1 Purpose of and Need for Action

"Conservation is a state of harmony between men and land."
—Aldo Leopold

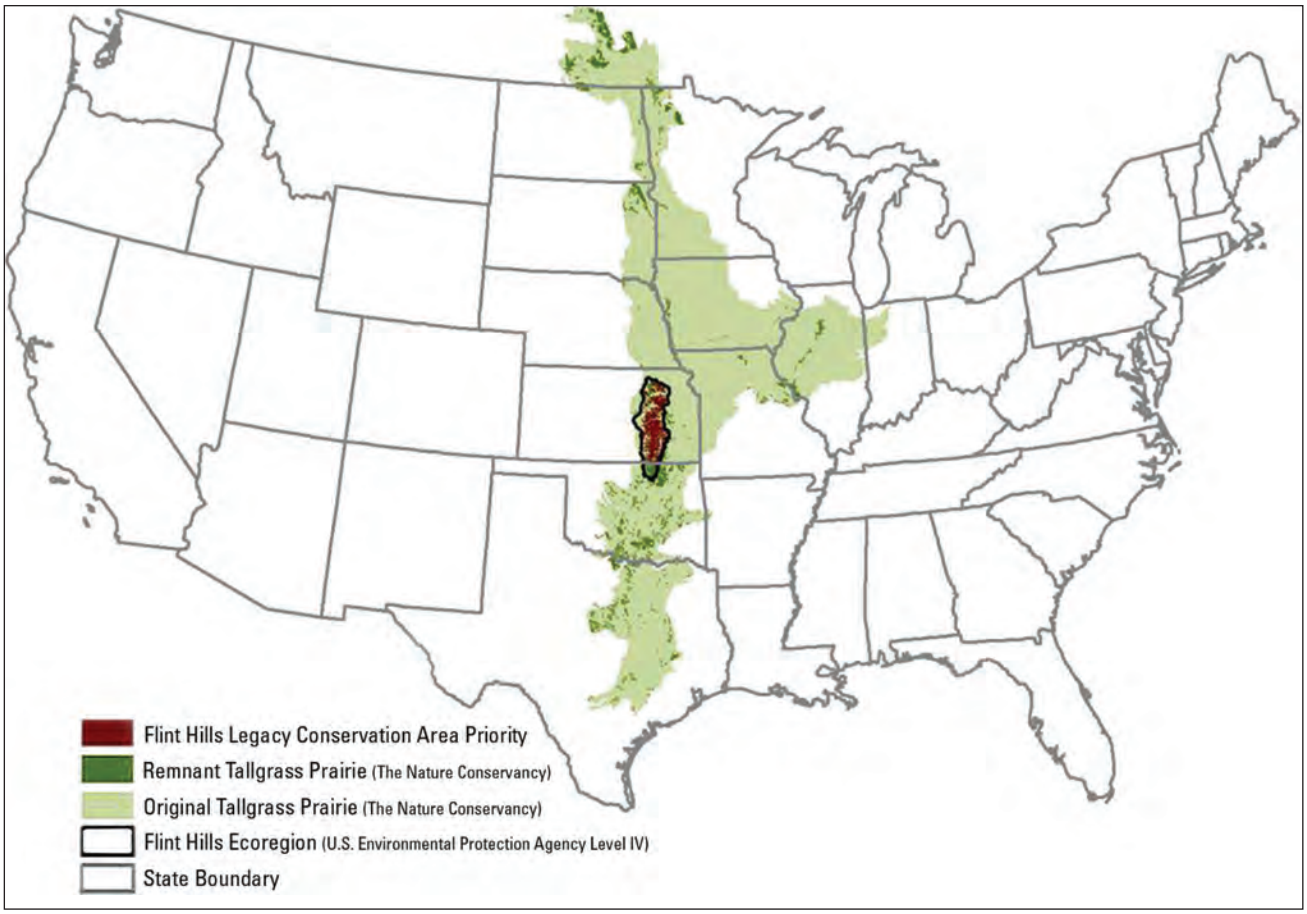

Figure 1. Historical tallgrass prairie distribution.

The lands east of the Rocky Mountains were once a vast sea of grass extending as far east as the deciduous forests of Kentucky and Ohio. The eastern third of this vast grassland is called the tallgrass prairie, often called the "true" prairie. Tallgrass prairie once covered more than 170 million acres from Texas to Canada (Samson et al. 1999) (figure 1). As America expanded westward during the 19th century, settlers found the rich soils associated with the tallgrass prairie ideal for growing crops and converted much of the original landscape for agriculture.

Today, less than 4 percent of this once vast grassland region remains (Steinauer and Collins 1996). Given that amount of loss, it is no wonder grassland birds are the fastest declining avian cadre in North America. Cultivation, agriculture, tree encroachment, and development activities have pushed grassland-dependent species into ever-shrinking areas of tallgrass prairie. Approximately three-fourths of the remaining tallgrass prairie lies within the Flint Hills ecoregion of eastern Kansas and northeastern Oklahoma, with about 6 million acres present in the Kansas portion. The outer edge of this region is presently suffering a rapid conversion to forest due in part to a declining fire culture within the agricultural communities of the region. The inner core of this region (approximately 3.3 million acres) is relatively intact to date, offering potential for long-term social stability, and ecosystem function and value.

The Flint Hills area is a treasured landscape of gently-sloping limestone and chert hills. Today, two hundred years after Zebulon Pike explored the Flint Hills, one can still witness the same unobstructed vistas that he described in his journal. The central core, running in a north-south configuration, has persisted as a relatively unfragmented expanse of

tallgrass prairie because of limestone outcrops that discouraged plowing, and because of a ranching culture that recognized the ecological importance of fire when living and working within a fire climax ecosystem. Since about 1860, the predominant use of the Flint Hills uplands has been cattle ranching.

The Flint Hills Legacy Conservation Area (FHLCA) is part of a landscape-scale, strategic habitat conservation effort to protect a unique, highly diverse, and largely unfragmented area of tallgrass prairie. Located in eastern Kansas, the region provides important habitat for a diverse array of native wildlife species, including the threatened Topeka shiner, greater prairie-chicken, Henslow's sparrow, short-eared owl, Bell's vireo, American golden-plover, grasshopper sparrow, dickcissel, eastern meadowlark, upland sandpiper, buff-breasted sandpiper, scissor-tailed flycatcher, loggerhead shrike, Smith's longspur, Harris' sparrow, northern harrier, Swainson's hawk, and other grassland-dependent species. Rich with history, the Flint Hills ranching culture has maintained grazing and fire as necessary tools for tallgrass ecosystem health.

While ranching has helped maintain the last intact portion of tallgrass prairie and much of the region's biodiversity, there are concerns that incompatible industrial and residential development could threaten this unique landscape. Left unabated, such development will likely diminish this important agricultural and biological resource for future generations.

PROPOSED ACTION

The U.S. Fish and Wildlife Service is proposing to establish a voluntary conservation easement program in eastern Kansas called the Flint Hills Legacy Conservation Area (figure 2). The project boundary encompasses roughly 3.3 million acres, within which the Service would strategically acquire conservation easements on up to 1.1 million acres of private land.

The Service would seek all acquisition in the form of perpetual conservation easements from willing sellers. The project would not involve fee-title acquisitions. The easement program would rely on voluntary participation from landowners. Grazing and prescribed fires would continue on the land included in the easement contract. Landowners could continue to pursue development on properties without Service conservation easements. All land within an easement would remain in private ownership and, therefore, property tax and grassland management activities such as invasive plant and tree control, grazing and prescribed fires would remain the responsibility of the landowner. Public access to the land would also remain under the control of the landowner.

Easement restrictions may include but are not limited to preventing development (residential, commercial and industrial), altering the natural topography, converting native grassland to cropland, draining wetlands, and introducing plants that are not native to the Flint Hills.

The proposed easements would help maintain a relatively large, unfragmented block of habitat that would compliment efforts by other land trusts and entities, such as the Ranchland Trust of Kansas, Kansas Land Trust, The Nature Conservancy, National Park Service, Kansas Department of Wildlife and Parks, U.S. Department of Agriculture, and the U.S. Army Corps of Engineers.

PROJECT AREA

The FHLCA project area consists of 3.3 million acres within the Flint Hills ecoregion of Kansas (Omernick 1987). A narrow band running north-south, it is located within 21 counties in eastern Kansas (see figure 2), and stretches from the northern to the southern border of the state. Some tallgrass prairie extends south into Oklahoma, where it is referred to as the Osage Hills. As elsewhere in Kansas where less than 2 percent of the land area is federally owned, private ownership dominates the project area. The main habitat type found within the project area is eastern tallgrass prairie, represented by over ninety native grasses and 500 broadleaf species. The Flint Hills ecoregion contains the largest concentration of freshwater springs in Kansas (Kansas Geologic Survey 2008) and represents the ultimate source of the Caney, Cottonwood, Elk, Fall, Marais des Cygnes (Osage), Neosho, Verdigris, and Walnut rivers.

The total area within the proposed project boundary represents over 3.3 million acres, roughly three times the long-term project goal. This physiographic region represents the world's last intact tallgrass prairie landscape of sufficient size to offer full ecological function. The physical shape and juxtaposition of the up to 1.1 million acres in the priority area targeted for easements is an important component of the project's long-term success. This remaining, high quality, ecologically functioning stretch of tallgrass prairie runs along a north-south axis and is as narrow as 20 miles wide (see figure 2). This narrowness is not a biological choice; it is by default that the project boundary takes this shape, constrained on the east and west by tillage agriculture, woody vegetation, and development.

PURPOSE OF AND NEED FOR PROPOSED ACTION

The purpose this project is to provide the landscape-scale, strategic habitat conservation necessary to maintain ecological community function for eastern

U.S. Fish & Wildlife Service

Flint Hills Legacy Conservation Area
Eastern Kansas

Base Map

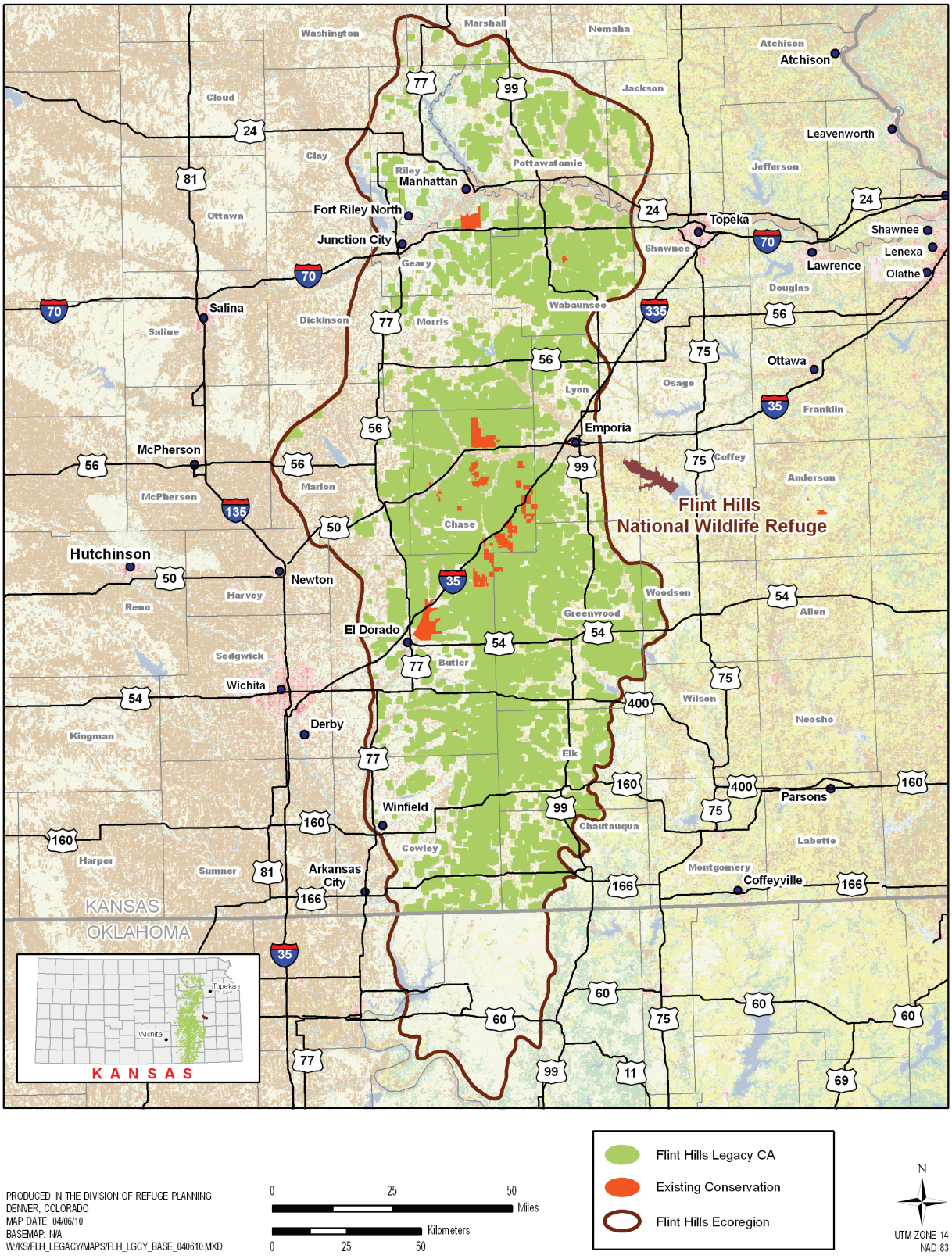

Figure 2. Project map for the Flint Hills Legacy Conservation Area.

tallgrass prairie, including grassland-dependent wildlife. This is especially important for grasslands, because they do not have the localized diversity of geological and elevational gradients that most other ecosystems contain. (Kelly Kindscher, plant ecologist, University of Kansas; personal communication.) This conservation project is needed to help protect the Flint Hills prairie ecosystem from being drastically changed by widespread, unplanned residential or commercial development. The conversion of ranches and rural areas to residential, commercial, and industrial developments, along with forest encroachment, threatens the open expanses of native rangeland that many grassland birds and other prairie-associated wildlife are dependent upon (Huntsinger and Hopkinson 1996).

Based on known conservation principles of landscape ecology, the narrow north-south corridor of remaining tallgrass prairie is exceptionally vulnerable to ecological degradation associated with increased fragmentation. In essence, if this, the world's largest remaining tract of tallgrass prairie becomes any narrower; its ecological functionality will be diminished, reducing the possibility of sustainable populations of fish and wildlife being maintained. The resiliency, or the capacity of the system to absorb changes and disturbances while maintaining its basic structure and function, will be lost.

Currently, the Flint Hills area provides essential breeding, wintering, and migrational habitat for migratory birds such as the greater prairie-chicken, Henslow's sparrow, short-eared owl, Bell's vireo, American golden-plover, grasshopper sparrow, dickcissel, eastern meadowlark, upland sandpiper, buff-breasted sandpiper, scissor-tailed flycatcher, loggerhead shrike, Smith's longspur, Harris' sparrow, Swainson's hawk and northern harrier. Numerous other species of birds, mammals, reptiles and amphibians are known to use the habitat of the Flint Hills (see appendix A).

The Flint Hills represents North America's only remaining landscape-scale expression of tallgrass prairie. Virtually all of what remains is threatened by some form of development—energy including wind and coaled methane development, residential, and general urban expansion. All express direct impacts to the ecosystem, and share a common threat of reducing the ability to use prescribed fire in a region dependent on fire for its existence—it is therefore prudent to conserve the largest, highest quality, feasible representation of this ecosystem.

Due to these threats, the Partners for Fish and Wildlife (PFW) program recognized the Flint Hills as a focus area in their strategic habitat plan. The Service's PFW program has been working with many landowners to help restore and enhance fish and wildlife habitat on private land. PFW activities include habitat restoration and improvement (invasive plant control and grazing, and prescribed fire modifications). However, without long-term landscape-scale protection, the results of current conservation efforts through this program and by many other partners will not be sustainable. The FHLCA program is necessary to protect additional habitat that is not eligible or covered by current Service programs, and will greatly enhance and augment efforts by other agencies and organizations to restore and protect habitats in the Flint Hills prairie region.

The purposes of the Flint Hills Legacy Conservation Area are to:

- preserve landscape-scale ecological integrity of the Flint Hills tallgrass prairie by maintaining, and enhancing the historical native plant, migratory bird, and other wildlife species at a landscape-scale with the support of the associated ranching culture;
- support the recovery and protection of threatened and endangered species and reduce the likelihood of future listings under the Endangered Species Act;
- protect the integrity of tallgrass prairieland associated prairie waters by preventing further habitat fragmentation;
- provide a buffer against climate change, by providing resiliency for the tallgrass prairie ecosystem through landscape-scale conservation;
- protect an intact north-south migration corridor for grassland-dependent wildlife;
- use the built-in resiliency to climate variability of native tallgrass prairie to ensure the continuation of wildlife habitat in the face of the uncertain effect of climate change.

Dave Rintoul/USFWS

Henslow's sparrow.

DECISIONS TO BE MADE

The Service's planning team (see appendix B) will complete an analysis of the environment and management alternatives. Based on the analysis, documented in this environmental assessment, the Service's director of region 6, with the concurrence of the director of the U.S. Fish and Wildlife Service, will make three decisions:

- Determine whether the Service should establish the Flint Hills Legacy Conservation Area.
- If yes, select an approved, conservation-easement project boundary that best fulfills the habitat protection purposes.
- If yes, determine whether the selected alternative would have a significant impact on the quality of the human environment. The National Environmental Policy Act of 1969 requires this decision. If the quality of the human environment would not be significantly affected, a finding of no significant impact will be signed and made available to the public. If the alternative would have a significant impact, completion of an environmental impact statement would be required to address those impacts.

ISSUES IDENTIFIED AND SELECTED FOR ANALYSIS

Open houses were held in Alma, Cottonwood Falls, and Wichita Kansas in November and December 2009. Public comments were taken to identify issues to be analyzed for the proposed project. Approximately 148 landowners, citizens, and elected representatives attended the meetings and most expressed positive support for the project. Additionally, ninety letters providing comments and identifying issues and concerns were also submitted.

In addition, the Service's field staff contacted local government officials, other public agencies, and conservation groups which have expressed an interest in and a desire to provide a sustainable future for the Flint Hills tallgrass region. Approximately 400 factsheet flyers were mailed out, and project information was also made available on the refuge and regional planning websites.

Many of the comments received addressed the need for a balance between natural and cultural systems. There are two main categories of commonly expressed issues and concerns.

Biological Issues

- Effects of wind energy development, oil and gas exploration and development, and residential development.
- Concern that only a small percentage of tallgrass prairie remains.
- Concern about the conservation of the remaining tallgrass prairie in Oklahoma.
- Concern about short-term activities (including annual prescribed fires and early, intensive grazing) having long-term impacts to the tallgrass prairie.
- Effects of tree encroachment from a lack of fire use due to absentee landowners, different land management priorities by some landowners, and development.
- Possible reintroduction of species historically occurring in the region.
- Possible effects to the air and water quality of the area with increasing development.

Socioeconomic Issues

- Effect of wind energy development, and oil and gas exploration and development.
- Possible tax implications of conservation easements.
- Need to preserve the working ranches, and culture of the region.
- Need to preserve history (natural, Native American and ranching heritage).
- Possible long-term implications of easements on land management.
- Potential impacts to the aesthetics, scenic vistas, and natural beauty of the area resulting from development.
- Potential for the development of agri-tourism as a source of income.

USFWS

Bluestem grass in tallgrass prairie.

- Changing, aging population in rural areas.
- Need for increased understanding and appreciation for the tallgrass prairie and area.

Issues Not Selected for Detailed Analysis

Historically, there has been concern about the amount of tax generated to the counties when land protection programs take place. Since the proposed project is a conservation easement program, the land enrolled in the program does not change hands and, therefore, the property taxes paid by the landowner to the county are not affected. Kansas property taxes are based on agricultural value. Since easements will not affect the agricultural value of the property, no changes to the tax base are anticipated.

Development of rural landscapes often leads to increased demand for services and higher costs to rural counties. There would generally be an offset of any perceived reduction in the tax base since the county would not incur the expense of providing services to rural developments.

NATIONAL WILDLIFE REFUGE SYSTEM AND AUTHORITIES

The mission of the National Wildlife Refuge System is to preserve a national network of lands and waters for the conservation, management and, where appropriate, restoration of fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans. The Flint Hills Legacy Conservation Area project would be administered as part of the Refuge System in accordance with the National Wildlife Refuge System Administration Act of 1966 and other relevant legislation, executive orders, regulations, and policies.

Conservation of additional wildlife habitat in the Flint Hills region would also continue to be consistent with the following policies and management plans:

- Land and Water Conservation Fund Act (1965)
- Migratory Bird Treaty Act (1918)
- Endangered Species Act (1973)
- Bald Eagle Protection Act (1940)
- Migratory Non-game Birds of Management Concern in the U.S. (2002)
- U.S. Fish and Wildlife Act (1956)
- North American Waterfowl Management Plan (1994)

RELATED ACTIONS AND ACTIVITIES

The Service is working with other public and private entities to maintain wildlife habitat within the project area. Many organizations in Kansas have recognized the ecological significance of the Flint Hills and the need to bring about conservation in concert with the region's ranching heritage. Ranchers, biologists, federal agencies, and nongovernmental organizations all see a need to protect this remaining tallgrass prairie. Grassroots organizations such as the Tallgrass Legacy Alliance have been working for more than a decade to conserve grasslands in the Flint Hills. The Ranchland Trust of Kansas, Kansas Land Trust, U.S. Department of Agriculture, Kansas Department of Agriculture, and The Nature Conservancy have all also been active in preserving portions of the Flint Hills using conservation easements. Organizations or agencies that are currently holding conservation easements within the conservation boundary include The Nature Conservancy, the Grassland Reserve Program, Ranchland Trust of Kansas, and Kansas Land Trust.

The Nature Conservancy (TNC) is one of many stakeholders who wish to see the ecology and culture of the Flint Hills continue. As part of The Nature Conservancy's ongoing efforts to preserve this impressive prairie landscape, a community-based conservation program called the Flint Hills Initiative was launched in 2001. The Conservancy's conservation goal for the Flint Hills is to maintain the unfragmented nature of this last expanse of tallgrass prairie and to improve the quality of site-specific habitats for target species and natural communities. The Nature Conservancy currently holds 31,436 acres of conservation easements within the Service's proposed project area.

The Grassland Reserve Program (GRP) is a voluntary conservation program administered through the U.S. Department of Agriculture that emphasizes support for working grazing operations, enhancement of plant and animal biodiversity, and protection of grassland under threat of conversion to other uses. Participants voluntarily limit future development and cropping uses of the land while retaining the right to conduct common grazing practices and operations related to the production of forage and seeding, subject to certain restrictions during nesting seasons of bird species that are in significant decline or are protected under federal or state law. A grazing management plan is required for participants. The easement acreage under the Grassland Reserve Program within the Service project area is currently 17,357 acres.

Ranchland Trust of Kansas (RTK), which is an affiliate of the Kansas Livestock Association, was organized as an agricultural-based land trust to hold conservation easements in Kansas. Ranchland Trust of Kansas's mission is to preserve Kansas' ranching heritage and open spaces for future generations through the conservation of working landscapes. Ranchland Trust of Kansas currently has a 655-acre conservation easement in the project area.

Kansas Land Trust (KLT) is dedicated to conserving natural ecosystems, farm and ranch lands, and scenic open spaces; and preserving outdoor recreational opportunities and historical uses of land. Founded in 1990, the KLT advocated in its first years for the passage of conservation easement enabling legislation by the Kansas Legislature, which occurred in 1993. The Kansas Land Trust accepted its first easement in 1994, and has completed thirty-six easements, 3,311 acres of which are in the Service's proposed project area.

Tallgrass Legacy Alliance (TLA) is a not-for-profit grassroots organization dedicated to preserving the ecological, cultural and economic integrity of the tallgrass prairie. The Tallgrass Legacy Alliance is a diverse group with ecological and agricultural interests that has been active on a landscape scale providing information on issues of concern in regards to the Flint Hills region. The Tallgrass Legacy Alliance has also been providing assistance with innovative grazing systems, prescribed fire, and invasive species control (particularly sericea lespedeza) through the use of grants and cost-shares with landowners throughout the Flint Hills.

Private landowners and ranchers have been instrumental in working with the various organizations and agencies to implement conservation projects. More than 98 percent of the project area, including much of the critical habitat for wildlife, is in private landownership.

The Kansas Department of Wildlife and Parks (KDWP) has been a strong partner in the Flint Hills by supporting effective grassland management through landowner technical assistance, Farm Bill implementation, and educational programs.

Partners for Fish and Wildlife (PFW) is a program administered by the Service that provides financial and technical assistance to work cooperatively with landowners to voluntarily restore and enhance wildlife habitat on private land. Since the inception of the PFW program in 1992, the Service has a long and successful history of working with private landowners in Kansas. Since the inception of PFW in 1992 over 349,342 acres of tallgrass prairie have been restored or enhanced.

Infestations of invasive plants such as sericea lespedeza, eastern red cedar, and Osage orange currently are not pervasive in the Flint Hills project area. However, they are present in many watersheds and threaten to spread throughout the project area. In the absence of fire, woody species such as red cedar and Osage orange rapidly invade the tallgrass prairie. In an effort to control invasive plants, the Service's PFW program, The Nature Conservancy, Tallgrass Legacy Alliance, county weed districts, and private landowners have initiated region-wide cooperative efforts. Current tools include educational efforts demonstrating the benefits of prevention with use of prescribed fire, as well as financial assistance for mechanical, biological, and chemical treatments.

HABITAT PROTECTION AND EASEMENT ACQUISITION PROCESS

On approval of a project boundary, habitat protection would occur through the purchase of conservation easements. It is the long-established policy of the Service to acquire minimum interest in land from willing sellers to achieve habitat acquisition goals.

The acquisition authority for the proposed Flint Hills Legacy Conservation Area is the Fish and Wildlife Act of 1956 (16 U.S.C.742 a-742j). The federal money used to acquire conservation easements is received from the Land and Water Conservation Fund, which is derived primarily from oil and gas leases on the outer continental shelf, motorboat fuel tax revenues, and sale of surplus federal property.

There could be additional funds to acquire lands, waters, or interest therein for fish and wildlife conservation purposes through congressional appropriations and donations from non profit organizations and other possible sources.

The basic considerations in acquiring an easement interest in private land are the biological significance of the area, the biological requirements of wildlife species of management concern, existing and anticipated threats to wildlife resources, and landowner interest in the program. The purchase of conservation easements would occur with willing sellers only and will be subject to available funding.