

SECTION B. DRAFT ENVIRONMENTAL ASSESSMENT

I. Background

INTRODUCTION

This Environmental Assessment for the proposed Comprehensive Conservation Plan (CCP) for Lake Ophelia National Wildlife Refuge (Refuge or Lake Ophelia NWR) has been prepared in compliance with the National Environmental Policy Act. It discusses the purpose and need for the Comprehensive Conservation Plan for the Refuge, which is located in Avoyelles Parish, Louisiana (Figure 1-1). It also analyzes the impacts that could be expected from each of the management proposals outlined in the plan. This analysis assists the Fish and Wildlife Service (the Service) in determining if it will need to prepare an Environmental Impact Statement or a Finding of No Significant Impact for the plan.

The Fish and Wildlife Service is the nation's primary conservation agency concerned with the protection and long-term management of fish and wildlife resources. The Service administers a system consisting of more than 540 National Wildlife Refuges, much of which is primarily for the protection of migratory bird populations and federally listed threatened and endangered fish, wildlife, and plants. Of particular interest in Louisiana is the decline of the North American migratory bird resource and sub-populations of the Louisiana black bear, both of which have been affected by significant losses of bottomland hardwood forest. As a result, the Service is emphasizing the recovery of these species in its management plans for Lake Ophelia National Wildlife Refuge.

PURPOSE AND NEED FOR THE ACTION

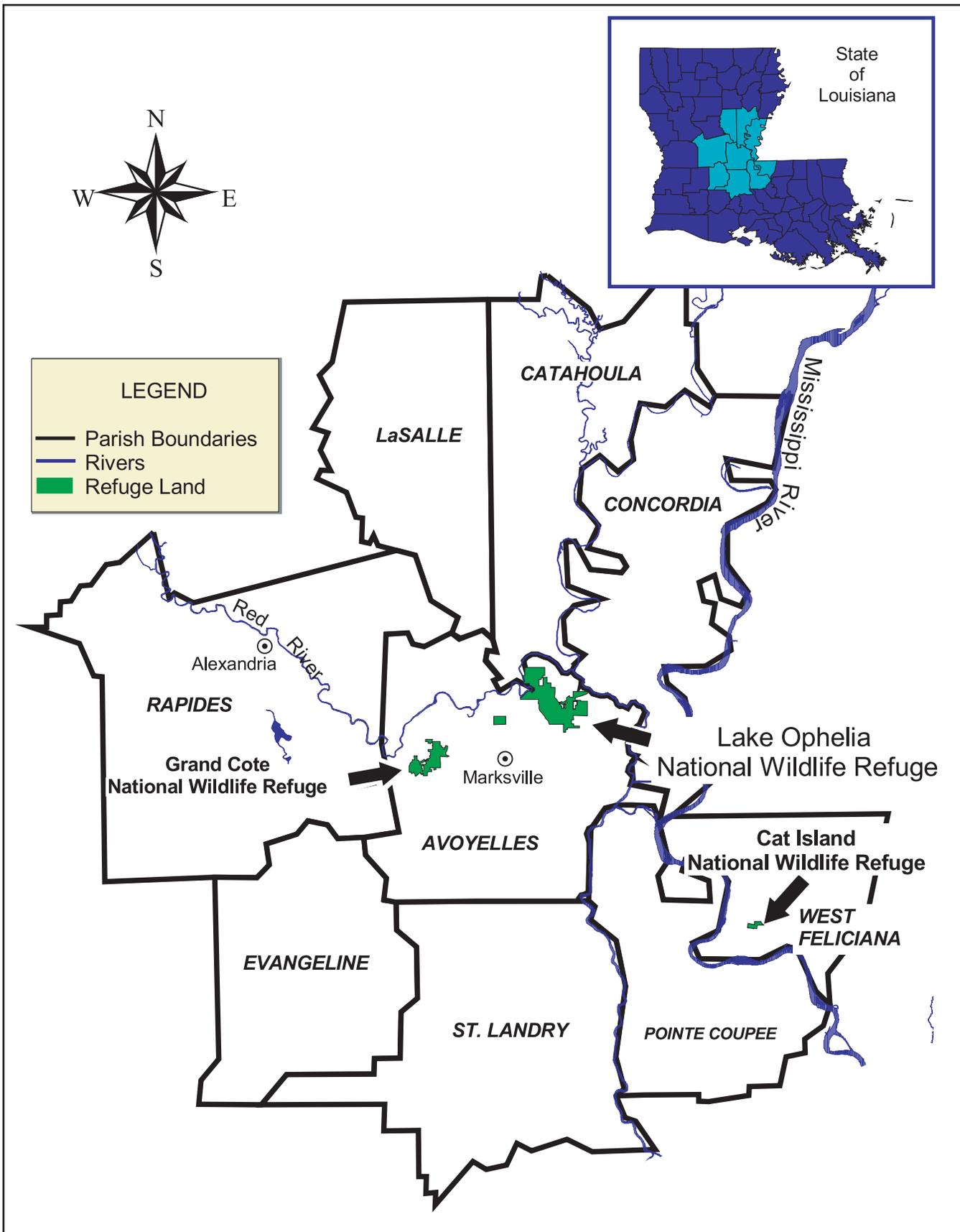
The purpose of the CCP is to establish and implement a set of management directions for Lake Ophelia National Wildlife Refuge for the next 15 years.

The environmental assessment for the plan is needed in order to determine and evaluate a range of reasonable management alternatives for Lake Ophelia NWR. Each alternative was generated with the potential to be fully developed into a final Comprehensive Conservation Plan. The environmental assessment also predicts and evaluates the biological, physical, and socioeconomic effects of implementing each alternative. From this range of alternatives, the Fish and Wildlife Service's proposed management action is then identified.

In accordance with the guidelines of the National Environmental Policy Act (NEPA), the Service has identified a number of issues, concerns, and needs through discussions with the public, agency managers, and professionals. From these issues and concerns the Service's planning team identified a range of four alternatives, evaluated the possible consequences of implementing each, and selected Alternative 2 as the proposed management action. In the opinion of the Service and the planning team, Alternative 2 is the best approach to guide the Refuge's future management direction.

There is no current plan that identifies priorities and ensures consistent and integrated management for the Refuge, thus the need for this environmental assessment. The National Wildlife Refuge System Improvement Act of 1997 requires that all National Wildlife Refuges have a Comprehensive Conservation Plan in place within 15 years to help fulfill the mission of the Refuge System.

Figure 1-1. The location of the Central Louisiana National Wildlife Refuge Complex.



DECISIONS TO BE MADE

Based on this Environmental Assessment, the Fish and Wildlife Service will select an alternative to implement the final CCP for Lake Ophelia National Wildlife Refuge. An Environmental Assessment was prepared to determine if the selected alternative will have a significant impact on the human environment. If no significant impacts are identified, then a Finding of No Significant Impact (FONSI) will be prepared. This determination will be based on an evaluation of the purposes for which the Refuge was established, the mission of the Service and the Refuge System, and other legal mandates. Assuming that no significant impacts are found, implementation of the plan will begin, and the plan will be monitored on an annual basis and revised when necessary.

PLANNING STUDY AREA

Lake Ophelia NWR is located in east-central Louisiana, 15 miles north of Marksville, Louisiana, and 8 miles northwest of the confluence of the Red, Atchafalaya, and Mississippi Rivers. The city of Alexandria is the nearest major city and is located 30 miles northwest of the Refuge.

The planning study area for this environmental assessment includes lands outside the existing Refuge boundary that are being studied for inclusion in the Refuge System or partnership planning efforts. It also includes portions of the Lower Mississippi River Valley Joint Venture's Red River/Three Rivers Source Population Objective Area (Figure 1-2). The Service presently owns and manages 17,525 acres of the 38,000 acres identified as lying within the Refuge's current acquisition boundary. The Service will seek to acquire, from willing sellers, the remaining acres. This environmental assessment will identify management on Refuge lands as well as those lands proposed to be acquired by the Service.

OTHER RELEVANT ACTIVITIES AND PLANS

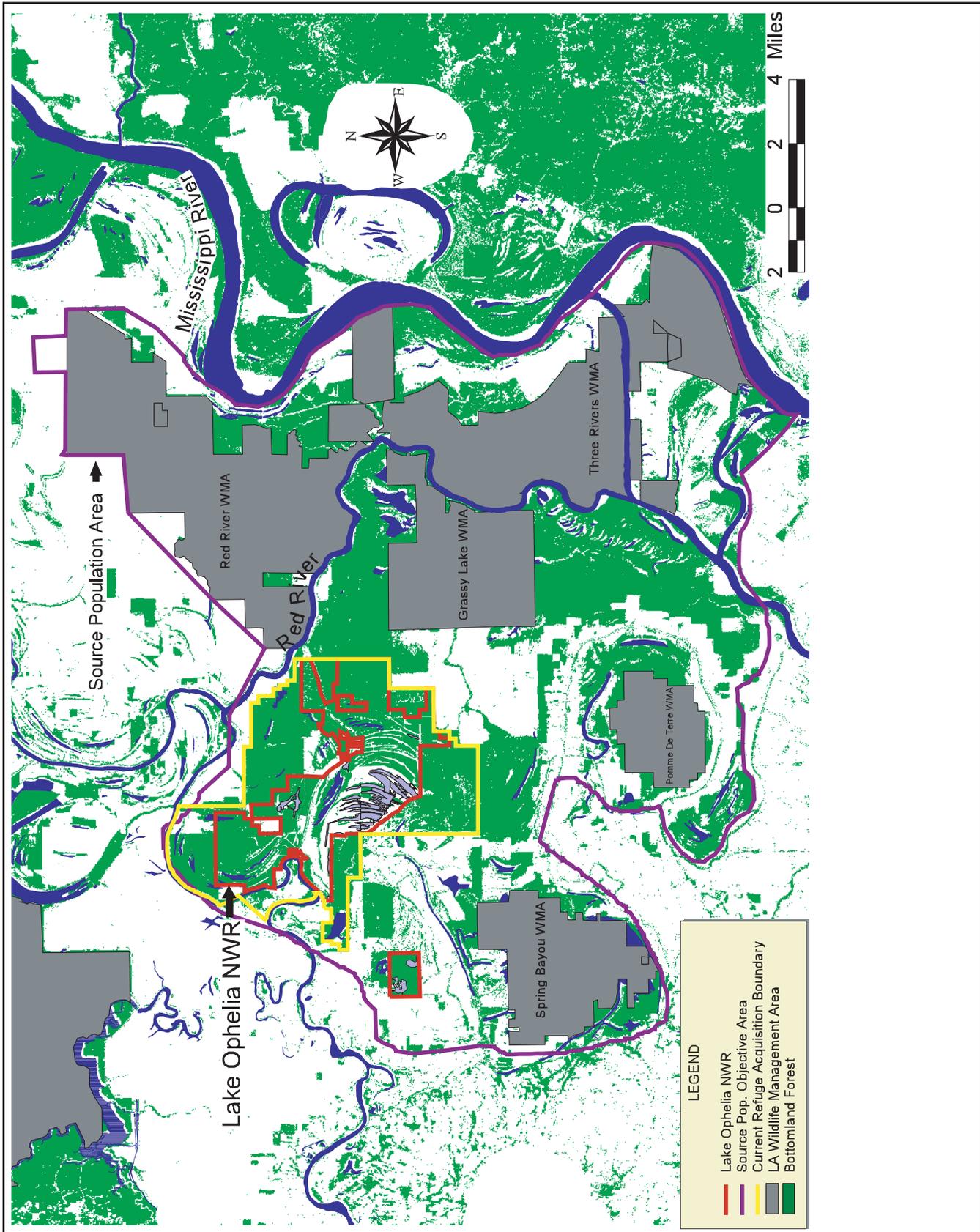
Along with the Service's legal mandates and initiatives, other planning activities directly influence the development of the CCP. The Service and others develop and coordinate planning initiatives involving Federal, State, and local agencies; local communities; non-governmental organizations; and private individuals to help restore habitats for fish and wildlife on and off public lands.

The Service is initiating cooperative partnerships in an effort to reduce the declining trend in biological diversity. Biological planning has established habitat objectives in the Lower Mississippi River Alluvial Plain (LMRAP) for species groups targeted in this plan that reflect the Partners in Flight Plan, North American Waterfowl Management Plan, Western Hemisphere Shorebird Reserve Network, and the recovery of the Louisiana subspecies of black bear.

The LMRAP serves as the primary migration habitat for migratory songbirds returning from Central and South America. It also provides wintering, breeding, and migration habitat for mid-continental waterfowl populations. Restoration of migratory songbird populations is a high priority of the Partners in Flight Plan. Source Population Objective Areas (SPOAs) have been identified throughout the LMRAP to identify areas that, if reforested, will help support stable breeding populations of Neotropical migratory birds.

The Partners in Flight Plan emphasizes land bird species as a priority for conservation. Habitat loss, population trends, and the vulnerability of species and habitats to threats are all factors used in the priority ranking of species. Further, biologists have identified focal species for each habitat type from which population and habitat objectives and conservation actions will be determined. This list of focal species, objectives, and conservation actions will aid migratory bird management on the Refuge.

Figure 1-2. Lake Ophelia National Wildlife Refuge in the context of the Red River/Three Rivers Source Population Objective Area.



A major effort underway in Louisiana is the recovery of the Louisiana black bear. The Service funds and coordinates Louisiana black bear recovery efforts. The Black Bear Conservation Committee, comprised of private, State, and Federal participants, also plays a vital role in statewide Louisiana black bear recovery efforts.

THE PLANNING PROCESS AND ASSOCIATED ISSUES

Initial CCP planning meetings were attended by Service personnel. At these initial meetings, strategies for completing the CCP were discussed, the issues and concerns were identified, and a mailing list of likely interested organizations and individuals was compiled. These organizations and individuals were invited to participate in a scoping meeting, where they were introduced to the Refuge and its planning process and asked to identify their issues and concerns. A public meeting was held for the same purposes as the scoping meeting. Announcements giving the location, date, and time for the public meeting were sent to local newspapers and radio programs. Input obtained from all of these meetings was used to develop the draft plan.

The planning team's identified issues and concerns were expanded to include those generated by the scoping team and citizens from the local community. These issues and concerns, identified in the Draft CCP, formed the basis for the development and comparison of the different alternatives described in this environmental assessment (EA).

BOTTOMLAND HARDWOOD RESTORATION

Lake Ophelia NWR is situated near several large forested tracts in the Three Rivers SPOA. A cooperative private-State-Federal partnership under the North American Waterfowl Management Plan, Partners in Flight, and the LMVJV calls for public lands in this area to be managed to provide 84,000 acres of interior forest habitat (forest more than one kilometer from edge). The largest amount of unforested public land in the Three Rivers SPOA is located on the Refuge. With strategic reforestation, significant amounts of interior forest can be created by reforesting agricultural areas on the Refuge that are not needed to meet waterfowl and shorebird objectives.

Approximately 12,000 acres of the Refuge are forested. Of this, 4,588 acres have been reforested since Refuge establishment. Sites were restored by planting seeds (by hand and machine) and seedlings (by hand and machine). Restoration on some sites is incomplete, and further planting efforts are required. Currently, no active forest management occurs. Also, there is a need to create and manage for mature forest conditions within several of the current mid-aged stands. In these stands, management actions should be directed toward providing a more complex forest stand structure with large tree crowns interspersed with openings to promote vertical structure in the mid-story and understory.

The local community was an integral part of the court decision that brought land clearing operations (specifically, those that occurred on the property that would become Lake Ophelia NWR) under Section 404 of the Clean Water Act. Because of this involvement, the community is very interested in bottomland hardwood restoration. There was some expectation in the community that the Refuge was established to restore the forest that had been removed. More than 10 years after Refuge establishment, local interest still exists to reforest the entire Refuge. The area's Cajun culture has a strong history of fishing and hunting, and forest restoration is seen as a way to increase hunting (mostly white-tailed deer) opportunities. However, because providing waterfowl habitat, including sanctuary areas, is a primary Refuge purpose, total reforestation is not possible.

LAND ACQUISITION/FOREST FRAGMENTATION

When the Refuge was established, its role in providing bottomland hardwood forest was seen mostly as an opportunity to provide an additional habitat type for wintering waterfowl (i.e., flooded woodlands in addition to agricultural and moist-soil areas). Reevaluation has determined that supplying interior forest (in support of Partners in Flight) and forested corridors between forested blocks (in support of Louisiana black bear recovery) is as important as simply providing forest. Protection of priority lands between the Refuge and other public natural resource areas through both Service programs and partnerships is vital to Louisiana black bear and Neotropical migratory birds.

AGRICULTURE

The Refuge farms approximately 3,678 acres on Lake Ophelia NWR. Cooperative farming is used to fulfill the Refuge's waterfowl, resident wildlife, and threatened and endangered species trust responsibilities. This is a mutually beneficial arrangement where the farmer is allowed to farm Refuge land (with restrictions on crop type, pesticide use, techniques, etc.), while the Refuge receives 20 percent of the crop or an equivalent value in services (e.g., mowing or disking of moist-soil areas, maintenance of water control facilities). Cooperative farming also infuses money into the local economy by providing jobs and supporting local businesses.

Typically the Refuge grows a combination of corn, soybeans, wheat, milo, and millet. In combination, each provides significant benefits to the trust species (waterfowl and Louisiana black bears) we are entrusted to protect. However, ancillary benefits also include improved habitat conditions for the American woodcock, white-tailed deer, wild turkey, and numerous other resident wildlife species.

Most of the current Refuge cropland lies within the core waterfowl sanctuary. During the November-to-February time period, the sanctuary area is closed to public entry in order to minimize disturbance to migratory birds.

THREATENED AND ENDANGERED SPECIES

Recovery and protection of threatened and endangered plants and animals is an important responsibility delegated to the Service and national wildlife refuges. Three threatened or endangered animals are thought to use (or could use) Lake Ophelia NWR and the adjoining Red River: the bald eagle, Louisiana black bear, and pallid sturgeon.

Bald eagles historically have nested on Lake Ophelia NWR. In the past, the Refuge has attempted to restore nesting bald eagles by hacking eaglets collected from coastal Louisiana. This project was ended after three years and 32 eaglets were successfully fledged. While no active nests have resulted from these efforts to date (two partial nests were observed after hacking ended and during 2003 and 2004 a pair of eagles produced some false nests within the closed waterfowl sanctuary area). Refuge habitat restoration and protection activities provide suitable habitat for nesting eagles.

Louisiana black bear recovery plans call for establishing a population in the Three Rivers/Red River Conservation Area, which includes Lake Ophelia NWR. The Refuge can support recovery by providing repatriation sites and by providing personnel to monitor bears, conduct education programs, and handle nuisance bear complaints. If local recovery efforts are to be successful, an effective outreach program aimed at educating the local community about the habitat needs of the black bears needs to be conducted.

The Refuge can support pallid sturgeon recovery efforts by restoring riverine habitat and providing technical assistance to other Service divisions, resource management agencies, and private landowners.

WATERFOWL

The primary purpose of Lake Ophelia NWR, as identified in the legislative authority (Emergency Wetlands Resources Act of 1986, Migratory Bird Conservation Act of 1929, and Fish and Wildlife Act of 1956) used to establish the Refuge, was to conserve the wetlands to maintain public benefits and to help fulfill international obligations contained in various migratory bird treaties and conventions (Final Environmental Assessment, 1989). The purpose was further enumerated in the Approval Memorandum for the purchase of lands for the establishment of Lake Ophelia NWR, which stated that the primary reason for acquisition and inclusion of the area into the Refuge System was to preserve wintering habitat for mallards, pintails, and wood ducks, and production habitat for wood ducks (USFWS Southeast Region Approval Memorandum, 1989). Three objectives for which the Refuge would be managed were identified in the Approval Memorandum: to preserve an area which has traditional high use for wintering waterfowl; to provide additional waterfowl habitat through Refuge management; and to establish a waterfowl sanctuary.

The Refuge's waterfowl purpose guides the primary operation and management actions on the Refuge. A portion of the Refuge is dedicated to providing seasonally flooded cropland, moist-soil areas, and forested wetlands to meet the feeding, resting, and breeding needs of migratory and resident waterfowl. A Biological Review of Lake Ophelia NWR, conducted in 1998 as part of the Comprehensive Conservation Planning process, identified the following minimum habitat objectives needed to provide sufficient winter water, food, sanctuary, and resting/loafing areas to meet the needs of waterfowl in the core waterfowl sanctuary area: habitat capable of supporting 5,000 to 10,000 ducks from November 20 to December 20; 15,000 to 30,000 ducks from December 21 to February 28; and at least 500 geese during each of these two time periods. Additional waterfowl habitat would be preserved and managed in non-sanctuary areas of the Refuge to support wintering waterfowl and provide public waterfowl hunting opportunities.

Reforestation of all Refuge cropland and expanding waterfowl hunting opportunities were identified during the scoping process. However, in order to meet the Refuge's purpose, the Refuge must maintain enough cropland and moist-soil areas to meet waterfowl habitat needs and provide sufficient sanctuary areas, i.e., undisturbed resting and feeding areas, for waterfowl. Some additional reforestation can be accomplished, but the Refuge must maintain enough cropland and moist-soil habitat to meet the needs of waterfowl. Additional waterfowl hunting opportunities can be provided as the Refuge acquires additional land, but the core waterfowl sanctuary needs to remain intact to meet the undisturbed resting and feeding needs of waterfowl.

NEOTROPICAL MIGRATORY BIRDS

Neotropical migratory birds are a species group of special management concern. Providing habitat (i.e., interior forest) for these birds is one of the Refuge's major objectives. Strategic reforestation of cropland surplus to the Refuge's waterfowl habitat objectives would contribute to the interior forest needs of Neotropical migratory birds. Future forest management activities would be directed toward improving forest composition and structure for Neotropical migratory birds.

VISITOR SERVICES AND EDUCATION

Currently, little non-consumptive public use occurs. The Refuge does not have the staff or facilities to provide on- or off-Refuge environmental education, interpretive, or recreation programming. The lack of exposure resulting from light non-consumptive public use and the lack of awareness of the Refuge's wildlife-dependent recreational opportunities negatively affects all Refuge programs.

In Avoyelles Parish, where the Refuge is located, the Tunica-Biloxi Paragon Casino is a major tourist attraction that draws over 200,000 overnight visitors annually. Many of the casino's overnight hotel and recreational vehicle (RV) resort guests are interested in short half-day tourist destinations. Non-consumptive public use facilities in association with a Grand Cote NWR visitor center annex would provide wildlife-dependent environmental education, interpretation, and recreation opportunities currently not available in Avoyelles Parish.

HUNTING

Consumptive use of fish and wildlife resources is an integral part of Louisiana (particularly Cajun) culture. It is not surprising that a considerable amount of State and local interest exists in expanding the public opportunities for hunting. Any additional public hunting opportunities will be dependent on providing safe, quality experiences that are compatible with Refuge purposes. Hunting opportunities would be made available to a greater number of people over a larger land base through the Refuge's continuing land acquisition program.

There is some interest in a modern gun hunt for white-tailed deer. However, much of Lake Ophelia NWR's hunting areas are open habitat (early succession or clearcut areas) and a modern gun hunt cannot be conducted safely. Recent surveys indicate that the Refuge's deer herd is in balance with the habitat, indicating that the current hunting strategies (archery, youth gun, and muzzleloader hunts only) are biologically sound. While the deer herd could be controlled with modern firearms, relying on the current program provides more hunting opportunities (primitive weapons are less efficient, requiring more units of effort [opportunities] to harvest the targeted number of individuals). As the Refuge's forest stands mature, opportunities for a modern gun hunt will be explored.

FISHING

Under current conditions, fishing opportunities on the Refuge are limited to Lake Ophelia, Westcut Lake, and Duck Lake. Lake Ophelia is within the waterfowl sanctuary, which limits fishing opportunities to March through September. Fishing opportunities can be expanded by constructing a boat ramp at Frazier/Whitehorse Lake, developing bank fishing areas, improving or expanding fishing piers, controlling aquatic weeds, and restoring fisheries in Lake Ophelia and other lakes. Also, the U.S. Army Corps of Engineers' preliminary surveys for the Spring Bayou Reconnaissance Study indicate that Lake Long could be reconnected to the Red River, possibly restoring the lake's hydrology and historic fishery.

ROADS AND TRAILS, EXTERIOR AND INTERIOR

In general, lack of access, both interior and exterior, limits all public use on the Refuge. No all-weather roads or trails exist.

The Refuge's only exterior access route is Louisiana Highway 452. The paved section of this road ends approximately three miles from the Refuge. Avoyelles Parish is responsible for maintaining Highway 452 three miles after the pavement ends, and the Refuge is responsible for maintaining 38 miles of roads and trails after the parish's responsibilities end. Seasonal weather limits access (including that by Refuge staff) to four-wheel drive and high clearance vehicles. Because current staffing and funding prevent improvement of access roads, travel to the Refuge is unattractive to many visitors.

Access to many interior areas of the Refuge also is limited. Because no all-weather interior roads exist, access to much of the Refuge is by foot or all-terrain vehicle (ATVs). During wet conditions, visitors must use a four-wheel drive vehicle to access one of several parking areas, and proceed on foot or ATV.

With heavy use, ATV trails quickly become unsuitable for foot travel, limiting those visitors without ATVs to areas served by designated hiking-only trails.

Providing all-weather interior and exterior access roads would allow year-round use by most visitors.

FSA FEE TITLE TRACT ACCESS

Three Farm Services Administration (FSA) fee title tracts large enough to provide public use opportunities are managed by the Refuge. Lack of ingress/egress routes and poor quality roads have prevented allowing compatible public use. Refuge acquisition of adjoining properties and/or developing public access would allow development of wildlife-dependent recreational opportunities on these tracts.

FUNDING/STAFFING

Funding has been insufficient to support Refuge programs. Inadequate staff, facilities, and equipment have prevented the Refuge from fully realizing its purpose. Currently, the Refuge is not fully meeting waterfowl and shorebird habitat objectives; conducts limited wildlife inventories; has few public use facilities; has incomplete habitat/wildlife management plans; provides few non-consumptive wildlife-dependent environmental education, interpretation, or recreational opportunities; and has degrading facilities (e.g., water control infrastructure, roads, and public access).

CULTURAL RESOURCES

Archaeological investigations within the Refuge have been limited and, with the exception of Gibson (1989), they occurred prior to its creation. Eight archaeological sites have been documented by previous surveys. While few cultural resources are known to exist on Lake Ophelia NWR, management activities must be conducted so as to avoid compromising sensitive sites.

The Tunica-Biloxi Native American tribe is located in the local community (tribal lands and Paragon Casino). The Tunica-Biloxi are strong supporters of natural resource issues and could be a valuable partner.

Together with Refuge goals, key issues were used to form a basis for the development of management alternatives described in this EA. Oral and written comments (regarding this document and the CCP) received from public meetings and agency reviews will assist the Service in refining these alternatives.

