbance to wildlife (Webb and Wilshire 1983, Defenders of Wildlife 2002, Texas Parks and Wildlife 2011). However, based upon the use of existing roads and trails to support hunting activities, based upon special use permit conditions for researchers, and based upon the ability of the refuge manager to modify this activity as needed, the impacts from approved ORV use to support hunting, fishing, and research activities are anticipated to be minimal. (For more information regarding potential impacts associated with public use activities, please refer to the Final Environmental Assessment.)

Determination:

_____ Use is Not Compatible

__X__ Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility: ORV use could have substantial negative impacts on refuge resources. However, this activity will be limited to permitted hunters and anglers on designated roads and trails and qualified researchers/scientists/biologists.

For hunting activities, the Service will work with the FWC to designate specific sites, certain existing roads, and certain existing trails for ORV use and to monitor ORV use and impacts in order to help minimize any impacts. If impacts associated with ORV use by hunters are determined by the refuge manager to exceed acceptable levels, the refuge manager will work with FWC and the hunters to minimize these impacts (e.g., move or close certain access points, create a designated detour, and/or close a portion or all of an area to ORV use).

In addition, researchers will be permitted to only use ORVs in specific areas on the refuge where they will be conducting their studies, and only during the timeframes and under the conditions outlined in a refuge-approved protocol and special use permit. All research proposals on the refuge will be reviewed by the staff prior to issuance of a special use permit. If impacts associated with ORV use by researchers are determined by the refuge manager to exceed acceptable levels, the refuge manager will work with the researchers to minimize these impacts (e.g., alter special use permit conditions, close certain access points, and/or revoke special use permits).

Justification: Under the Improvement Act, hunting is a priority public use. Hunting is an acceptable form of wildlife-dependent recreation compatible with the purposes of the refuge. The harvest of surplus animals is one tool used to maintain wildlife populations at a level compatible with habitat. Overabundance of animals, such as hogs and deer, can have detrimental impacts to native habitats. In addition to recreational opportunities, hunting to control populations of feral hogs and deer will be beneficial to native species and habitats, and will therefore be considered compatible with the purposes of the refuge. ORV use on specific sites, certain existing roads, and certain existing trails will facilitate hunting on the refuge. Further, monitoring will help the Service and FWC understand and minimize wildlife and habitat impacts.

Scientific research conducted on the refuge will contribute to a better understanding of the resources and natural processes that occur. In some cases, these scientific studies will allow the Service to more effectively protect and manage wildlife and plant populations. Providing opportunities for these activities will contribute to fulfilling provisions of the National Wildlife Refuge System Improvement Act. For some scientific studies, ORV use will be an important tool in meeting research objectives, and with proper precautions, this mode of transportation could be utilized with minimal environmental impacts.

Mandatory 10-year Re-evaluation Date:

Description of Use: *Camping*

This interim compatibility determination serves as our commitment to allow camping activities to continue in designated areas, where they are pre-existing and owner-authorized, on lands that will be acquired by the Service.

Camping is a traditional use in this area. Camping, as considered under this interim compatibility determination, is the primitive overnight cooking and sleeping accommodations erected at designated sites that facilitate access to remote areas of the refuge that will otherwise be unavailable during priority public use activities such as hunting and fishing. Camping will only be authorized in support of other approved refuge uses and to facilitate access to remote areas. Campsites will typically be located at the terminus of a designated trail and accessible by foot, bike, or horse. Campsite use by recreational vehicle or camper trailer, or camping at trailheads is not being considered. The Service will develop an understanding of camping activities for a particular site during the acquisition process.

Camping will be incorporated into any appropriate step-down management plans developed (e.g., hunt plan or visitor services plan) and in the comprehensive conservation plan for the refuge. Such plan or plans will address a variety of elements associated with camping, including use(s) supported, number and location(s) of sites, capacity targets, periods of use, and impacts.

Availability of Resources: Annual refuge operation and maintenance funds provided for the Pelican Island NWR Sub-complex of the Merritt Island NWR Complex will be used to support camping as an activity which supports the refuge priority public use program. A refuge staff position may be allocated to maintenance of the potential campsite and may be assisted by refuge volunteers or other trail user groups. Further, refuge staff will be required to annually assess camping activities, including any public safety issues.

Anticipated Impacts of the Use: Some impacts, such as littering, vegetation trampling, and wildlife disturbance, can be expected, but these are anticipated to be localized and minor. The potential for accidental wildfires exists. (For more information regarding potential impacts associated with public use activities, please refer to the Final Environmental Assessment.)

Determination (check one below):

_____ Use is Not Compatible

__X__ Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility: Camping will only be authorized to occur in association with an approved use of the refuge. Camping as a temporary or permanent residence will not be allowed. No open fires will be permitted. All litter/garbage will be required to be carried-off by campers. Camping will only be permitted in designated sites. Certain areas of the refuge may be restricted seasonally to protect breeding or nesting areas or to protect habitat. Camping will occur as a component of other priority public use programs to allow access to remote areas. To help ensure public safety, the refuge will likely require some kind of registration for campers (e.g., self registration at a trailhead or camping registration included in a hunt permit) with a limited length of stay (e.g., no more than 5 days within a 14-day period). Further, the Service may also consider camping fees to support this activity. If unacceptable impacts result from this activity, the refuge will modify, move, or eliminate the use.

Justification: Primitive camping in designated camp sites will be a low-impact and low-cost activity and will occur as a component of refuge priority public use programs (e.g., hunting), which will be determined to be compatible with the purposes of the refuge.

Mandatory 10-year Re-evaluation Date: 12/09/2021

Description of Use: *Hiking (including backpacking, jogging, and walking)*

This interim compatibility determination serves as our commitment to allow hiking activities to continue on designated trails, where they are pre-existing and owner-authorized, on lands that will be acquired by the Service.

Hiking is a traditional use in this area. Day-use by hikers, backpackers, joggers, and hikers are considered under this compatibility determination. Hiking will only be authorized in support of other approved refuge uses. Foot traffic trails will provide the opportunity for participants to become surrounded by the natural environment, instilling an appreciation for plants, animals, and their habitats. Portions of the Florida National Scenic Trail are found within the project area. The Service will develop an understanding of hiking activities for a particular site during the acquisition process.

Availability of Resources: Many existing roads and trails will be maintained for refuge purposes and therefore will not constitute additional maintenance costs to support hiking. The development of associated maps, signs, and brochures will be minor costs associated with hiking that will be supported by the Pelican Island NWR Sub-complex of the Merritt Island NWR Complex. Designated trails may be maintained by a combination of volunteers and refuge staff.

Anticipated Impacts of the Use: Impacts from these activities could include littering, vegetation trampling, and wildlife disturbance. (For more information regarding potential impacts associated with public use activities, please refer to the Final Environmental Assessment.)

Determination (check one below):

_____ Use is Not Compatible

__X__ Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility: Hiking, jogging, and walking will only be authorized in support of other approved refuge uses. Hiking, jogging, and walking will be restricted to daylight hours. Certain areas of the refuge may be restricted seasonally for breeding or nesting seasons or to protect habitat. Hiking, jogging, and walking will be limited to existing, designated roads and trails. If evidence of unacceptable impacts begins to appear, it may be necessary to change the activity, move the activity, or eliminate the activity.

Justification: These activities are low-impact and considered to be wildlife-dependent. Hiking, jogging, and walking activities will be in support of priority public use activities and programs (e.g., wildlife observation), which will be determined to be compatible with purposes of the refuge.

Mandatory 10-year Re-evaluation Date: 12/09/2026

Description of Use: *Horseback Riding*

This interim compatibility determination serves as our commitment to allow horseback riding activities to continue on designated trails, where they are pre-existing and owner-authorized, on lands that will be acquired by the Service.

Horseback riding is a traditional use in this landscape. Horseback riding will only be authorized in support of other approved refuge uses, including camping. Horseback riding will occur only on designated refuge roads and trails. Use will be expected to be light and sporadic, occurring mostly during cooler weather (November through April), particularly on weekends. Horseback riding is currently allowed on public properties near the refuge. The Service will develop an understanding of horseback riding activities for a particular site during the acquisition process.

Availability of Resources: Many existing roads and trails will be maintained for refuge purposes and therefore will not constitute additional maintenance costs to support horseback riding. The development of associated maps, signs, and brochures will be minor costs associated with horseback riding that will be supported by the Pelican Island NWR Sub-complex of the Merritt Island NWR Complex. Designated trails may be maintained by a combination of volunteers and refuge staff.

Anticipated Impacts of Use: The Service evaluated the potential effects of horseback riding on wildlife, habitat, human health, cultural resources, and other refuge resources and uses. Although wildlife disturbance from horseback riding is not well-documented, some studies suggest that many wildlife species are habituated to livestock and that horseback wildlife observers can approach wildlife at closer distances than by other forms of travel. Any form of approach is expected to cause some disturbance, which will vary according to the species affected and the type, level, frequency, and duration of disturbance, as well as the time of day or year that it occurs. Horseback riding has both direct and indirect effects on habitat. Trampling causes mortality of plant (and animal) species by crushing them. Indirect effects result when soil is compacted and plants cannot re-establish. Grazing by horses can reduce vegetation. Debate exists within the literature over whether horse hair or feces can spread nonnative weed seed. Any trail or road can be a conduit for the introduction of nonnative plants, since exposed soil and abundant sunlight provide favorable conditions for establishment of these species.

Compacting and loosening of soils occur from stock riding, more so in moist or wet soils. Therefore, trails should be established in well-drained, upland sites. Roads and trails for public access affect hydrologic drainage patterns. Horseback riding will continue on designated roads and trails. While it is possible for horses to transmit parasitic diseases, particularly *Cryptosporidium parvum* and *Giardia duodenalis*, to humans via the water supply, these diseases are usually spread by pregnant mares and foals under six months old. Horse manure is not harmful to human health, although it can cause conflicts with other trail users, since it can be odorous, unaesthetic, and a nuisance. While there can be user group conflicts or safety issues resulting from hikers, cyclists, and horseback riders using the same roads and levees, these are not anticipated effects due to the current levels of use. Horseback travel on the designated roads and trails is considered safe under current conditions and level of use. Horseback riding will be permitted only on designated roads and trails and prohibited on established, interpretive hiking trails. (For more information regarding potential impacts associated with public use activities, please refer to the Final Environmental Assessment.)

Determination (check one below):

_____ Use is Not Compatible

__X__ Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility: Horseback riding will only be authorized in support of other approved refuge uses. Horseback travel to facilitate priority public use will only be compatible on designated roads and trails. Horses will not be allowed on interpretive foot trails. Horseback riding will only be allowed between sunrise and sunset (which will be normal refuge hours). Group size will be limited to a maximum of eight riders who travel no more than two abreast. Horseback riding will be prohibited during deer gun hunting season in all refuge hunt areas. All roads and trails will be monitored annually to determine if they meet the compatibility criteria. Monitoring will be designed to assess the long-term effects of horse riding on refuge resources, visitor use, and route maintenance needs. Law enforcement patrols will be conducted throughout the year. The patrols will promote compliance with refuge regulations, monitor public use patterns and public safety, and document visitor interactions. Patrols will include recording visitor numbers, vehicle numbers, visitor activities, and activity locations to document the current and future levels of refuge use. No corralling, tethering, or hitching of horses along trails will be allowed. Other areas of the refuge may be closed to the public seasonally to protect certain species or habitat. Riders will be able to gain entrance to the refuge road system only at designated access points. If evidence of unacceptable impacts begins to appear, it may be necessary to change the activity, move the activity, or eliminate the activity.

Justification: While not listed as a primary, wildlife-dependent recreational use under the Improvement Act, as amended, horseback riding is believed to be a compatible public use under the stipulations outlined in this interim compatibility determination for the refuge. Primary reasons for this determination include the following: wildlife observation can be an element of horseback riding; horseback riding will allow the refuge to reach a target audience that it will not otherwise reach; horseback riders will be potential partners and a potential source of support for the refuge; and impacts associated with horseback riding are not believed to exceed impacts already caused by other public use activities. Horseback riding activities will be in support of priority public use activities and programs, which are determined to be compatible with refuge purposes.

Mandatory 10-year Re-evaluation Date: 12/09/2021

Description of Use: *Bicycling*

This interim compatibility determination serves as our commitment to allow bicycling activities to continue on designated trails, where they are pre-existing and owner-authorized, on lands that will be acquired by the Service.

While not one of the six priority wildlife-dependent recreational uses listed in the National Wildlife Refuge System Improvement Act, bicycling is a mode of transportation currently used to facilitate wildlife observation. Bike riding will occur only on designated roads and trails. This use occurs all year. Bicycling will only be authorized in support of other approved refuge uses. Mountain biking (e.g., off-trail with an aggressive riding style) will not be allowed. The Service will develop an understanding of bicycling activities for a particular site during the acquisition process.

Availability of Resources: Many existing roads and trails will be maintained for refuge purposes and therefore will not constitute additional maintenance costs to support bicycling. The development of associated maps, signs, and brochures will be minor costs associated with bicycling that will be supported by the Pelican Island NWR Sub-complex of the Merritt Island NWR Complex. Designated trails may be maintained by a combination of volunteers and refuge staff.

Anticipated Impacts of the Use: Minor impacts may occur in association with bicycling, such as littering and vegetation and wildlife disturbance. Refuge law enforcement officers will patrol regularly and refuge staff and/or volunteers will regularly pick up litter. This is a critical and objective evaluation of the potential effects that bicycles could have on the wildlife, habitat, and other public use activities and is based on available information and best professional judgment. Although bicycling has the potential to have impacts, the focus is to minimize those impacts to below a certain threshold. This is based on the impacts at the existing and projected level of use.

Bicycling, as a mode of transportation to facilitate participation in other priority public uses such as wildlife observation, is an appropriate form of transportation to view wildlife. Other forms of bicycle riding such as mountain biking are not wildlife-dependent and are not considered appropriate under this compatibility determination. All bicycling will be allowed only on designated roads and trails.

Wildlife disturbance relative to bicycle riding has been poorly studied with most references using other activities such as walking, hiking, and operating vehicles and their impacts on wildlife; therefore, bicycle impacts are inferred (unless noted). In general, activities that occur outside of vehicles (including bicycling) tend to increase the disturbance potential for most wildlife species (Klein 1993, Gabrielson and Smith 1995; Burger 1981; Pease et al. 2005). Out-of-vehicle activities along wildlife observation trails and pullouts along the trails have the greatest potential for disturbing wildlife species.

A study conducted at Back Bay National Wildlife Refuge indicated that jogging and bike riding in an open habitat, such as marshes where the activity is highly visible to wading birds, shorebirds, and waterfowl, are disruptive (Laskowski 1999). As a result, marsh birds in open areas flee from joggers and bike riders (Laskowski 1999). Wildlife may receive different cues from different modes of transportation, since wildlife do not flee as readily from cars, perhaps because the person is hidden in the vehicle and not perceived as a threat (Klein 1993). A 2005 study at Back Bay National Wildlife Refuge (Pease et al. 2005) compared five different human activities (i.e., motorized tram, slow-moving truck, fast-moving truck, bicyclist, and pedestrian) in relation to waterfowl disturbance. The study found that people walking and biking disturbed waterfowl more than vehicles. Based on the current and anticipated levels of use, bicycling is not considered to have negative long-term impacts to wildlife or refuge habitats. (For more information regarding potential impacts associated with public use activities, please refer to the Final Environmental Assessment.)

Determination (check one below):

_____ Use is Not Compatible

__X__ Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility: Bicycling will only be authorized in support of other approved refuge uses. All forms of wildlife observation should have minimal wildlife and habitat impacts. However, bicycling can cause wildlife impacts in open wetland areas, can increase wildlife impacts, and can disrupt other individuals viewing wildlife. Bicycles will not be permitted on established interpretive trails. Evaluation of bike riding on designated roads and trails will be conducted annually to assess if objectives are being met, if habitat impacts are within a tolerable range, and if wildlife populations are not being adversely affected. If evidence of unacceptable impacts begins to appear, it may be necessary to change the activity, move the activity, or eliminate the activity.

Justification: Bicycling to observe wildlife facilitates priority public uses of the Refuge System. Providing opportunities for these activities contributes toward fulfilling provisions of the Improvement Act. Wildlife observation from bicycles in areas where there are few impacts to

wildlife will provide an appropriate mode of transportation for promoting increased awareness, understanding, and support of refuge resources and programs. At the anticipated and current levels of visitation, bicycling does not seem to conflict with the national policy to maintain the biological diversity, integrity, and environmental health of the refuge. Bicycling activities will be in support of priority public use activities and programs (e.g., wildlife observation), which will be determined to be compatible with refuge purposes.

Mandatory 10-year Re-evaluation Date: 12/09/2021

Description of Use: *Grazing*

This interim acquisition compatibility determination serves as our commitment to consider using grazing activities as a management tool on designated tracts, where they are pre-existing and owner-authorized, on lands that will be acquired by the Service.

Grazing is a traditional use in this area. Grazing under the terms of this compatibility determination is to allow the limited and controlled grazing by domestic livestock, chiefly cattle, but potentially including other domestic livestock on designated tracts to improve the vigor and health of forestlands, grasslands, and other appropriate habitats. Further, grazing can be used as a management tool to further refuge management goals and objectives, such as habitat restoration and maintenance provided through prescribed fire, mechanical control, and nonnative plant control activities. Controlled grazing is recognized as a valuable tool to remove standing vegetation, reduce vegetation litter, and suppress undesired woody vegetation.

Frequency, duration, and timing of livestock on any particular unit will be evaluated and agreed upon by the Service and the grazing operation on a case-by-case basis. Most commonly, we will use high-intensity, short-duration grazing rotations and then require livestock removal. We will target two typical seasons of use: (1) Wet season (May through October), which will be designed to reduce the vigor of nonnative species and increase the vigor of native species, while (2) dry season (November through April) may be used to stimulate native vegetation response after nesting season and will be designed to further reduce nonnative species. Fencing may be and control of livestock will be the responsibility of the cooperating private party under a refuge special use permit. Frequency of cattle on any unit will be based on site-specific evaluation of the unit being managed. A typical scenario may include a unit being grazed for two consecutive years with grazing eliminated from the unit for several years before resuming grazing operations.

Market rate grazing fees will be required of permittees. Market grazing fees will include typical market deductions for unusual fencing requirements, required cattle movement, or other factors limiting economic return for the permittees. Market rates [per animal unit month (AUM)] will be determined on a case-by-case basis and will be determined annually in consultation with the U.S. Department of Agriculture on prevailing local grazing rates. One AUM is the amount of forage consumed by a cow/calf pair in a 30-day grazing period. Thus the grazing fee for each cow/calf pair will be determined for each 30 days of grazing.

Grazing is not considered a priority public use as identified in the Improvement Act. As an economic use of Refuge System lands, a compatibility determination for grazing will be mandatory.

Availability of Resources: Developing grazing agreements and monitoring compliance and biological effects requires some Service resources. Most grazing costs (e.g., fencing and monitoring herd health) will be assumed by the permittee. Some alternative resource management will be required if we were not to use grazing as a management tool. Typically, these other tools will be prescribed burning and mechanical control with light to heavy equipment, including using mowers and Gyrotrac. These costs will be assumed by the agency. Prescribed burning is an effective management tool, but staff limitations and unit logistics may prevent us from burning as many acres as desirable each year. Plus, there is likely an ecological benefit to rotating management techniques and seasons over time so that a given unit may be grazed one year and burned another. Annual refuge operation and maintenance funds provided for the Pelican Island NWR Sub-complex of the Merritt Island NWR Complex will be used to support grazing as an activity which supports refuge management goals and objectives.

Anticipated Impacts of the Use: Grazing by domestic livestock has severe short-term effects on plant communities and ecosystems. Many of these effects are desirable and are designed to maintain and improve healthy natural area communities. Some impacts, such as vegetation trampling and wildlife disturbance, can be expected, but these are anticipated to be localized and minor. Some of these effects include removing standing vegetation, trampling of other vegetation, and reducing populations of pioneering, undesirable woody plants. Other effects of grazing are more harmful but generally short-lived. Grazing can cause direct loss of habitat and species in cases where extended frequencies, increased density of livestock on the unit, and long rotations occur. However, controlled grazing is typically of short duration where frequency will be set by natural resource conditions and management goals, thus long-term, chronic impacts expressed from livestock overgrazing are not anticipated.

Grazing livestock can create minor direct disturbance to wildlife, but any harm should be negligible. Grazing at any time of the year could create an aesthetic issue of concern for some people who enjoy using the refuge in a natural state; seeing public lands being grazed by domestic livestock may reduce the appeal of the visit. There is a slight potential for conflict between members of the public and livestock or the permittee, particularly during the dry or winter season when most units will be expected to receive their heaviest use. All permittees will be advised that the unit may be open to the public for appropriate and compatible visitor uses that may include hunting and other forms of wildlife-dependent recreation. The public will be informed that appropriate and compatible visitor uses may be precluded during periods when cattle are being grazed in a visitor use area. There will be a very slight risk of injury to the public caused by livestock. Most visitors who are uncomfortable using property containing livestock are likely to select another unit or another time of year for their visit.

Determination (check one below):

_____ Use is Not Compatible

_X_ Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility: Grazing will be allowed only as a tool on designated tracts to further refuge management goals and objectives. Stipulations in the required refuge special use permit will likely include the listed items and could include additional conditions under which any allowed grazing will be required to operate.

- Grazing frequency, duration, and timing will be evaluated on a case-by-case basis and subject to the goals, objectives, and strategies of the refuge and the particular refuge unit. Unit-specific compatibility determinations may be necessary to fulfill the vision, purposes, goals, objectives, and strategies of the refuge and unit.
- All fencing costs will be borne by the permittee.
- No insecticides, including insecticidal dusting bags, will be used.
- No supplemental feeding will be allowed without specific authorization of the refuge manager.
- Control and confinement of the livestock will be the responsibility of the permittee.

If unacceptable impacts were to result from this activity the refuge would modify, move, or eliminate the use.

Justification: Grazing is another tool that the refuge could employ to meet management goals and objectives and thus will be compatible with the purposes of the refuge. Controlled grazing by domestic livestock will not materially interfere with or detract from the purposes for which the refuge was established. Limited livestock grazing creates temporary disturbances to vegetation and many of these disturbances are desirable for management. Grazing produces an undesirable but short-term impact to site aesthetics. Controlled grazing will be an alternative management tool that could be used to replace or complement prescribed burning, mechanical control, and application of herbicides to control nuisance plant species. Without occasional disturbance caused by burning, mechanical control, herbicide control, or grazing, natural area health will decline, as will an area's potential and suitability for wildlife production.

Mandatory 10-year Re-evaluation Date: 12/09/2021

Public Review Comment: Preliminary scoping for this project began on August 19, 2010 with a coordination meeting with FWC, which was followed on August 26, 2010, by an America's Great Outdoors event in Kenansville, Florida. This was followed by preliminary informational presentations to the Arthur R. Marshall Foundation, Pelican Island Audubon Society, National Wildlife Refuge Association's Beyond the Boundaries, Trust for Public Land, Summerplace Garden Club, Osceola County Natural Resource Department, Fish and Wildlife Conservation Commission (FWC), South Florida Water Management District Water Resources Advisory Commission, area ranchers, Osceola County Board of County Commissioners, and Florida Agriculture Commissioner Putnam. A preliminary meeting with the governmental partners was held on November 10, 2010 in Altamonte Springs, Florida, including the Service, NRCS of the USDA, FWC, FDEP, FFS, and SFWMD. The Nature Conservancy and the National Wildlife Refuge Association also attended this November meeting, acting as consultants for the Service.

Secretary of Interior Ken Salazar announced the project at the Everglades Coalition meeting on January 7, 2011. A White House blog appeared the same day to announce the project. The Service created a webpage for the project and posted it on January 10, 2011 (http://www.fws.gov/southeast/greatereverglades). This website has been frequently updated throughout the planning process to help provide information to interested parties.

A notice of intent appeared in the *Federal Register* on January 12, 2011 (76 FR 2132), announcing the intent of the Service to develop a Land Protection Plan and associated NEPA documents for the proposed Everglades Headwaters NWR and Conservation Area in the Kissimmee Valley area and opening the public scoping period for the proposal. Public scoping comments were requested to be received by February 28, 2011. By mid-February, this deadline was extended to March 31, 2011.

During public scoping, information about the project was sent to Florida national wildlife refuges' friends groups (1/12/2011); a press release was sent out to local media to announce the public scoping meetings (1/19/2011); public notice was e-mailed to over 500 individuals, organizations, and government agency officials on the mailing list for the proposal (1/19-20/2011); a press release was sent to about 2,400 media outlets in Florida to announce the public scoping meetings (1/19-20/2011); over 650 printed flyers were mailed to individuals, organizations, and government agency officials on the mailing list for the proposal (1/20-21/2011); the Lake Wales Ridge Ecosystem Working Group forwarded a copy of the press release to its members (1/20-21/2011); a follow-up press release was sent to about 2,400 media outlets in Florida to announce the remaining public scoping meetings (2/7/2011); notice of the extension of the public scoping comment period was sent to over 880 e-mail addresses and 500 mailing addresses of interested individuals, organizations, and government agency officials on the mailing list for the proposal (2/17/2011); and a follow-up press release was sent to about 2,400 media outlets in Florida to announce the public scoping comment period extension (2/17/2011). Informational presentations and discussions about the project also continued, including to the Lake Wales Ridge Ecosystem Working Group (1/10/2011), Archie Carr Working Group (1/13/2011), Osceola County (2/11/2011), Everglades Day (2/12/2011), River Ranch Property Owners Association and local airboat groups (2/18/2011), Okeechobee Economic Council (3/2/2011), South Florida Water Management District Water Resources Advisory Council (3/3/2011), Osceola County Cattleman's Association (3/8/2011), University of Florida/Institute of Food and Agricultural Sciences Working Across Boundaries Workshop (3/23/2011), Association of County Commissioners (3/25/2011), Conservation Blueprint Pilot Project (3/29/2011), Florida Today Editorial Board (4/5/2011), Palm Beach Post Editorial Board (4/7/2011), Archbold Biological Station (4/14/2011), Seminole Tribe of Florida (5/13/2011), Martin County Conservation Alliance (5/18/2011), National Wildlife Refuge Association Board of Directors (5/20/2011), Florida Cattleman's Association (6/1/2011), Environmental Committee of the Florida Cattleman's Association (6/21/2011), Governor's Cabinet (6/22/2011), Florida Department of Environmental Protection and Florida Department of Agriculture and Consumer Services (6/22/2011), Marshall Foundation (7/1/2011), Natural Resources Conservation Service (7/18/2011), Osceola County (7/19/2011), United Waterfowlers (8/25/2011), Ducks Unlimited (8/26/2011), and Environmental Committee of the Florida Cattleman's Association (9/1/2011).

Articles and information about the project appeared in print, online, and radio media during the public scoping period, including the Osceola News Gazette (1/5/2011,1/6/2011), Sun Sentinel (1/7/2011), Miami Herald (1/7/2011), Reuters (1/7/2011), Environmental News Service (1/7/2011), SoutheastAgnet.com (1/8/2011), GardenNews.biz (1/9/2011), SustainableBusiness.com (1/10/2011), Habi-Chat (January 2011), Ft. Myers News Press (1/18/2011), National Public Radio (1/19/2011, 3/7/2011, 3/17/2011), WCTV.com Tallahassee Eyewitness News Channel 6 (1/19/2011), Okeechobee News (1/26/2011, 2/20/2011), Highlands Today (1/29/2011, 2/6/2011), Palm Beach Post (1/29/2011, 1/30/2011), Vero Beach Press Journal (2/5/2011, 2/7/2011, 2/10/2011), Sebring News Sun (2/6/2011, 2/20/2011), WPTV.com West Palm Beach News Channel 5 (2/11/2011), St.

Petersburg Times (2/19/2011, 3/13/2011), Sebring News Sun (2/20/2011), Florida Today (2/23/2011), Gator Tales (Spring 2011), and TCPalm.com (6/23/2011).

Public scoping comments were submitted verbally and in writing at public scoping meetings and by mail, fax, and email. Four public scoping meetings were conducted in and around the Study Area: January 26, 2011 at the Kissimmee Civic Center, Kissimmee, Florida, with about 200 attendees; February 4, 2011 at the Sebring Civic Center, Sebring, Florida, with about 325 attendees; February 9, 2011 at Okeechobee High School, Okeechobee, Florida, with about 665 attendees; and February 10, 2011 at the Freshman Learning Center of Vero Beach High School, Vero Beach, Florida, with about 580 attendees. Both verbal and written comments were submitted at the public scoping meetings. Further, over 38,000 written comments were submitted to the Service during the public scoping period in person and by mail, fax, and e-mail.

During public scoping, the Service met with the Seminole Tribe of Florida during this planning process to develop an understanding of its concerns, including those related to cultural resources. The Seminole Tribe of Florida administers a robust tribal government, operates various tourist and other enterprises, and supports the local economy and employment base. The Study Area for the proposed Everglades Headwaters NWR and Conservation Area encompasses numerous sites of interest to the Seminole Tribe of Florida. Sites that might be encountered within the proposed 50,000-acre refuge include green corn dance sites, villages, camps, cemeteries, and historic landscapes, such as the Okeechobee Battlefield. The Seminole Tribe of Florida also expressed interest in assuring that the project would not impact any preexisting tribal water rights. Further, the Brighton Reservation of the Seminole Tribe of Florida is located in Glades County, adjacent to the Study Area. The Tribal Historic Preservation Officer for the Muscogee (Creek) Nation requested copies of the Draft LPP and the Draft EA when available for review. And the Miccosukee Tribe expressed interest in the project, especially in relation to burial sites and tribal cattle grazing lands in Highlands County.

In advance of the release of the Draft LPP and Draft EA for public review and comment, the Service e-mailed and mailed postcards to nearly 1,400 interested parties to announce the upcoming availability of the documents for public review and comment and to allow interested parties to request CD and/or paper copies of the documents. Following release of the Draft LPP and Draft EA, the Service held a public review and comment period during which public comments were requested on the documents. A notice of availability was published in the Reading Room of the *Federal Register* on September 7, 2011 and on September 8, 2011 in the *Federal Register* (76 FR 55699) to help announce the public review and comment period for the proposed Everglades Headwaters NWR and Conservation Area. Information was also posted on the project's website (http://www.fws.gov/southeast/evergladesheadwaters), notices were mailed and e-mailed to the mailing list, and articles were published in various media. Paper and/or CD copies of the Draft LPP and Draft EA were mailed to requesting parties. The documents were also posted on the project's website. A notice of comment extension was posted in the Reading Room of the *Federal Register* at 8:45 am on October 24, 2011 and published in the *Federal Register* (76 FR 66321) on October 26, 2011 to extend the comment period to November 25, 2011. Press releases were sent to over 2,100 media outlets in Florida on 9/7/2011, 9/20/2011, and 10/24/2011.

Beyond Federal Register notices and web postings by the Service during the public review and comment period, public outreach activities included two open house and public hearing events, mailings and e-mailings to the mailing list, ongoing informational presentations, and media coverage. The Service held two public meetings: September 24, 2011 at the Theatre for the Performing Arts at the South Florida Community College in Avon Park, FL (with 68 attendees) and October 1, 2011 at Exhibit Hall A at Osceola Heritage Park in Kissimmee, FL (with 54

attendees). The first hour was an open house event that allowed attendees the opportunity to ask questions and talk with Service staff about the proposal in an informal atmosphere. The open house portion was followed by a public hearing where the Service presented the proposal and formal public comments were recorded. The Service also mailed out notices and requested copies of the documents before September 8, 2011 and e-mailed notices to the mailing list on September 8, 2011 to nearly 1,500 interested parties. On October 24, 2011 the Service also mailed and e-mailed nearly 1,500 notices of the extension of the comment deadline from October 24, 2011 to November 25, 2011. The Service also gave 13 informational presentations to requesting groups during the public review and comment period, including to: Highlands County Board of County Commissioners (9/13/2011), South Florida Water Management District Water Resources Advisory Council (9/19/2011), Polk County Board of County Commissioners (9/27/2011), Sportsman's Association leadership group (10/5/2011), Osceola County Board of County Commissioners (10/10/2011), Peninsular Florida Landscape Conservation Cooperative (10/12/2011), Central Florida Regional Planning Council (10/12/2011), Okeechobee Board of County Commissioners (10/13/2011), Archie Carr Working Group (10/13/2011), Cooperative Alliance for Refuge Enhancement (10/25-26/2011), FWC (11/2/2011) University of Central Florida staff (11/14/2011), and Cooperative Conservation Blueprint (11/15/2011). During the public review and comment period, articles appeared in and on a variety of print, online, and radio media: SoutheastAgNET.com (9/7/2011, 9/20/2011, 9/27/2011), UPI.com (9/7/2011), AudubonofFloridaNews.org (9/7/2011), CFNews13.com (9/7/2011) and on Cable Central Florida News 13 (9/7-8/2011), ABC News Channel 9 (9/7/2011), NBC News Channel 2 (9/7/2011), St. Petersburg Times (9/8/2011), Highlands Today (9/8/2011), Miami Herald (9/8/2011, 11/3/2011, 11/7/2011), Lakeland Ledger (9/8/2011), News Chief (9/8/2011), Orlando Sentinel (9/5/2011, 9/7/2011), Tampa Bay Water Atlas (tampabay.wateratlas.usf.edu) (9/7/2011), National Wildlife Refuge Association (refugeassociation.org, 9/7/2011), National Public Radio (9/12/2011, 10/4/2011, 10/5/2011, 11/8/2011), FLFFC.org (Florida Freshwater Fishing Coalition, 9/9/2011), OrvisNews.com (9/12/2011), Tampa Tribune (9/24/2011), News Sun (9/30/2011, 10/1/2011), Marsh Rider: The Voice of Airboating (October/November edition), News Press Tribune (TCPalm.com, 10/12/2011), Treasure Coast Newspapers (10/25/2011), Politico.com (11/1/2011), NaplesNews.com (11/3/2011), Waterworld.com (11/3/2011), Sarasota.WaterAtlas.org (11/3/2011), Sun-Sentinel.com (11/3/2011, 11/10/2011, 11/19/2011), and SummitCountyVoice.com (11/21/2011).

The Service received over 2,300 comments during the public review and comment period (see Appendix J of the Final EA for a summary of the substantive comments and the Service's responses). During the public review and comment period, the Seminole Tribe expressed concerns regarding: water rights, cultural resources, management plans, grazing rights, and vegetation and fire management/green corn dance. The Miccosukee Tribe expressed concerns regarding future refuge management activities inundating (e.g., through major hydrological projects) cultural resource sites, especially burial sites. The Service will continue to consult with both the Seminole Tribe of Florida and the Miccosukee Tribe of Indians of Florida regarding concerns related to the refuge and conservation area.

NEPA Compliance for Refuge Uses Descriptions:

_____ Categorical Exclusion without Environmental Action Statement
_____ Categorical Exclusion and Environmental Action Statement
__X__ Environmental Assessment and Finding of No Significant Impact
_____ Environmental Impact Statement and Record of Decision

Signatures of Compatibility Determinations:

Refuge Manager: _____ 12/9/2011
Signature/Date

Project Leader: _____ 12/9/2011
Signature/Date

Refuge Supervisor: _____ 12/9/11
Signature/Date

Regional Compatibility Coordinator: _____ 12/9/11
Signature/Date

Regional Chief, National Wildlife Refuge System, Southeast Region: _____ 12-9-11
Signature/Date

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Appendix C. Interim Recreation Act Funding Analysis

Refuge Name: Everglades Headwaters National Wildlife Refuge and Conservation Area

Date Established: January 18, 2012

Purposes of the Refuge:

"... conservation, management, and ... restoration of the fish, wildlife, and plant resources and their habitats ... for the benefit of present and future generations of Americans..." 16 U.S.C. 668dd(a)(2) (National Wildlife Refuge System Administration Act)

"…to conserve (A) fish or wildlife which are listed as endangered species or threatened species…or (B) plants…" 16 U.S.C. 1534 (Endangered Species Act of 1973)

"…the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions ..." 16 U.S.C. 3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986)

"…for use as an inviolate sanctuary, or for any other management purpose, for migratory birds…." 16 U.S.C. 715d (Migratory Bird Conservation Act)

"...for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude..." 16 U.S.C. 742f(b)(1) "…for the development, advancement, management, conservation, and protection of fish and wildlife resources...." 16 U.S.C. 742f(a)(4), (Secretarial powers to implement laws related to fish and wildlife) (Fish and Wildlife Act of 1956)

"…suitable for— (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species ..." 16 U.S.C. 460k-1 "... the Secretary ... may accept and use ... real ... property. Such acceptance may be accomplished under the terms and conditions of restrictive covenants imposed by donors ..." 16 U.S.C. 460k-2 [Refuge Recreation Act (16 U.S.C. 460k-460k-4), as amended]

Recreational Use(s) Evaluated: (1) Recreational hunting of resident game (e.g., deer, turkey, and small game) and migratory birds (i.e., waterfowl) in accordance with federal and State of Florida regulations, (2) recreational fishing of freshwater fish species (e.g., largemouth bass, bream, catfish, and crappie) in accordance with State of Florida regulations, (3) environmental education and interpretation, (4) wildlife observation and photography, (5) research, (6) camping (as component of priority public uses), (7) hiking (as component of priority public uses), (8) horseback riding (as component of priority public uses), and (9) bicycling (as component of priority public uses).

Funding Required to Administer and Manage the Recreational Use(s): The Service will use existing staff from nearby refuges such as the Merritt Island and Pelican Island NWR Complexes. Funding to support the Everglades Headwaters NWR and Conservation Area will be made available to implement initial protection activities, hunt implementation, data collection, and non-consumptive uses. The Service will also cooperate with FWC to support initial public use activities on the refuge, including the provision of law enforcement support. The Service will continue discussions with FWC regarding opportunities for state wildlife management area designation(s) and management, co-management, and joint activities.

Interim Recreation Act Funding Analysis Signatures:

Based on a review of the refuge budget allocated for recreational use management, I certify that funding is adequate to ensure compatibility and to administer and manage the recreational use(s).

Refuge Manager: _____ 12/9/2011
Signature/Date

Project Leader: _____ 12/9/2011
Signature/Date

Refuge Supervisor: _____ 12/9/11
Signature/Date

Regional Chief, National Wildlife Refuge System, Southeast Region: _____ 12-9-11
Signature/Date

Appendix D. References

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