

Louisianan WHIP Plan

INTRODUCTION

The Louisiana State Wildlife Habitat Incentives Program Plan was developed through a partnership of federal and state agencies, private industry, environmental groups, and locally-led Soil & Water Conservation District work groups. The plan was formulated to address local wildlife habitat needs and to compliment the Louisiana NRCS Conservation Partnership Strategic Management Plan.

State Objectives

The plan's objectives address parish, state, and national wildlife resource concerns. This plan is designed to give high priority to those habitat types and associated wildlife which have been impacted by agricultural and forestry activities. Priority was given to habitats not addressed by other conservation programs and to restoration/enhancement of sites that will compliment other programs.

The main objectives of the Louisiana WHIP are to:

- Sustain and conserve threatened and endangered species
- Sustain and conserve native and rare habitats
- Protect and improve water quality and fisheries resources
- Protect and improve scenic streams
- Restore and enhance forest lands to increase biodiversity
- Enhance habitat productivity in non-tidal and tidally influenced wetlands
- Restore and enhance wildlife habitat on land that has traditionally been dedicated to other land uses

The plan is targeted to help achieve objectives set by other wildlife conservation initiatives including: National Buffer Initiative, North American Waterfowl Management Plan, Ducks Unlimited Louisiana Waterfowl Projects, Neo-tropical Migratory Bird Habitat Initiative, American Forest and Paper Association Sustainable Forestry Initiative, and habitat initiatives formulated under Memorandums of Understanding between NRCS and the Wild Turkey Federation and Quail Unlimited.

The plan promotes the restoration/enhancement of wildlife habitat on private lands; supports locally led wildlife resource conservation activities; promotes a voluntary approach to wildlife habitat restoration and enhancement; and builds and maintains partnerships with both public and private entities.

Habitat Priorities

The habitats targeted for restoration/enhancement under this plan were selected and prioritized by an interdisciplinary team (Technical Advisory Subcommittee (TAS)) represented by a variety of agencies and organizations. The team assessed many proposals for inclusion into the program. Those proposals selected met program objectives; are technically sound; practical to implement; will result in significant benefits to wildlife; are cost efficient; and will be accepted and used by private landowners.

The state has fourteen Common Resource Areas (CRAs). Specific habitats of concern were then selected and prioritized within these CRAs. Many of the habitat resource concerns are located within multiple CRAs and this is reflected and addressed in the ranking criteria.

The summary below displays the habitats of concern selected from the CRAs. The habitats of concern are listed in order of priority.

1 st Priority	Riparian Buffer Establishment
2 nd Priority	Rare-Native Habitats
	Cogon Grass Control (Non-native invasive grass)
	Longleaf Pine Woodland
	Upland Hardwoods
	Native Prairie
3 rd Priority.....	Cypress Brake Restoration
4 th Priority.....	Wildlife Corridor Establishment
	Watercourse Corridors
	Field Borders
	Odd Areas
5 th Priority.....	Vegetative Succession Management
	Pine Forest (disking/burning/chemical application)
	Woodland Rights-of-Way (disking, planting)
	Moist Soil Areas (disking, bush hogging, chemicals)
6 th Priority.....	Habitat Bio-diversification
	Creation of understory snags in Woodlands
	Plantings in Damaged Woodland Areas
	Planting Soft/Hard Mast Trees and Shrubs in woodlands and/or cutovers
	Wildlife Watering Facility
	Shoreline Plantings in Coastal Marsh

Most habitat restoration/enhancement will be achieved by planting native trees, shrubs and grasses, or by manipulating the vegetation to set back plant succession. The only habitat of concern, which does not address vegetation, is the Wildlife Watering Facility.

The Habitat Resources Section of this plan contains detailed information about the habitat/wildlife resources and habitats of concern within the Major Land Resource Areas.

UPLAND WILDLIFE HABITAT

In Louisiana, upland wildlife habitat spans several major land resource areas (CRAs) including the eastern and western gulf coast flatwoods, the western and southern coastal plain, and the southern and subtropical Mississippi valley silty uplands. Combined, this accounts for approximately 15,030,414 acres or 49.19 percent of the entire state. Upland wildlife habitats range from nearly level (flatwoods & silty uplands) to rolling hills (silty uplands and coastal plain) dissected by numerous wetland types and streams. Significant amounts of acreage are designated as agricultural cropland within the silty uplands while rangeland acreage amounts are more significant than cropland on flatwoods and coastal plain areas. Timber production accounts for the major land use on the flatwoods and coastal plain CRAs.

Upland wildlife habitats benefit and support many wildlife species including numerous game and non-game species and several federal and state listed threatened and endangered species.

The numerous bayous, streams, lakes, groundwater recharge areas and vast amounts of native vegetation within the uplands greatly contribute to the overall health and well-being of all Louisiana habitants. The unique upland habitat existence and its protection from degradation in quality and diversity are paramount. However, several factors have contributed to its demise.

- 1) The demand for commercial wood products has resulted in a conversion of many native ecotypes (i.e., mixed pine/hardwoods, longleaf pine and shortleaf pine forests) to genetically engineered monocultures of more production-oriented species.
- 2) The increased need for production space has spread to the conversion of upland stream bottom wetlands, and other unique habitats, some of which are unsuited for this type of plant community.
- 3) Water quality has become degraded in some areas. Sedimentation and thermal pollution have threatened some wildlife species.
- 4) Habitats directly unaffected by conversion have become isolated dramatically reducing some species' mobility and populations.
- 5) Mining operations, urbanization and a variety of other activities have also taken their toll.
- 6) Lack of management/maintenance, of otherwise beneficial practices, has inadvertently negatively impacted native wildlife.

While some conservation programs including, the Forest Incentives Program (FIP), Stewardship Incentives Program (SIP), and Conservation Reserve Program (CRP) are available to address needs within the uplands, few address nonproduction areas. The Wildlife Habitat Incentives Program (WHIP) can be utilized as a tool to mesh with the existing programs complimenting their benefit to wildlife while further reaching the strategically important areas which have been historically unreachable. For example, the importance of riparian buffers is well known and is a priority with the CRP, but if an area lacks cropping history, it may be ineligible in that program.

Habitats of Concern

Within Louisiana's upland wildlife habitat, the WHIP priorities for fiscal year 2009 are as follows: the establishment of riparian buffers, the restoration of longleaf pines and upland hardwoods, the establishment of wildlife corridors, control of cogongrass, and practices which manipulate successional stages or diversify the habitat by producing beneficial native vegetation.

Riparian Buffers

Planting shrubs and trees along waterbodies in open land will significantly enhance riparian areas for wildlife. Food, nesting sites, escape cover, and travel corridors will be provided within areas largely devoid of adequate habitat. Reductions in sedimentation, erosion, and thermal pollution in the adjacent waterbodies are also expected. Several wildlife species are expected to benefit by this practice including white-tailed deer, northern bobwhite quail, wood ducks, American woodcock, small rodents, several other bird species, reptiles, amphibians, fishes, and aquatic invertebrates. The water quality attributes of riparian buffers will benefit several threatened and endangered wildlife species including the inflated heelsplitter, pallid sturgeon and gulf sturgeon, Louisiana pearlshell, bald eagle, and the ringed sawback turtle. The linkage to other essential habitats could also benefit mobile threatened/endangered (or nearly extinct) mammals such as the Louisiana black bear, red wolf and the Florida panther. The enhancement/protection of riparian buffers in woodland/cutover areas is critical to many forest dwelling species. The native soft and hard mast trees and shrubs to be reestablished in riparian zones will provide the food and cover needed for the revival and/or reintroduction of several woodland species in uplands.

Longleaf Pine Woodland

The reestablishment of longleaf pine stands to historic (suitable) sites will aid in the recovery of declining habitat types found within the upland habitat. Whether these trees are restored on the unique longleaf pine wetland savannah ecotypes or the traditional upland longleaf pine/bluestem habitats, they will benefit several wildlife species. In addition to white-tailed deer, northern bobwhite quail, and wild turkey, several non-game species' populations will be enhanced. Among the non-game wildlife, which will benefit from the restoration of this habitat, some are endangered, threatened, or sensitive species which are dependent on historic longleaf pine habitat or the microhabitats which occur within. Examples of these dependent species include Louisiana bluestar, pinewoods bluestem, several asters, and sedges, red wolf, Florida panther, several bats, Bachman's sparrow, American kestrel, loggerhead shrike, red-cockaded woodpecker, gopher tortoise, Louisiana pine snake, southern red-back salamander, dusky gopher frog, and the American burying beetle.

Upland Hardwood Forests

As with the restoration of longleaf pine habitats, the restoration or inclusion of native upland mast producing hardwood trees within pine production areas or agricultural settings will assist in replacing declining habitats. Traditional oak-pine-hickory stands.

Cogongrass Control

Cogongrass (*Imperata essamine*) is a grassy weed that has become established in some areas across Louisiana. The grass prefers sandy soils with low nutrient levels. There is a potential threat of this becoming established in the historic long leaf pine and other priority habitat areas across the state.

This grass spreads by seed and rhizomes. The mature plant will produce approximately 3000 seeds annually. The seedlings will begin to produce rhizomes within four weeks of germination. These characteristics and the plants ability to out compete other plant species makes this plant very successful in colonizing new areas, and quickly creating monotypic environments once established.

Because of its aggressive, weedy habitat habit in other countries, cogongrass is identified on the Federal Noxious Weeds List. It has been identified as the seventh worst weed in the world.

Alluvial Habitat

The Alluvial Wildlife Habitat Area is within the southern Mississippi valley alluvium common resource area. This area is in the natural floodplains of the Mississippi River, Red River and Ouachita River, and covers 9,010,510 acres or 29.49 percent of the state.

Bottomland hardwoods once covered most of the area, however, clearing of forests for agricultural production has removed most of the original hardwood ecosystem. Some relatively large tracts of native habitat remain in national refuges and state wildlife management areas with small remnants of woods scattered throughout the area, but most of the area is now in crop production. The remaining bottomland hardwood tracts provide excellent habitat for both game and non-game wildlife, but the vast areas of cropland lack the habitat elements necessary to support most of the native species.

Bottomland hardwoods provide excellent habitat and support high populations of white-tailed deer, wild turkey, fox and gray squirrels, swamp rabbits, neo-tropical migratory birds, and migratory waterfowl. Threatened and endangered species including the Louisiana black bear, bald eagle, Bachman's warbler, and American alligator also utilize bottomland hardwood habitat. Conversion of the forests to agricultural production also impacted water quality and fisheries resources in the numerous streams and bayous which transect the area. The forested back swamps and wooded riparian zones that filtered pollutants from runoff water disappeared as land was converted to agriculture. The quality of fisheries now found in most alluvial streams is composed only of fish that can tolerate highly turbid water and other pollutants.

Programs such Water Bank, Wetlands Reserve Program, Conservation Reserve Program, Forestry Incentives Program and Stewardship Incentives Program have addressed some of the needs within the alluvium. WHIP can be used to compliment the above mentioned programs as well as the U.S. Fish and Wildlife Services, Partners for Wildlife Program, Ducks Unlimited, Louisiana Waterfowl Program and others.

Habitats of Concern

Within the alluvial area, riparian buffers, wildlife corridors, diversification of existing woodland, and manipulation of plant succession in most soil area, and woodland rights-of-way have been identified as priorities for 2009.

Riparian Buffers / Wildlife Corridors

The trees, shrubs and grasses established on riparian buffers and wildlife corridors will provide food and cover for a variety of wildlife. Fur bearing mammals, including mink, raccoon, fox, coyote, birds of prey, such as the red-shouldered hawk and great horned owl, and prey species such as the hispid cotton rat, and swamp rabbit will all utilize riparian/corridor habitat. These habitats also provide travelways, escape cover, and food for white-tail deer, gray and fox squirrels, and the American woodcock. Bobwhite quail prefer edge cover created along vegetative buffers for food, escape cover and nesting cover. Research has shown that riparian buffers, which connect two wooded tracts, are frequently used for travel corridors by the threatened Louisiana black bear.

Water quality and fisheries will also benefit from riparian vegetation. The vegetation will filter sediment before it reaches the stream and the trees will provide shade and cooler water and cover for fish and other aquatic species.

Vegetation Succession/Habitat Diversification

Many landowners in the alluvial area flood shallow water areas for migratory water fowl during the winter months. Many of these areas grow up in native vegetation and can provide excellent feeding areas for ducks and geese if managed properly. Periodic disking, prescribed burning or bush hogging of moist soil areas is sometimes necessary to reduce competition by nuisance plants, that if left unchecked will dominate the area and eliminate the plants that are preferred waterfowl food. Duck Unlimited and NRCS are currently working to create shallow water areas on thousands of acres in the alluvial area. Using WHIP to encourage proper management of these areas will optimize waterfowl habitat quality in these projects.

Some bottomland hardwood habitats can be enhanced by opening the overstory tree canopy. Dense tree canopies often block sunlight from the forest floor resulting in little food and cover for wildlife dependent upon understory vegetation. The deadening of some trees will allow sunlight to penetrate into the understory and promote the growth of herbaceous plants, shrubs, vines and tree saplings, and leave dead snags for cavity nesters. This will benefit some neo-tropical songbirds, American woodcock, white-tail deer, swamp and cottontail rabbit, Louisiana black bear, and many other forest dwelling species.

Biodiversity can also be improved in some bottomland hardwood habitats by planting shade tolerant mast producing trees and shrubs in strategic locations. The introduction of native soft mast trees and shrubs in small plots will promote the invasion of these species in the area and the ultimate result will be better habitat for wildlife.

Disking on utility rights-of-way will set back plant succession and encourage the growth of grasses and herbs beneficial to wildlife. This will serve as excellent habitat for wild turkey, swamp and cottontail rabbits, and bobwhite quail. Rights-of-way disked through wet areas will promote the growth of grasses and forbs favored by waterfowl.

Prairie Habitat

The prairies of southwestern Louisiana were the last of the great regions of the state to become “truly settled.” Major changes to the landscape began taking place around 1882 when the Southern Pacific Railroad was completed to establish through transportation between the prairies and the outside world. The area now makes a significant contribution to the state’s agricultural economy via rice and cattle production.

Louisiana prairies were historically tallgrass prairies interspersed with trees found in nine parishes along the southwestern Louisiana Gulf Coast. They were flanked by the Calcasieu River basin to the west and the Atchafalaya River basin to the east. To the south the prairies blended with freshwater marshes. The northern extent of its occurrence was fringed by flatwoods. Prior to conversion, prairies covered approximately 1,513,300 acres or 4.96 percent of the state. Less than 100 acres of unaltered prairie habitat remains in Louisiana today.

Plant life in the prairies is very diverse and unique. Native prairie grasses are wetland plants, including some fresh marsh species. Dominant grasses include the closely related bluestem and broomsedge, vase-grass (watergrass), switchgrass, and eastern gamma-grass. Carpetgrass and Johnsongrass have been introduced to the prairies. Prairie soils once supported a wide variety and abundance of wild flowers.

The prairies naturally occurred between the woods marking the stream courses. Trees growing alongside the stream courses include oak, elm, ash, and cottonwood. Fires, high summer evaporation, claypan, “too-wet-too-dry” soil conditions, are all suspected as limiting factors restricting tree growth on prairies.

Prairie wildlife is similar but different from other habitat types occurring in the state. The mere fact that two habitat types—prairie and wooded stream courses—dotting the landscape in a systematic pattern, makes it possible for both woodland and grassland species to meet their habitat needs. From a wildlife habitat perspective, prairies are very important to grassland bird species.

Habitat conversion to other land uses has caused a significant decline in the quality and quantity of wildlife food and cover. Grassland wildlife, especially birds, is usually unable to adapt to changes in land use. Practices that improve food and cover need to be applied to the landscape.

Habitats of Concern

Within the prairie area, the establishment of riparian buffers, wildlife corridors, native prairie grasses, and the management of moist-soil areas have been identified as priorities for fiscal year 2009.

Rare Native Habitats – Prairies

Prairie restoration would most likely be accomplished by targeting small 5 to 20 acre tracts of converted prairie lands. Vegetative plantings consisting of native species such as bluestem, switchgrass, and eastern gammagrass would be planted and maintained for at least a 10-year period.

Riparian Buffer and Streamside Corridors

The numerous streams criss-crossing the prairies CRA provide an opportunity for riparian restoration and enhancement. Riparian zones can be improved by planting trees, shrubs, and herbaceous plants alongside the streams to provide food and cover for wildlife. This practice will also help improve the water quality of the area.

Field Borders and Odd Areas

Since many of the agricultural fields are rather large homogeneous sites, field borders and odd areas can be established to restore wildlife habitats. These practices would benefit quail, songbirds, and many species of small mammals.

Vegetative Succession

Manipulation—Moist Soil Area

An effective management practice for improving waterbird habitat in the prairies CRA is to disturb the soils of a shallow-water pond. Disking and burning are two proven methods of moist-soil management used to encourage the growth of native plant species. Moist-soil areas are especially attractive to waterfowl, shorebirds, and wading birds.

Coastal

Marsh

Habitat

The gulf coast marshes of Louisiana mark the transition from land to sea. The marshes or coastal wetlands of Louisiana encompass 5,004,600 acres or 16.38 percent of the state. Four distinct marsh types have been identified and are classified as salt, brackish, intermediate, and fresh. The marsh types are characterized by associations of plant species, hydrological patterns, soils, and fish and wildlife resources.

Coastal marshes in Louisiana provide habitat for many species of wildlife. Millions of waterbirds either winter in coastal marshes or pass through on their way to traditional wintering grounds. The Louisiana coastal marshes are of great importance to migratory waterfowl and provide winter habitat for more than two-thirds of the entire Mississippi flyway waterfowl population. Coastal wetlands also support over half of the continental mottled duck populations. Also, a large portion of the fur and alligator harvest in North America, and more than 20 percent of the country's commercial fisheries, are provided by the coastal marshes.

The bald eagle nests adjacent to the coastal marshes of the state. Other listed species dependent on the coastal wetlands for their existence include the eskimo curlew, arctic peregrine falcon, brown pelican, and piping plover.

Hydrologic alterations such as the construction of canals and the leveeing of major rivers have been occurring in the marsh for many years. As a result of these activities, saltwater intrusion and marsh erosion is "eating away" at these valuable coastal wetland habitats. As marsh loss continues, the quantity and quality of choice food and cover plants decreases also.

Habitat of Concern

Steps are being taken throughout coastal Louisiana to help restore and enhance the coastal marshes. Many of these efforts involve water management to prevent further damage by saltwater and marsh erosion. After the hydrology has been restored to the extent practicable, native vegetation is often planted to slow down erosion and stabilize the fragile marsh soils. These newly established native plant communities expand over time to provide fish and wildlife preferred habitat.

The Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA-PL 646), commonly referred to as the Breaux-Johnston Act, is one of the major programs underway to restore, protect, and enhance coastal marshes. It is a partnership between the federal government and the state of Louisiana. WHIP could possibly partner with CWPPRA to facilitate the establishment of native vegetation in degraded coastal marshes.

State WHIP Application Ranking Procedure

Louisiana will use the ProTracts Ranking Tool for ranking all WHIP applications. This ranking tool has been developed in order to achieve a consistent nation-wide ranking process that is tailored to prioritize the targeted habitat types and resource concerns in Louisiana. The ranking tool will allow field offices to rank applications based on practice benefits / cost effectiveness, and addressing of local, state, and national issues. The application ranking will be based on the resource concerns and habitat types that will be benefited by the practices that the applicant is requesting financial assistance on. This procedure will rank each application numerically. See Appendix A for Ranking Tool Instructions.

In addition to practice benefits/cost effectiveness, the ranking criteria will also include:

- Habitat Type – Rare and Declining Habitat Restoration
- Habitat Enhancement / Management
- Threatened and Endangered Species Habitat
- Proximity to Other Wildlife Habitat Initiatives
- Conversion to Wildlife Habitat
- Length of Contract
- Secondary Benefits to Water Quality

All rankings will be recorded in ProTracts. Applications will be funded based on the ranking score and available funding.

Conservation Planning

A conservation plan which at a minimum addresses fish and wildlife habitat as the primary resource concern will be developed and serve as a Wildlife Habitat Incentives Program Plan of Operations (WPO). Habitat creation/restoration/enhancement will be done in accordance with a WPO completed by NRCS personnel or other public or private natural resource professionals, who are approved by NRCS. A needs assessment will be done before the plan is developed to determine if practices are necessary and if they can be implemented to achieve the desired results.

The WPO portion of the cost-share agreement shall meet identified wildlife resource conservation needs. The WPO may cover all or part of the participant's land base and may be all or part of a complete conservation plan.

The WPO forms a basis for the WHIP cost-share agreement and shall encompass the parcel of land where habitat will be established, improved, protected, enhanced or restored. The WPO shall meet the WPO Requirements listed in Title 440, CPM, Part 517.11.

All conservation practices and management systems in the WPO must be approved by NRCS and developed and carried out in accordance with the applicable NRCS Field Office Technical Guide (FOTG). Appendix C of this plan lists the conservation practices which are eligible for financial assistance under this program in Louisiana.

Habitat Inventory and Assessment Component of the WPO

A benchmark wildlife habitat evaluation will be completed at the time of WPO development documenting the habitat objectives and the level of wildlife habitat resource condition (Appendix A). Follow-up assessments will be completed through the life of the WHIP contract AND in the final year of the WHIP contract.

A Louisiana WHIP Habitat Assessment Procedure has been developed to evaluate the impacts of the creation/restoration/enhancement measures (Appendix B). A Habitat Assessment will be conducted only for those applications accepted/funded for the program. The assessment consists of two sections – Habitat Objectives and Habitat Impacts.

The Habitat Objectives section will be used to identify goals related to the specific types of wildlife habitat elements and habitat components to be created/restored/enhanced.

The Habitat Impacts section will be used to evaluate baseline conditions of the existing habitat before the restoration and enhancement practices are installed and will be done on a periodic basis thereafter AND in the final year of the contract to determine if the habitat objectives have been achieved.

Management recommendations will be given to the landowner to maintain or improve the quality of habitat as indicated by the assessment. The frequency of conducting periodic assessments will be determined on a case-by-case basis.

WPO Training

Formal training will be provided to all NRCS and partners personnel who will develop and implement WPO's. NRCS and partners will provide training that will address program policy, ranking of applications, habitat needs assessments, planning and implementation of conservation practices, and conducting habitat impact assessments. Training will be conducted prior to sign-ups and will continue as needed.

Essential Plant and Animal Habitat Contracts – Longleaf Pine Ecosystem

Louisiana has approved the Longleaf Pine Ecosystem for participation in WHIP under Essential Plant and Animal Habitat. Essential habitat contracts will be 15 year agreements with financial assistance payment rates set at 90% of the statewide average cost.

WHIP applications in Louisiana qualify as Essential Plant and Animal Habitat Contracts if the following criteria are met:

- The enrolled acres are within the Louisiana longleaf pine historic range; and
- The contracted practices will develop, protect, enhance, or restore essential longleaf pine ecosystem habitat; and
- The contract will include, and is limited to, any of the following:
 - Longleaf pine planting;
 - Native Grass or Grass/Forbs Planting in combination with longleaf pine planting;
 - Native Grass or Grass/Forbs Planting, 2 acres or greater in size;
 - Management practices (burning, flash grazing, or mowing)
 - Associated establishment practices (site preparation, seedling release, fertilizer)

Description of the Louisiana Longleaf Pine Ecosystem Essential Habitat:

Within Louisiana, approximately 7 million acres of longleaf pine (*Pinus palustris*) ecosystem once existed. Currently in Louisiana, less than 250,000 acres remains, with the majority of that being on National Forest. For this reason and many others, the Louisiana State Wildlife Plan lists the longleaf pine forest types as among the state's most imperiled habitats. In the Eastern Gulf Coastal Plain ecosystem, the Plan ranks the Eastern Longleaf Pine Savannah and Eastern Upland Longleaf Pine Forest as the number 1 and number 2 terrestrial habitat conservation priorities, respectively. Similarly, in the Lower Western Gulf Coastal Plain, the Western Longleaf Pine Savannah and the Western Upland Longleaf Pine Forest are the top two habitat conservation priorities, respectively. The Plan identifies 62 species of animals classified as Species of Conservation Concern that occur in Louisiana's 4 longleaf pine habitat types. These species include 11 species of amphibians, 18 species of birds, 9 species of mammals, 16 species of reptiles, and 8 species of butterflies. Most of these species are in decline because of the reduction in acreage of longleaf pine and its associated grass/forbs understory. Federally protected species including the red-cockaded woodpecker, gopher tortoise, and American chaffseed, as well as the federal candidate species, Louisiana pine snake, could benefit greatly from practices which establish, enhance, and conserve longleaf pine forest ecosystems.

The longleaf pine forest ecosystem is typically characterized as an open forest or woodland with a diverse grass and forbs understory. This ecosystem is also a fire dependant system. Fire reduces competition from encroaching hardwood and pine species and removes the rank herbaceous plant materials, setting back succession while promoting new growth and diversity.

The more components to this ecosystem which are restored, the more value the system will be considered. Ideally, longleaf pine and a diverse mix of locally adapted native grasses and forbs should be established, and managed with periodic prescribed burning. Establishing longleaf pine trees alone can provide some ecological benefits as can establishing native grasses and forbs within the historic longleaf pine forest range.

- Louisiana Assoc. of Conservation Districts
- Louisiana Dept. of Wildlife and Fisheries
- Louisiana Office of Forestry
- U.S. Fish and Wildlife Service
- Ducks Unlimited
- Louisiana Department of Natural Resources
- The Nature Conservancy
- Natural Heritage Foundation
- Quail Unlimited
- National Wild Turkey Federation
- Louisiana Outdoor Writers Assoc.
- Louisiana Forestry Association

WHIP Quality Assurance

Annual contract reviews will be conducted by the NRCS field office representatives to monitor compliance with the WHIP cost-share agreement.

WHIP habitat assessments will be conducted by the NRCS field office representatives and/or partner's representatives in consultation with the landowner.

The habitat assessment will consist of the following:

- Review the WPO to determine if objectives are being met
- Conduct an on-site visit to observe the habitat
- Document progress and success
- Discuss management alternatives with the landowner
- Recommend plan revisions if needed

Annual Quality Assurance Reviews will be conducted by area and/or state office personnel on 5% of the contracts completed in the state.

The quality assurance review will consist of the following:

- Review the implementation of the ranking procedures
- Review the WPO
- Conduct an on-site visit to observe the habitat
- Review the habitat assessment for technical quality and accuracy
- Determine the technical abilities of NRCS field office personnel
- Determine if field office personnel need additional training