AGRICULTURAL
CANDIDATE CONSERVATION AGREEMENT WITH ASSURANCES FOR LESSER PRAIRIE-CHICKENS

between

OKLAHOMA DEPARTMENT OF WILDLIFE CONSERVATION

and

U. S. FISH AND WILDLIFE SERVICE

This Candidate Conservation Agreement with Assurances (CCAA), effective and binding on the date of the last signature below, is between the Oklahoma Department of Wildlife Conservation (ODWC) and the U. S. Fish and Wildlife Service (USFWS). Participating landowners will be included under the CCAA by signing individual Certificates of Inclusion (CI; Appendix A), subject to approval by ODWC and concurrence by the USFWS. Administrators of this CCAA are:

ODWC:	The ODWC designates the following individual as the CCAA Administrator: Richard Hatcher Director P.O. BOX 53465, OKC, OK 73152 Phone: 405-522-6279 Email: *rhatcher@odwc.state.ok.us*
USFWS:	The USFWS designates the following individual as the CCAA Administrator: Dixie Porter, Ph. D. Field Supervisor, Tulsa Ecological Services Field Office 9014 E. 21st St. Tulsa, OK, 74129 Phone: 918-382-4504 Email: *dixie_porter@fws.gov*
Tracking Number:	TE72923A-0

I. Responsibilities of the Parties

The ODWC is proposed to be the sole non-federal permit holder in this CCAA, and will be responsible for implementing and administering the CCAA. The ODWC will enroll non-federal agricultural property owners (hereafter referred to as participating landowners) under this CCAA through issuance of Certificates of Inclusion (CI; Appendix A) to those property owners who have entered into an ODWC developed and approved Wildlife Management Plan (WMP) (Appendix B) for the lesser prairie-chicken (LEPC) (*Tympanuchus pallidicinctus*) and who are either actively implementing conservation measures for the species or are already providing habitat conditions favorable for LEPC. Appendix C provides a glossary of terms. The CI and Appendices A, B, and C contain the entirety of the landowner's responsibility, and in their entirety form the agreement between the landowner and the ODWC. The individual site-specific WMPs are linked to this programmatic agreement through the CI, which conveys the regulatory assurances provided in the Enhancement of Survival Permit (Permit) to the enrolled property owner. By signing the CI, the property owner agrees to implement or maintain the identified conservation measures associated with current and future management of the enrolled lands. The ODWC, in cooperation with the USFWS, will process and monitor all CI to document that the conservation measures implemented on non-federal property are providing a high conservation benefit to LEPCs. The ODWC will meet with participating landowners, at their request, to provide needed technical assistance, including discussions of funding options, for projects that improve and maintain LEPC habitat. The ODWC will, dependent upon availability, provide funding under various programs to benefit LEPC habitat on non-federal lands within the Planning Area, as described under Part II. The ODWC will prepare and submit an annual report to the USFWS that documents activities performed under this CCAA. ODWC will annually lead a meeting with USFWS and all participating landowners enrolled under this CCAA to review progress from the previous year, discuss factors influencing LEPC conservation and management, and discuss actions that could benefit LEPC to be initiated in the upcoming year.

The USFWS will issue a Permit to ODWC under section 10(a)(1)(A) of the Endangered Species Act of 1973, as amended (ESA) in accordance with 50 CFR 17.22(d) or 17.32(d), that will become effective if or when the LEPC is listed as threatened or endangered. The Permit will provide ODWC and participating landowners with authorization for incidental take of LEPC and provide regulatory assurances should the LEPC be listed at some time in the future. The term of this CCAA is 25 years. The term of the Permit begins on the date of a final rule that lists the LEPC as threatened or endangered and continues through the end of the CCAA term. The term of the CI begins upon the date of the final signature and continues through the agreed upon term of the CI, but not past the term of the CCAA and permit. Both the CCAA and the CI are renewable at the end of the term. If this CCAA is modified at any time in the future, those modifications will not be required of landowners who possess a CI at the time of the modification, unless mutually agreed upon by the ODWC and participating landowners. The Permit will authorize incidental take of LEPCs resulting from lawful activities (e.g., crop cultivation and harvesting, livestock grazing, farm equipment operation, recreation) on enrolled lands, consistent with the level anticipated under the CCAA as stipulated in the CI. USFWS will, within 45 days of receipt of a completed CI from ODWC, notify ODWC in writing (through signature on the CI) of the USFWS' determination of whether the proposed land(s) should be enrolled. If the USFWS does not agree to enrollment of the proposed lands, the USFWS will work with ODWC to develop mutually agreeable measures that would create an adequate CI for

adequate CI for USFWS signature. The USFWS will review reports submitted by ODWC for compliance with the terms of the CCAA and the CIs in a timely manner.

USFWS will assist ODWC and enrolled landowners in locating funds to implement conservation measures under this agreement. For example, the USFWS Partners for Fish and Wildlife Program or other available USFWS programs, may be used to enhance LEPC habitat on privately-owned lands within the Planning Area and assist in conservation efforts, depending upon availability of funds. The USFWS will provide assistance in coordinating development and implementation of this agreement, as requested by ODWC.

Property Owners apply for coverage under the CCAA by agreeing to participate in an ODWC-approved WMP and by completing and submitting a CI application. An approved CI will provide the property owner protection under the Permit associated with the CCAA (and having the same number as the CCAA tracking number above) if the species is listed under the ESA in the future. The property owner will complete and maintain the conservation measures outlined in the WMP in order to maintain a valid and approved CI. Participating landowners will allow ODWC personnel (or an agreed upon designee) to survey enrolled lands for the presence of LEPC, and for suitability as habitat. Participating landowners will allow ODWC to record a baseline of appurtenances on the land, the quality of LEPC habitat and the presence of LEPC. Participating landowners will allow ODWC personnel (or an agreed upon designee) access to the enrolled lands for purposes of monitoring LEPC populations and habitat and for ensuring compliance with agreement. Participating landowners will participate in discussions and meetings with ODWC and other participating landowners, as needed, to discuss the status of LEPC management and conservation on enrolled lands.

The ODWC entered into a contract with Ecosystem Management Research Institute (EMRI) in 2012 to develop a conservation plan for the LEPC in Oklahoma: The Oklahoma Lesser Prairie Chicken Conservation Plan (OLEPCCP; Appendix D). Development of the OLEPCCP involved synthesis of all relevant information currently available and input from diverse stakeholders The OLEPCCP identifies priority conservation areas, population goals, and conservation strategies and actions, and if one is developed, will be consistent with and inform a range-wide conservation strategy for the LEPC, as appropriate. The OLEPCCP also, to the extent possible, links conservation actions to appropriate entities and contains an implementation timeline.

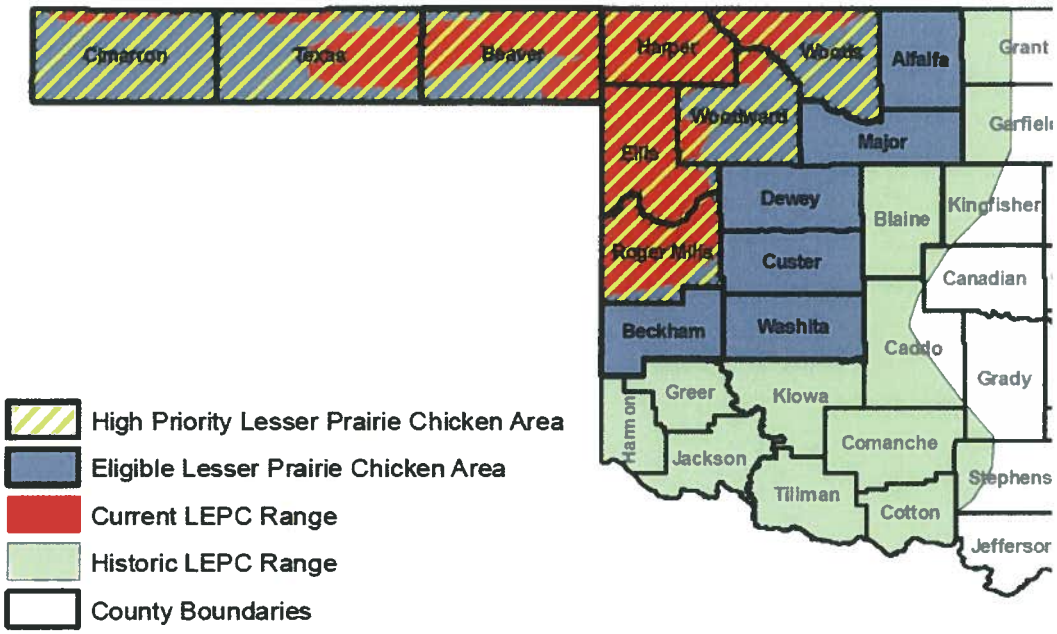
II. Planning Area, Covered Area, and Enrolled Lands

This CCAA pertains to non-federal lands in Oklahoma encompassed by the current distribution of LEPC, those non-federal lands that are unoccupied, but potentially suitable LEPC habitat, and those non-federal lands that could provide habitat should the current population and distribution of LEPC increase. In particular, this CCAA will include all or portions of the following Oklahoma counties and this area will be referred to as the Planning Area: Alfalfa, Beaver, Beckham, Cimarron, Custer, Dewey, Ellis, Harper, Major, Roger Mills, Texas, Washita, Woods and Woodward counties (Figure 1). Covered areas are eligible non-federal lands within the Planning Area that provide suitable habitat for LEPC, or have the potential to provide suitable LEPC habitat with the implementation of conservation measures/. Enrolled lands (or properties) are those lands within the covered area that are included under this CCAA and the Permit, through the process of landowners signing and ODWC issuing the CI. Legal descriptions of

enrolled properties will be described on a plan-by-plan basis, and will be in the WMP for each enrolled property, as required for issuance of the CI. ODWC's goal is to enroll a minimum of 100,000 acres under this CCAA by 01 January 2020. That goal will be re-evaluated on a 5-year basis. Although several counties are included in the Planning Area, highest emphasis will be directed toward those counties within the High Priority LEPC Area identified below (Figure 1).

The ODWC may elect to include/enroll only a portion of a landowner's property as conservation lands if other areas of the property contain unsuitable habitat or activities that are incompatible with conservation lands. However, to provide assurances to the landowner and incidental take coverage on/for the landowners entire property, conservation lands and non-conservation lands (those areas which contain unsuitable habitat or activities that are incompatible with conservation lands), should be included/enrolled. It remains imperative that there must be a high conservation benefit for LEPC when considering the entire enrolled property.

Figure 1. The Planning Area (or Eligible Area) and High Priority Areas for the CCAA, and current and historic LEPC range.*



*The Planning Area is represented by the blue counties and the yellow crosshatched counties. The High Priority Areas are represented by the yellow crosshatched counties.

III. Authorities and Purpose

Sections 2, 4, 6, 7, and 10 of the ESA, allow the USFWS to enter into this CCAA. Section 2 of the ESA states that encouraging interested parties, through Federal financial assistance and a system of incentives, to develop and maintain conservation programs is a key to safeguarding the Nation's heritage in fish, wildlife, and plants.

Section 4 of the Act outlines guidelines for identifying species that are threatened or endangered under the Act. Section 4(h)(3) requires that the Service establish a ranking system to assist in identifying species that should receive priority review for listing. To fulfill these responsibilities, the Service developed a program to identify species that warrant protection under the Act (termed "candidates" or "candidate species") and to monitor and conserve those species for which protection is deemed appropriate until listing can proceed. By entering into this CCAA, the USFWS is utilizing its Candidate Conservation Programs to further the conservation of the Nation's fish, wildlife, and plants.
Section 6 of the Act provides for the cooperation with the States in endangered species conservation, including matching Federal funding. Collaborative stewardship with State agencies is important in the development of CCAAs, given the statutory role of State agencies and their traditional conservation responsibilities and authorities for resident species.

Section 7 of the ESA requires federal agencies, including the USFWS, to review programs that it administers and to utilize such programs in furtherance of the purposes of the ESA. Additionally, section 10(a)(1)(A) of the ESA authorizes the issuance of Permits to "enhance the survival" of a listed species.

ODWC enters into this CCAA under the authority of Oklahoma Wildlife Conservation Code, Title 29 (1974), § 3-101. The mission of ODWC is to manage and conserve the natural and cultural resources of Oklahoma and to provide hunting, fishing, and outdoor recreation opportunities for the use and enjoyment of present and future generations. As such, the ODWC plays a significant leadership role in LEPC conservation.

The LEPC is proposed for listing as threatened under the ESA. The final listing determination is due September 30, 2013. A determination of listing depends on a full assessment of the status of the species in light of the five ESA listing factors:

1. the present or threatened destruction, modification, or curtailment of its habitat or range;
2. overutilization for commercial, recreational, scientific, or educational purposes;
3. disease or predation;
4. the inadequacy of existing regulatory mechanisms; and/or
5. other natural or manmade factors affecting its continued existence

The LEPC currently occupies only a small percentage of their historical range, as depicted in Figure 2 below. The most serious threats to the LEPC are habitat loss resulting from conversion of native rangelands to introduced forages and cultivated crops; conversion of suitable habitat restored under the Conservation Reserve Program (CRP) to cropland; cumulative habitat degradation caused by severe grazing; and energy development, including wind, oil, and gas development and associated transmission lines and infrastructure. Additional threats are woody plant invasion of open prairies due to fire suppression, herbicide application that alters suitable habitat, and habitat fragmentation caused by structural, transportation, and other developments.

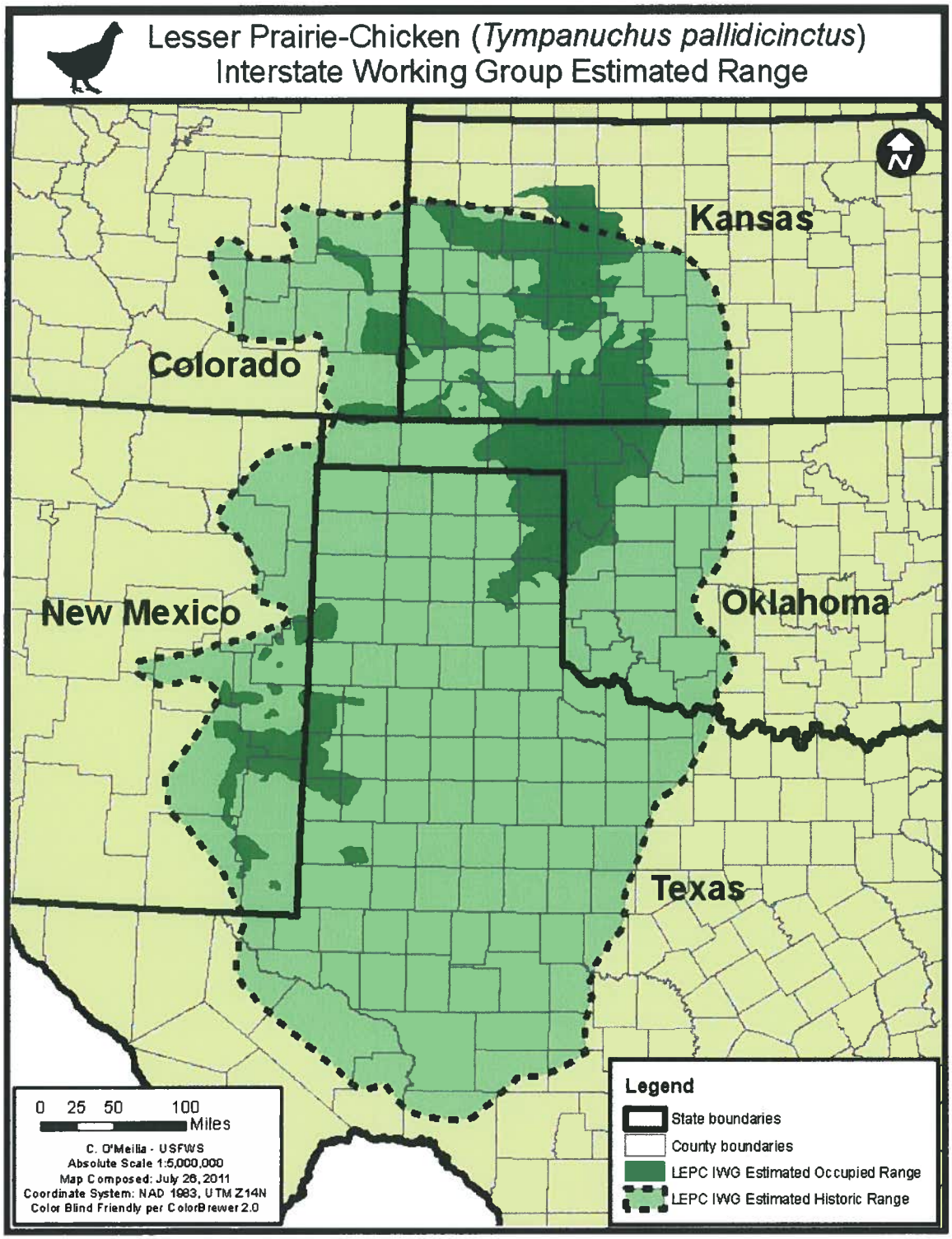
Many of these threats may exacerbate the normal effects of periodic drought on LEPC populations. In many cases, the remaining suitable habitat has become fragmented by the spatial arrangement of these individual threats. Habitat fragmentation can be a threat to the species through several mechanisms: remaining habitat patches may become smaller than necessary to meet the requirements of individuals and populations, necessary habitat heterogeneity may be

lost to areas of homogeneous habitat structure, and the probability of recolonization decreases as the distance between suitable habitat patches increases.

Oklahoma is an ecologically complex state where conservation of wildlife species depends on landowners who manage the majority of the important habitats, and thus maintain wildlife diversity (Murray, 1996; ODWC, 2005). ODWC recognizes the intrinsic value of good stewardship and supports landowners who assume this responsibility. In Oklahoma, assistance to private landowners is an integral component of ODWC's Private Lands program, which also includes programs and services such as the Wildlife Technical Assistance program, technical and financial assistance through the Landowner Incentive Program, Wildlife Habitat Improvement Program, and recognition of exceptional land stewardship through the ODWC Landowner of the Year Awards Program. The ODWC private lands program focuses on a diverse array of programmatic responsibilities for wildlife habitat management and development, technical assistance, incentive programs, and habitat conservation. ODWC Wildlife Division personnel provide technical assistance to land managers and landowners upon request for assistance to develop plans and recommendations for voluntary conservation, enhancement and/or development of wildlife habitat which address the conservation goals and objectives of the landowner. Other agencies, such as the Natural Resources Conservation Service, often partner with ODWC and the USFWS to support conservation of LEPC on private lands.

The purpose of this programmatic CCAA is for ODWC to join with the USFWS and participating landowners to implement conservation measures for the LEPC in Oklahoma, in support of ODWC's ongoing and future efforts to manage, conserve, and recover the species. Under this CCAA, ODWC will issue CIs to non-federal landowners who enter into ODWC-approved WMPs for LEPC and are actively implementing or maintaining conservation measures for this species. The conservation measures implemented by participating landowners would generally consist of prescribed grazing, prescribed burning, brush management, CRP and cropland management, range seeding, and other upland wildlife habitat management practices (see Section V. Potential Conservation Measures).

Figure 2. LEPC Interstate Working Group Estimated Range Map.



An additional purpose of this CCAA is to provide a mechanism of assuring non-federal landowners, through CIs that no additional conservation measures, other than those agreed upon in the WMP, will be required of them if the LEPC becomes listed as threatened or endangered

under the ESA. Such an agreement will help alleviate private property rights concerns, as well as generate support from non-federal landowners.

Consistent with the USFWS's Candidate Conservation Agreement with Assurances Final Policy [64 FR 32706, 64 FR 32726, 64 FR 52676, 69 FR 24084], the conservation goal of this CCAA is to encourage development and protection of suitable LEPC habitat on non-federal lands. The conservation goal will be met by giving the State of Oklahoma and non-federal landowners incentives to implement voluntary conservation measures and providing landowners with regulatory certainty concerning land use restrictions that might otherwise apply should LEPC become listed under the ESA. Financial assistance to implement this CCAA may be available through conservation programs of the U.S. Department of Agriculture, the USFWS, and various Oklahoma State Agencies, most notably the ODWC, subject to annual appropriations. This CCAA could be used as a model for similar agreements for grassland species of management concern in Oklahoma.

IV. Background and Description of Existing Condition

The LEPC is a distinct species of North American prairie grouse that inhabits native prairie and grazed rangelands dominated primarily by *Quercus havardii* (shinnery oak), bluestems and *Artemesia filifolia* (sand sagebrush)-bluestem vegetation types (Sharpe 1968). Like other prairie grouse that are polygynous, males characteristically gather in the spring to perform courtship displays on traditional breeding areas called leks. Males gather to display on leks at dawn and dusk beginning in late February through early May. Dominant older males compete for and defend territories at the center of the lek where most of the copulations occur. Younger males typically occupy peripheral territories around margins of the lek. Females arrive at the lek in early spring with peak hen attendance occurring during mid-April.

After mating, hens select a nest site, usually within 3 miles (mi) of a lek (may be as far as 5-6 mi from a lek), and lay a clutch of 10-12 eggs. Hens may attempt a second nest, rarely a third, following a nest failure. Incubation lasts 24-26 days, and young leave the nest within hours of hatching. Broods typically remain with females for 12-15 weeks. Campbell (1972) estimated that LEPC have a maximum life span of 5-years.

The autumn and winter diet of LEPC is dominated by vegetative matter. Shinnery oak leaf galls, catkins, leaves, and acorns may comprise 60-70% of the autumn and winter diet; *Rhus aromatica* (fragrant sumac) and sand sagebrush also are important winter foods. When available, grain sorghum may be used as winter food, particularly when availability of native foods is diminished during infrequent periods of prolonged snow and/or ice cover. During the spring and summer months, insects begin to increase in importance in the diet. In New Mexico, green vegetation constituted about 80% of the spring diet (Davis et al. 1979), whereas insects comprised 55% of the summer diet of adults and 99-100% of the summer diet of juveniles.

Major factors affecting the status of the LEPC are conversion, degradation, and fragmentation of habitat. The conversion of native sand sagebrush and shinnery oak rangeland to improved pastures and cropland has been documented as important factors in the decline of the LEPC. Although acres of former cropland have been enrolled in the CRP in northwestern Oklahoma, LEPC populations have not exhibited a marked response to the available vegetation types and

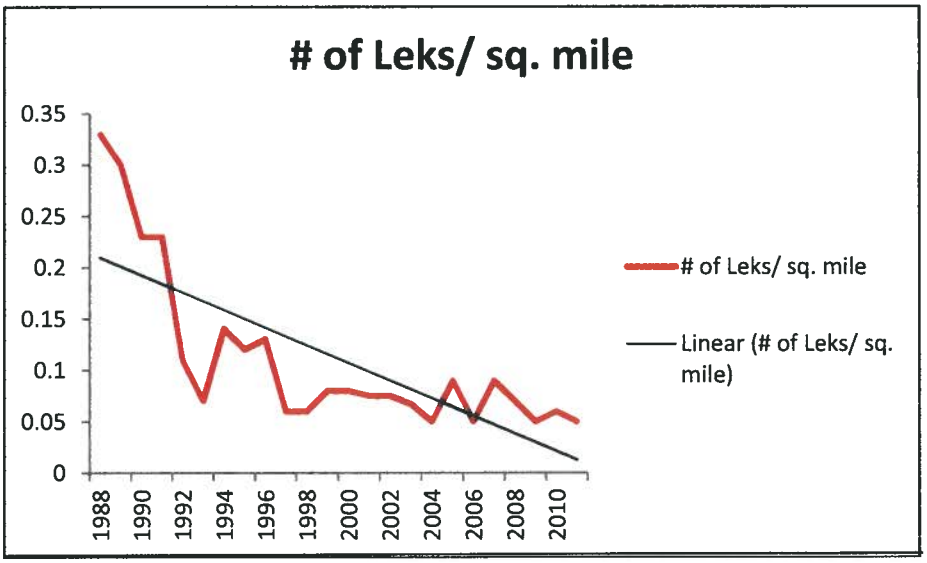
structure created by the program. Many CRP acres have been planted to monocultures of *Bothriochloa* spp. (old world bluestem) or *Eragrostis curvula* (weeping lovegrass), which do not meet food, brood-rearing, and thermal habitat requirements for the LEPC.

A mixture of heavily, moderately, and lightly grazed and ungrazed native rangelands is an essential component of LEPC habitat, and should occur in a mosaic pattern on a landscape scale. However, in most areas, insufficient quantities of lightly grazed or ungrazed habitat are available to support successful LEPC nesting. Overutilization of rangeland by livestock, to a degree that residual cover remaining in the spring is inadequate to support nesting activities, is considered detrimental to LEPC populations because grass height is reduced below that necessary to provide concealment of the hen and her nest and desirable food plants are diminished.

Systematic annual surveys of a number of Oklahoma counties where LEPC occur began in 1962 (ODWC, 1970). The historical range, based on accounts beginning as far back as the early 1900's (Davis et al., 2008), is shown to encompass all or parts of 30 counties. Copelin (1963), estimated that the LEPC's range from the 1940's to the early 1950's had decreased and LEPC only occurred in all or parts of 13 counties. Currently, LEPC range in Oklahoma encompasses only 9 counties, with most occurrences documented in only 6 counties. Researchers considered the occupied range at the mid-20th century (1940-1950) to be a reduction from the historical range (ca. 1900). Current population size is unknown but was estimated to be about 7,500 individuals in 1978 (Cannon and Knopf, 1980) and no more than 3,000 individuals in 2000 (Horton, 2000).

Between 1982 and the present, ODWC annually estimated density of leks/square mile (mi^2) of suitable habitat in 6 counties. During this time period, lek density has steadily declined from a high of 0.33 leks/mi^2 surveyed in 1988 to current lek densities of less than 0.1 leks/mi^2 surveyed, with one of the most notable decreases occurring in the early 1990's (ODWC, 2008). Current lek density trends appear stable, but at a greatly reduced density when compared with densities observed during surveys conducted in earlier years.

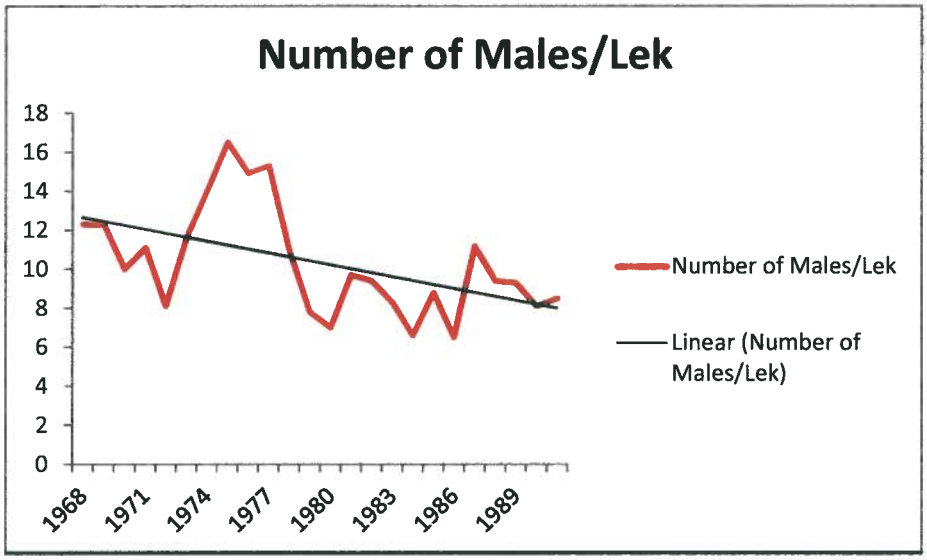
Figure 3. Number of leks per square mile through time in Oklahoma.



According to the most recent (Spring 2010) LEPC surveys the estimated density of LEPC leks on routes was 0.06 leks/mi^2. The trend from 1988 to present shows a decreasing trend from 0.33 leks/mi^2 to 0.06 leks/mi^2. The most noticeable drop occurred during the five-year period from 1988 to 1993 when lek densities decreased from 0.33 leks/mi^2 to 0.11 leks/mi^2. However, the most recent trend has been relatively stable, with lek density since 1997 fluctuating between 0.08 and 0.05 leks/mi^2.

LEPC flush counts have been conducted continuously since 1968. Survey procedures were modified in 1992 and again in 1999. Between 1968 and 1991 the average number of birds (males only) for all leks surveyed (even if no birds were present on the lek) was included in the data analysis. These numbers ranged from a high of an average of 16.5 males/lek in 1975 to a low average of 6.6 males/lek in 1984.

Figure 4. Number of males per lek through time in Oklahoma.

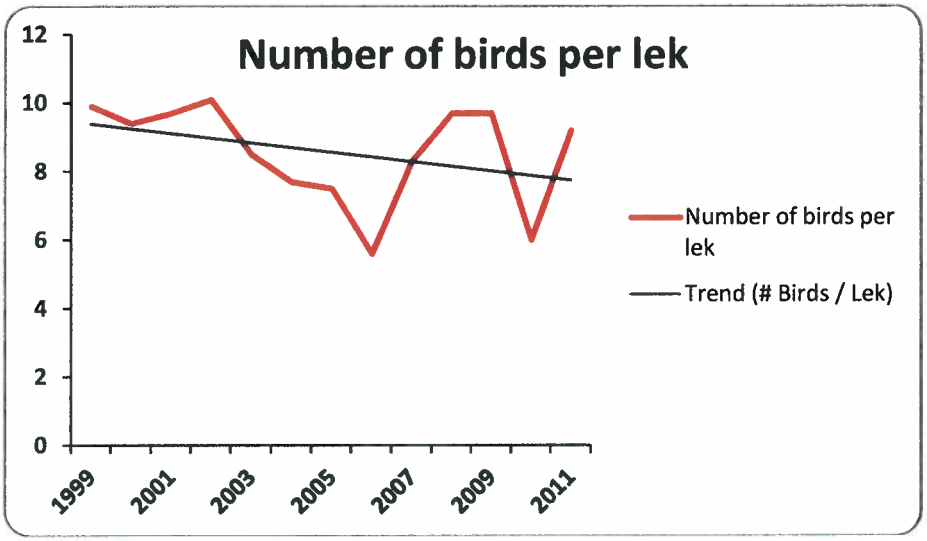


Beginning in 1992 and continuing through the 1999 survey period, only those leks on which birds were present (active leks) were included in the data analysis figures. There was a noticeable decline in survey numbers from 1993 to 1995. The 9.8 birds/active lek recorded during the 1993 survey dropped to 4.6 birds/active lek in 1995. The survey numbers did rebound to 9.6 birds/active lek in 1998. In 1999 surveyors began counting all birds (females as well as males) seen on active leks. From 1999 through the present the number of birds per lek has remained stable to slightly decreasing.

Much of the remaining suitable habitat for LEPC is becoming increasingly fragmented by cultivated croplands, roads, structural development, oil and gas exploration, wind energy development, and brush encroachment. In January of 2011 the Farm Service Agency recognized 3,036,119 acres of cropland in the Planning Area for the CCAA (Pers. comm., Rod Wanger, Farm Services Agency, Stillwater, OK). Of those 3 million acres, approximately 668,947 acres are in active CRP (Pers. comm., Rod Wanger, Farm Services Agency, Stillwater, OK).

According to Map Information Assembly and Display System (MIADS) land use data (circa 1990) there were 5,095,846 acres classified as rangeland in the Planning Area of the CCAA (Pers. comm., Steve Glasgow, Natural Resources Conservation Service, Stillwater, OK).

Figure 5. Number of birds per lek through time in Oklahoma.



Although it initially appears that a large proportion of the CCAA Planning Area is currently in rangeland and CRP, the patterns of placement on the landscape, the species of grass planted on CRP lands, and the management practices implemented on these lands contribute significantly to whether these acres are available and useable habitat for LEPC populations. For example, fragmentation (i.e., patterns of land use on the landscape) may exacerbate the local extinction process through several mechanisms: remaining habitat may be smaller than necessary to meet the life history requirements of the species, necessary habitat heterogeneity may be lost, habitat between patches may hold high levels of predators, collision with utility lines and other anthropogenic structures may increase adult mortality, and the probability of recolonization decreases as habitat patches are separated by greater distances. As a group, prairie grouse are relatively intolerant of extensive habitat fragmentation and human disturbance.

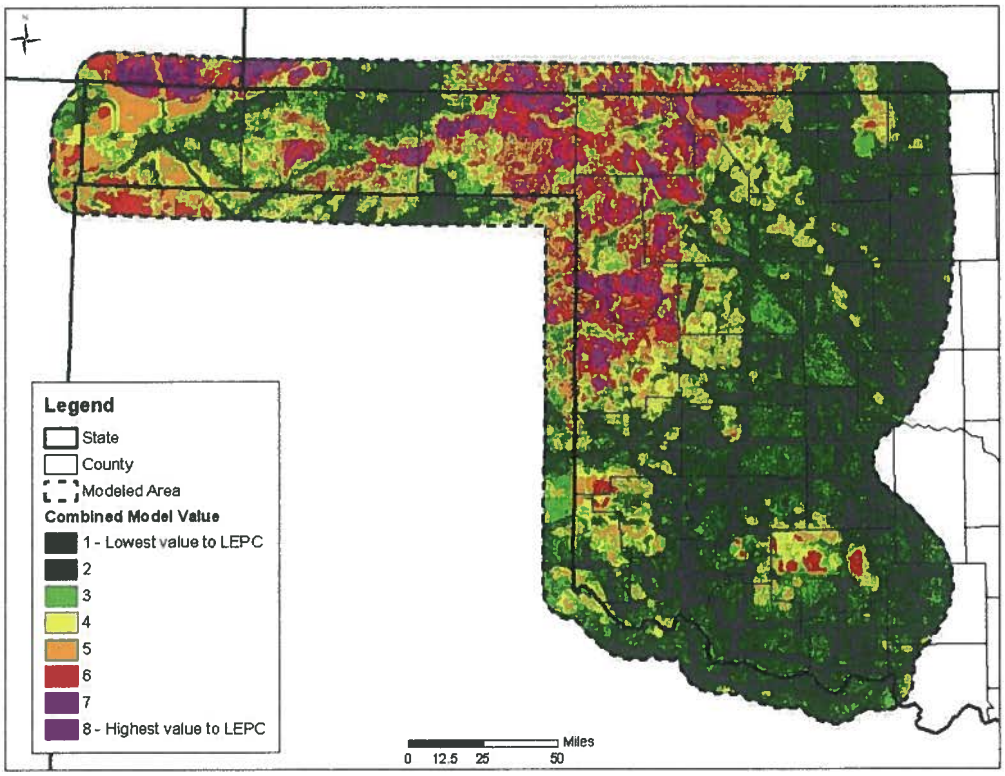
Drought has been shown to impact LEPC through its effect on seasonal growth of vegetation necessary to provide nesting and roosting cover, food, and escape from predators. Home ranges tend to be larger in drought years, and recruitment may be less likely during drought and in the year following. Along with other prairie grouse, the LEPC has a high reproductive potential in years of adequate conditions. Thus, drought conditions are unlikely to be the sole causative factor in long-term LEPC population declines.

ODWC has conducted a wide variety of outreach and conservation efforts for LEPCs, and is committed to the continuation of outreach and conservation in the future. Past ODWC outreach and conservation efforts for LEPCs include listening sessions with private landowners, inter-agency conservation forums, participation in LEPC Interstate Working Group activities (e.g., development and production of LEPC digital video), support and delivery of the ODWC Wildlife Habitat Improvement Program (WHIP), support and delivery of conservation programs within

the Farm Bill (e.g., CRP, WHIP, and Environmental Quality Incentives Program), technical assistance to landowners and managers, and directed program and research funding. Current ODWC outreach and conservation efforts for LEPCs include the Voluntary Offset Program (VOP), the annual LEPC Festival in Woodward, OK. In addition, ODWC has developed and deployed on their website the Oklahoma Lesser Prairie Chicken Spatial Planning Tool (OKLEPCSPT). ODWC also co-led with Kansas, and Playa Lakes Joint Venture, the development of a five state Southern Great Plains Crucial Habitat Assessment Tool (SGP CHAT) for the LEPC

The OKLEPCSPT is a conceptual spatial model (output below) that ranks land relative to its importance for LEPC conservation. This LEPC model is a key planning and decision support tool available on the internet for use by the general public, other conservation agencies and partners and for helping landowners, oil and gas and wind energy developers, electrical transmission line developers, and other commercial and private interests identify, avoid or minimize negative effects of development or land use practices to lesser prairie-chickens. The LEPC model produces a spatial grid spanning the historical range of the LEPC in Oklahoma in which each 30m x 30m pixel is numerically ranked (1 to 8). The higher the rank, the more valuable that pixel is to the LEPC. Ranks are determined by comparing each pixel in the grid against a set of eight criteria addressing LEPC occurrence, habitat requirements and threats.

Figure 6. Relative Habitat Value for LEPC in Oklahoma (OKLEPCSPT)



Based on calculations using the OKLEPCSPT, the amount of land within the habitat ranking classes, by county, is provided in the following table (Table 1). At least 90 percent of the area

encompassed by the various classes depicted is in non-federal ownership. The goal of this CCAA is to enroll a minimum of 100,000 acres under this CCAA by 2020, and allows for the enrollment of an additional 100,000 acres between 2020 and 2037.

Table 1. Ranking classes and amount of CCAA Planning Area by county derived from OKLEPCSPT.

County	Area (in acres)		
	Ranking Classes 7-8	Ranking Classes 6-5	Ranking Classes 3-4
Alfalfa	0	35,156	100,926
Beaver*	163,931	507,745	375,258
Beckham	0	76,027	169,114
Cimarron*info on LEPC contract and ODWC	47,577	372,828	435,282
Custer	0	46,598	167,622
Dewey	41	50,894	249,207
Ellis*	139,916	409,282	222,777
Harper*	79,834	345,532	222,992
Major	0	14457	111036
Roger Mills*	65,851	332,377	277,659
Texas*	41,727	295,745	512,848
Washita	0	13,465	75,847
Woods*	**67,018**	**199,601**	**259,726**
Woodward*	56,982	237,306	248,116
Total (entire Planning Area--all classes)	10,571,802		

* -- Counties within currently Estimated Occupied Range as determined by LPCIWG

The five-state SGP CHAT is an online regional mapping tool identifying and prioritizing LEPC habitat and movement corridors across political jurisdictions. This model will be useful in developing landscape-level conservation strategies for the five state wildlife agencies across the range of the species, and targeting conservation efforts. Like the OKLEPCSPT this Decision Support System (DSS) is a key planning and decision support tool available on the internet for use by the general public, other conservation agencies and partners and for helping landowners. The finest data resolution is one square mile hexagons, and use of these data layers at a more localized scale is not appropriate and may lead to inaccurate interpretations. The classification may or may not apply to the entire section. Consult with local biologists for more localized information.

In addition, ODWC continues delivering both state and Federal cost share assistance programs for LEPC habitat improvement, promotion of assistance programs through various media outlets and field days, and assistance with creation of a wildlife credits program. Future ODWC conservation and outreach efforts will address all of the above in addition to recruitment of additional cooperators through priority area designation, and targeted enrollments for all available and applicable conservation delivery programs, increasing educational opportunities for

the public, and development of a five-state DSS that encompasses the entire range of the LEPC in the states of Oklahoma, Kansas, Texas, New Mexico and Colorado.

In late June 2011, the USFWS approved a Conference Report pursuant to section 7 of the ESA on implementation of the Lesser Prairie-chicken Initiative (LPCI) by the Natural Resources Conservation Service (NRCS). The LPCI is a conservation initiative based upon a targeted approach to implementation of specific conservation practices to benefit lesser prairie-chicken populations and expand their occupied habitats within their five-state range. The LPCI focuses NRCS and partner financial and technical resources on high priority regions within the LPCI Action Area to maintain and enhance existing habitats. The LPCI includes a monitoring aspect to ensure that resources are actually being targeted to maximize LEPC conservation benefits. The LPCI will play a crucial technical assistance role during the implementation of this CCAA. Funds for implementation of the LPCI are subject to annual appropriations.

V. Potential Conservation Measures

This section includes the conservation measures available for consideration under this CCAA, many of which are based upon NRCS technical standards, LEPC CI, Conference Opinion, and WMP guidance. The standards are determined by the funding source (i.e. Partners for Fish and Wildlife funding stipulates certain standards and WHIP funding requires certain standards). The specific conservation measures implemented on a particular non-federal property need not include every single measure identified here. The goal of the CCAA is to reduce threats to the species and conserve, restore, and/or enhance necessary non-federally owned LEPC habitats in Oklahoma.

The CCAA conservation measures to be implemented or maintained are intended to conserve, restore, and/or enhance LEPC habitat so that progress toward sustainable population levels can occur. Use of these actions also is intended to reduce any unfavorable impacts to LEPC arising from the management and utilization of the enrolled lands. CI applications and the supporting ODWC-approved WMPs will address the improvements to be made, sources of funding, responsibilities for completion of improvements, a time frame, and a monitoring plan to ascertain the success of improvements.

Although all seasonal habitat requirements of LEPC are necessary for their conservation and recovery, available data indicate that increasing breeding success (i.e., nest success, recruitment) is the primary key to increasing numbers of LEPC (and perhaps therefore, distribution) (Hagen et al. 2004). As a result, conservation measures implemented to improve, recover, and/or enhance LEPC habitat should focus on providing suitable nesting and brood-rearing habitat components (e.g. areas with light to moderate grazing pressure and dominant native shrub cover). The conservation measures outlined below are structured to first restore and then maintain native prairie habitats as nesting and brood-rearing habitat, and also will meet the habitat needs of many other short and midgrass-dependent species.

LEPC habitat types (e.g., nesting, foraging, and brood-rearing habitats) should be distributed in a mosaic over contiguous blocks of rangeland habitat. Heterogeneous or "patchy" landscapes encompassing multiple successional states that include tall grasses and shrubs (nesting habitat) in proximity to more open grasslands supporting forbs (brood-rearing habitat) with areas of short

grass and bare ground (breeding habitat) support all of the habitat types used by LEPC throughout the year. Large habitat blocks dominated by a single successional state or smaller blocks that are not in proximity to other habitat types used by LEPC may not be suitable for use by LEPC. For example, nesting habitat (tall grass and shrubs approximately 18 inches in height) and brood-rearing habitat (forbs, sparsely distributed tall grass, patches of bare ground) should always be available within 1 mile of known leks. The locations of these patches may be rotated throughout the ranch or management unit, but planning to maintain this pattern and still provide necessary patchiness of all habitat components is the challenge and key to LEPC management. Another method to achieve patchiness on the landscape is through prescribed grazing and fire, the schedule of which would include considerations of forage quantity and location, livestock numbers, and drought. In addition, grazing plans related to LEPCs are intended to produce a variety of several habitat types on the landscape, and therefore must remain flexible to change. A grazing system that creates heterogeneity (i.e., patchiness) on the landscape (or within the management unit) by maintaining middle to late stages of plant succession interspersed with early successional stages, is optimal for LEPC (Hagen et al. 2004).

CONSERVATION MEASURES

The following are recommended conservation measures to facilitate LEPC habitat conservation, restoration, and/or enhancement within the Planning Area. The list is organized by general habitat management technique for ease of use. Flexibility exists within all techniques at the discretion of those involved in the ODWC-approved WMP process. Although not included in the list, it is important to recognize that in addition to the listed techniques, a property covered by a CI that already has suitable LEPC habitat and would be managed "as is" or on which improvements to the habitat would be made, would also constitute an appropriate conservation measure within this CCAA. Sources for the list of conservation measures include Mote et al. (1999), NRCS and WHMI (1999), Jamison et al. (2002), Bidwell et al. (2003), Bidwell and Peoples (2004), Hagen et al. (2004), and Riley (2004). Background information and additional detail can be found within these resources. It should be noted that the list of conservation measures, provided in the following paragraphs, is a synthesis of available information, and reflects our current understanding of LEPC habitat requirements and population responses to available habitat. The monitoring component of this CCAA (see Section X Monitoring Provisions) is an important part of delivery of conservation measures in order for continued refinement of practices; it is strongly recommended that participating landowners and technical assistance providers (ODWC, NRCS, USFWS biologists) evaluate and monitor LEPC habitat responses to implemented measures using the principles of adaptive resource management (Walters and Holling 1990).

Fire and Grazing

Using the appropriate stocking rate combined with proper fire frequency will produce desired habitat conditions for all life stages and seasonal uses for LEPC. These desired habitat conditions can be described as early, middle and late successional states for any plant community. Fire and grazing are the main habitat management tools that affect habitat structure and pattern on native prairies and shrublands. The frequency, size, and pattern of burning or grazing, and their relationship (fire-grazing interaction) must be considered and managed to meet the year-round habitat requirements of the lesser prairie-chicken.

Stocking Rate - Stocking rate is defined as the number of grazing animals or animal units on a given amount of land over a certain period of time.

a. In order to provide simultaneous representation of multiple plant successional states, stocking rates should vary between light to moderate. Light to moderate stocking rates can be calculated using NRCS's ecological site descriptions or using other conventional quantifying techniques. Multiple successive years of grazing too lightly or too heavily across a management area can reduce habitat quality and plant diversity.

Fire Frequency

b. Depending on rainfall, burning 20 to 30 % of a project area each year will allow the entire area to be burned within the desired 3- to 5-year interval and still maintain plant diversity. Burning more than 50 % of the project area in one year may temporarily diminish habitat availability. August to April/May is the natural fire season; however, burning in other seasons offers opportunities to offset the inability to implement prescribed burns during less than favorable weather conditions (e.g., excessive wind speed, etc.), and can be an acceptable conservation measure. Burns can be scattered across the project area or in large blocks totaling 20 to 30 % of the overall project area per year. Unlike many western states where fire is thought to increase abundance of invasive species, this isn't an issue in the southern Great Plains.

Habitat Diversity

c. By following an appropriate stocking rate and fire frequency strategy, 3 to 4 different plant successional states should be present at any given time. Plant succession should not exceed the natural variability of plant communities within the Southern Great Plains. See diagram below from Knopf (1996).

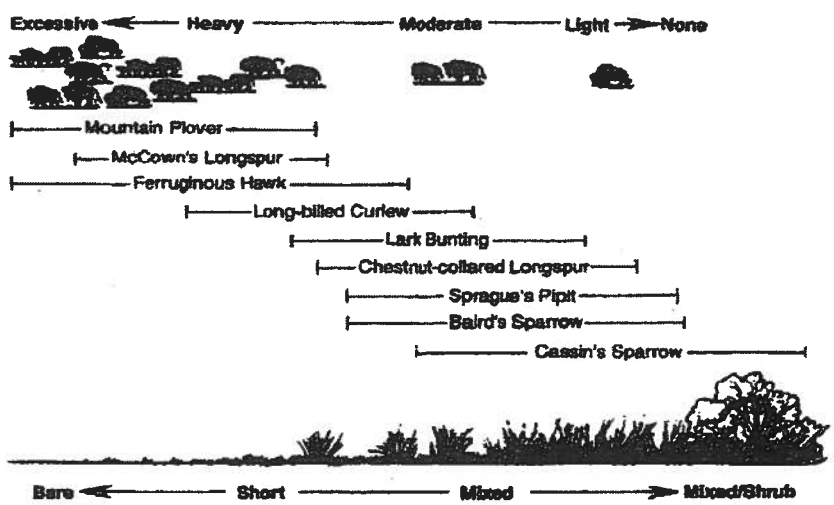


Figure 11.2. Distributions of endemic birds of prairie uplands on a shortgrass/mixed-grass and historical grazing pressure continua across the western landscapes of the Great Plains.

Fencing

d. Permanent barbed-wire and some electric fences can be lethal to LEPC in flight, and should be used only when necessary to achieve other management objectives. The use and installation of fences should be coordinated with other practices such as water distribution and patch burning, to achieve desired prescribed grazing goals and minimize potential impacts to LEPC. ***Any unneeded fences should be removed.*** Barbed wire fences should be marked to reduce potential collisions and one-or-two wire electric fences should be substituted for barbed wire fences if conditions permit. On each project area to be covered under the CCAA the amount of fence should be minimized to the extent practicable and possible, and alternative measures (e.g. fire, mineral, water, and some electrical fences) should be used to the extent practicable to manage livestock grazing. Where feasible, fences should be as low as possible while still maintaining their functionality. When no longer needed, fences should be removed. Information on fence marking is available from the Sutton Center (*www.suttoncenter.org/LPCH/fences*).

Herbicides

a. Herbicides should be used sparingly and primarily as a tool to maintain cover and food producing plants such as shrubs and forbs, and the insects that require them. Herbicides should be used only when habitat goals cannot be achieved by other means. Where grazing management (i.e., stocking rate) is appropriate for the productive capabilities of the land and fire is periodically used to direct grazing and balance shrub canopy and height, herbicides should only be necessary to control invasive nonnative plants. Invasive, non-native plants, such as *Cynodon dactylon* (Bermuda grass), *Bothriochloa* spp. (Old World bluestems), *Elaeagnus angustifolia* (Russian olive), *E. umbellata* (autumn olive), and other exotic species are of no value to the LEPC, and as their density increases on the landscape, the value of the habitat for LEPC diminishes. Additionally chemical control of native brush species, like *Robinia pseudoacacia* (black locust) and *Maclura pomifera* (Osage orange), which did not historically occur in native prairies used by LEPC may be recommended (see also section on brush management below). If necessary to use herbicides on shinnery oak, the goal should be to temporarily reduce shinnery oak competition with grasses. Herbicides should be used only at dosages that would defoliate shinnery oak and not kill it. Application should follow natural landscape patterns and large block and linear applications should be avoided. When herbicide use is deemed appropriate, spot treatment of target plants (rather than broadcast application) is preferred.

Conservation Cover

a. Areas of cropland, introduced grasses and other introduced forage plants, and similar disturbed sites (e.g., roads and well pads) should be converted into native warm season grasses and forbs, based upon site-specific recommendations (using USDA-NRCS Ecological Site Descriptions, historic plant community, and LEPC habitat needs) included in the ODWC-approved WMP for the enrolled property. Restoration of these sites using a monoculture of grasses or through use of non-native species provides limited benefit to LEPC, and is discouraged. If a landowner decides against

site restoration, the ODWC may elect to exclude a portion of the property as conservation lands if the property contains unsuitable habitat or activities incompatible with conservation lands.

Haying

b. Any haying near known leks and nest sites should be deferred until breeding and nesting activities are completed (no earlier than July 1st). Harvesting/cutting should be conducted in a manner than maintains adequate heights of residual vegetation and that allows adequate time for sufficient regrowth following harvest. Such measures ensure that the sites provide suitable LEPC habitat in the winter and following spring.

c. Cutting of hay should be conducted in a manner that allows any birds using that field to flush or escape harm that could be caused by the action of machinery. Appropriate harvest options include initiating cutting on one side of a field and working back and forth across the field or starting harvest in the center of the field and working outward. Harvest methods that begin on the outside perimeter of the field and work inward toward the center of the field should be avoided. This method tends to push birds toward the center of the field and often results in birds becoming "trapped" in the center island of uncut vegetation. Adults and more frequently, young birds, are reluctant to escape by flushing or by running through the more open habitat left after harvest. Consequently these birds are at greater risk of being harmed by the machinery or of being captured by predators. Birds of prey often hunt on fields that are being harvested due to an increased ability to detect and capture prey. As birds flee the action of the machinery, lack of escape cover increases their risk of capture by birds of prey. In some cases modification of haying equipment by addition of a flush bar would be an acceptable alternative to center-out mowing.

Conservation Reserve Program (CRP)

d. Farm Services Agency (FSA)-approved mid-contract management practices for CRP lands (which are mandatory for more recent signups, and allowed for earlier sign-ups with contract modification and NRCS technical assistance and FSA approval) should be implemented. Dependent upon whether the CRP acreage is planted to introduced grasses (CP-1) or native grass (CP-2), the management activities (e.g., prescribed burning, discing, interseeding with native grasses or perennial forbs, etc.) most beneficial to LEPC will be site-specific, and tailored to the property through the FSA CRP contract administration, NRCS technical assistance, and the ODWC-approved WMP process.

e. Properly managed native grasslands will include a forb and shrub component and should range in height from approximately 13.5 to 30 inches (Hagen et al. 2004). Objectives of CRP contracts should strive to replicate these conditions. The optimum CRP planting mixture would consist of native warm season perennial bunch grasses and include native legumes, forbs, and woody shrub plantings (Litton et al. 1994). Seeding with multiple native species helps re-create natural LEPC habitat conditions and provides important diversity of vegetation heights and growth-forms.

f. Non-native grasslands established under CRP contract should be restored to a site-appropriate native plant community (based upon ecological site descriptions, historic plant community, USDA-NRCS Ecological Site Guides, and LEPC habitat

needs) once the CRP contract expires (Bidwell et al. 2003), or excluded as an area inconsistent with conservation lands.

Brush Management

g. Native shrubs (not trees) are a component of high quality native LEPC habitat. However, extensive areas of shrubs with little or no interspersed native warm season bunch grasses provides limited habitat value for LEPC. In such cases, brush management is a necessary management action to maximize LEPC habitat value.
h. Trees and similar forms of woody (non-herbaceous or succulent) plants, such as *Juniperus virginiana* (eastern red cedar), black locust, osage orange, and *Prosopis glandulosa* (mesquite) are not native to grasslands used by LEPC. Management or removal of these species, either through manual/mechanical (chainsaws, feller bunchers, hydraulic shears, masticators, etc.) or chemical means may be necessary to restore or enhance grasslands to desired conditions. Chaining (dragging an anchor chain across a site) is sometimes appropriate for areas in later successional stages of encroachment where sagebrush and other desired native shrubs, grasses, and forbs are greatly reduced or absent. Cut brush may be lopped-and-scattered, piled-and-burned, chipped, or hauled off. Brush exceeding 5 ft. in height will be felled unless other considerations necessitate leaving them standing. Woody slash may be treated if significant buildup of fuels occurs. Slash piles shall be burned when the wildfire risk is low (usually when soils are frozen or saturated) and in accordance with state forestry laws, when applicable, for treating slash to minimize wildfire risk. Livestock grazing should be deferred on treated sites for a period of time determined to be adequate based on pre and post site conditions.
i. Fire is one of the most cost effective means of managing brush, and is also an excellent tool for removal and exclusion of tree encroachment into LEPC habitat. Prescribed fire is the preferred tool for managing brush to desirable levels.
j. Mechanical (mowing, discing, chopping, cutting or dozing) brush removal is another effective means of brush management. If mechanical brush management is used, care should be taken to avoid working during the nesting season, April-June, and the goal of mechanical brush management should be to reduce brush to desirable levels, as described in an approved WMP, and not to eliminate brush altogether. Mechanical treatments should maintain scattered brush and / or motts on the landscape if part of the ecological site description. Brushpiles created through mechanical brush management activities may serve as raptor perches or attract predators, and should be burned as soon as possible.
k. Chemical brush management may, in limited instances be acceptable. The goal of chemical management should be to reduce the brush component to desirable levels, not to eliminate the brush altogether. Herbicide applications should be designed to reduce the brush component to desired levels and not eliminate it entirely. Wide-scale use of broadcast herbicide is not recommended (see previous section on Herbicides). Problem areas with excessive brush density should be spot treated, and herbicides used should be specific to the species of brush being treated as opposed to the use of broad spectrum herbicides.

Range Planting

l. Planting/seeding may be necessary to improve degraded rangeland or to restore croplands, non-native pastures, and similarly disturbed sites areas to rangeland conditions preferred by LEPC. When restoring previously disturbed sites, seeding mixtures and techniques must be tailored to the ecological site. As stated above, plantings that use introduced non-native species or consist of single species monocultures will not be considered. Reseeding should use a mixture of suitable native warm season grasses, forbs and legumes that will provide the most suitable habitat for LEPC (NRCS 2001).

m. More specifically, all lands that will be re-established to native grassland should use a specific mixture of native warm season bunch grasses, forbs and shrubs that are deep-rooted, drought-resistant, responsive to management with grazing and prescribed fire, and adapted to the appropriate ecological site. For example, a mixture that would be appropriate to seed sandy loam sites would be a combination of *Panicum virgatum* (switchgrass), *Schizachyrium scoparium* (little bluestem), *Bouteloua curtipendula* (sideoats grama), *Setaria vulpiseta* (plains bristlegrass), *Desmanthus illinoensis* Illinois bundleflower, and a shrub component [e.g., *Rhus trilobata* (fragrant sumac, *Prunus angustifolia* (sand plum)] (Litton et al. 1994).

Upland Wildlife Habitat Management

Cultivation and tillage practices

a. Cultivation practices that implement conservation tillage approaches, such as minimum till, mulch till, or no-till, **combined with minimal pesticide use** will provide additional and supplemental food supplies for LEPC (Litton et al. 1994). Cropland tillage practices that leave sufficient stubble (12 inches or more in height) and waste grain on the soil surface during winter periods enhance food availability for the LEPC (NRCS 2001). While not routinely necessary for survival of LEPC, during prolonged periods of abnormally extreme winter conditions (e.g., deep snow or ice cover for multiple subsequent days), these cropland areas may provide a temporary food source and enhance survival of LEPC. Plowing or burning these stubble fields during the fall and winter is discouraged.

Food plots

b. In limited circumstances, primarily when and where native food sources are not available, small plots planted in supplemental foods (i.e., food plots) may be beneficial. In these situations, fallow discing to increase areas of native forbs is preferred, but cultivated areas of alfalfa, wheat, milo, grain sorghum, and oats may be considered as a means of providing food resources during fall and winter. Food plots should be planted within 1 mi. of leks, in areas adjacent to native prairie, and only in those areas where cropland or patches of native annual forbs are unavailable. Plots should be approximately 5 acres in size, oblong in shape, and planted on the contour. Domestic livestock should be excluded from these areas (Litton et al. 1994, NRCS 2001, Bidwell and Peoples 2004, Hagen et al. 2004). However, food plots are not an appropriate substitute for proper habitat management and are most effective when used in combination with other forms of habitat management. Food plots alone will not increase LEPC populations in the absence of adequate amounts of suitable LEPC habitat. Typically the expense of planting food plots will be the responsibility of the

landowner. In some instances, seed may be provided by ODWC or another entity and some financial assistance for excluding livestock may be available.

Other practices

c. Strip discing (fallow discing) and similar light, small-scale, shallow forms of soil disturbance can be used to stimulate growth of native foods for LEPC (Litton et al. 1994). These types of disturbances should be scattered across the landscape and the types of plants produced will vary with soil type, rainfall patterns, and past history of the land (Litton et al. 1994). Discing should be conducted near, but not immediately adjacent to leks on a 2 to 3-year rotation. While discing for native food management may be done at any time during the dormant season, discing during late March is generally best because soil disturbance during this period destroys a minimum of existing food and cover, and this is prior to the nesting season. If soil moisture is available, vegetative growth will quickly cover the disced area, reducing potential wind or water erosion problems.
d. Any overgrown vegetation on lek sites should be managed to enhance the value and use of the lek.

POPULATION MANAGEMENT MEASURES/PRACTICES

Predator Control

While predator control/removal may be appropriate under certain very limited circumstances to improve the viability of small and isolated populations, this practice should not be undertaken without a complete understanding of LEPC and predator population dynamics, and a clearly stated objective for the management action. Predators have historically been a natural part of the landscape in LEPC range, and are not considered a serious threat in areas of high quality LEPC habitat. In those instances where predators do pose a serious threat, this is symptomatic of diminished habitat quality (e.g., brush and tree encroachment, insufficient residual vegetative cover, fragmentation of native rangeland into small patches separated by areas of unsuitable habitat, etc.). Management of avian predators often can be achieved by simply managing structures that provide suitable hunting perches and under no circumstances will control or removal of avian predators be allowed under this CCAA. Consequently, predator control is not an available conservation measure in a WMP.

Population augmentation/repatriation

Although not currently considered an accepted or proven population management practice under this CCAA, trapping and transplanting of wild or captive-reared LEPC in order to supplement or restore wild populations may be considered in the future by the Permit holder.

VI. Benefits Expected to the LEPC and Landowners

Expected benefits to LEPC will accrue as a result of implementation of conservation measures. In general, expected benefits to LEPC will be realized through improvement in population numbers, performance and viability; expansion of occupied range; improvement, conservation, protection, maintenance, and restoration of habitat; and elimination or reduction of threats to the

species (i.e., five listing factors/threats). For each CI issued, the USFWS must determine that the conservation measures and expected benefits, when combined with those benefits that would be achieved if it is assumed that similar conservation measures also were implemented on other necessary non-federal properties, would preclude or remove the need to list the LEPC as threatened or endangered (USFWS and NMFS 1999a).

Expected conservation benefits for LEPC from implementation of the conservation measures in this CCAA will be recognized through improved population performance. Specifically, this will entail expected increases in adult and juvenile survivorship, nest success, and recruitment rates. Because existing populations are so fragmented across the LEPC range, enhancement in Oklahoma may contribute to enhancement of populations (via connectivity of habitat) in Texas and Kansas. In addition, currently occupied, vacant, and potential LEPC habitats will be connected, protected, conserved, enhanced and/or restored through measures described in ODWC-approved WMPs and issued CIs.

Furthermore, LEPC conservation will be enhanced by providing ESA regulatory assurances for participating landowners. There will be a measure of security for participating landowners in the knowledge that they will not incur additional land use restrictions if the species is listed under the ESA. The CCAA will provide benefits to conservation of the species by offering technical assistance, and in some cases potential state and Federal funding, to landowners for utilizing best management practices and conservation measures to protect and enhance LEPC habitat, and to sustain and improve population performance (i.e., increased population numbers, increased survival, reduced mortality, expansion of occupied range).

The following activities are typically incompatible with areas to be enrolled as **conservation lands**. These activities may occur on other property owned by an applicant but not specifically on the conservation lands. Depending on the type of development, the actual footprint of a particular activity can extend well beyond the actual construction footprint. Recent research has demonstrated that LEPC exhibit a behavioral avoidance of many human-made structures, with the avoidance distance influenced by the type of development (Robel 2002, Hagen et al. 2004, Robel et al. 2004, Pitman et al. 2006, Chamberlain et al. 2006, Wolfe et al. 2007, Pruett et al. 2009). Hagen et al. (2011) proposed the following siting guidelines to protect 90% of breeding and summer habitat for LEPC: power lines ≥700m, wells ≥300m, buildings ≥1,400m, paved roads ≥850m, and ≥ 1.4km setback for wind turbines. Collectively, these studies suggest that anthropogenic features can negatively influence habitat use, acting as barriers to otherwise suitable LEPC habitat. The influence of these various forms of development will be considered as we determine what areas should be included in conservation lands.

Oil and Gas Activities

This CCAA does not cover oil and gas activities. Oil and gas development is typically incompatible with areas to be enrolled as **conservation lands**. In cases where the landowner has no discretion/control over when and where sub-surface mineral resources may be developed and is required to open their lands to oil and gas development, any take associated with that activity is not the responsibility of the landowner. Generally a landowner has no discretion/control over when and where sub-surface mineral resources may be developed, and is required to open their lands to oil and gas development, exploration and operations. An oil and gas company operating

on or near lands covered by this CCAA would be responsible for their activities and would need to pursue separate incidental take coverage, should the LEPC be listed in the future.

Conversion of Native Rangeland

Conversion of native grassland/rangeland to any other vegetation type (monocultures of any species, non-native grassland, cropland, etc.) is incompatible with areas to be enrolled as **conservation lands,** and is prohibited on all conservation lands enrolled in this CCAA. Areas that have been converted shall be enrolled as a portion of the area covered by a CI to provide assurances to the landowner over the entire property for incidental take coverage. These areas *may or may not* be eligible as conservation lands. This will be evaluated on a case-by-case basis because a high conservation benefit for LEPC must be met.

Tree Planting

Planting trees on **conservation lands** included in this CCAA is prohibited. Likewise, planting of trees on any enrolled land in a manner that constitutes a threat to the LEPC is prohibited.. This prohibition does not apply to the planting of shrub species, such as sand plum, and sand sagebrush, if prescribed as a habitat management practice for inclusion in this CCAA.

Wind Power

This CCAA does not cover commercial or multi-turbine wind developments. Leasing of wind rights and wind power development for commercial purposes are typically incompatible with areas to be enrolled as **conservation lands**. Wind Turbines constitute a threat to LEPCs and hence will not be allowed on conservation lands. Existing limited infrastructure (electrical lines, substations, roads, single household wind turbine, etc), may not necessarily constitute a threat , and will be considered on a case-by-case basis, but a high conservation benefit for LEPC must be met. In cases where adjacent property owners develop wind and the landowner has no discretion/control over when and where new wind power development may occur in relation to his property boundaries, any take associated with that activity is not the responsibility of the landowner. The Wind Company would be responsible for their activities and would need to pursue incidental take coverage, should the LEPC get listed in the future.

Transmission Lines

The CCAA does not cover transmission lines as these are typically incompatible with areas to be enrolled as **conservation lands**. In cases where the landowner has no discretion/control over when and where transmission lines may be developed (i.e. eminent domain) and is required to open their lands to transmission development, any take associated with that activity is not the responsibility of the landowner. A landowner may not have discretion/control over when and where transmission lines may be developed, and is required to open their lands. The transmission company would be responsible for their activities and would need to pursue incidental take coverage, should the LEPC get listed in the future. Existing transmission lines on areas not enrolled as **conservation lands** may be allowable on other property owned by a landowner, but a high conservation benefit for LEPC must be met.

The USFWS and the ODWC will examine new research and published literature regarding the prohibited activities, as it becomes available, to determine if any prohibited activities should be removed from the CCAA. If warranted, the USFWS and ODWC will consider formally modifying the CCAA to address any new scientific findings regarding the LEPC.

VII. Type of Take/Level/Impacts

Should the LEPC be listed as threatened or endangered under the ESA, authorization for incidental take under the Section 10(a)(1)(A) Enhancement of Survival Permit is limited to habitat enhancement and restoration activities (e.g., prescribed burning, prescribed grazing, upland wildlife habitat management, conservation cover) and monitoring activities necessary to implement the CCAA; and agricultural (e.g., crop cultivation and harvesting, livestock grazing, farm equipment operation), recreational (e.g., viewing or similar non-consumptive uses), and limited construction activities (e.g., construction of a storage building/barn). The Service anticipates incidental take of the LEPC will result from implementation of the CCAA on all enrolled lands throughout the action area. Take must be incidental to otherwise lawful ongoing activities on enrolled lands in the action area and consistent with implementation of the CCAA and the landowner's CI.

Incidental take in the form of harm or harassment may result from disturbance incidental to habitat improvement projects required to benefit the LEPC, and from other ongoing otherwise lawful agricultural, recreational, limited development, and other related activities. Direct take, in the form of incidental killing of adults, juveniles, chicks, or eggs, also may result from the implementation of conservation measures such as brush management practices, prescribed fire and grazing, fencing, and the collection of injured animals. Direct take, in the form of mortality, also may occur due to ongoing otherwise lawful agricultural, recreational, and other related activities such as the operation of vehicles and/or farm equipment. Some negligible disturbance is also possible from habitat monitoring activities.

Incidental take likely will occur sporadically, and is not expected to nullify the high conservation benefit anticipated to accrue under the CCAA. Application of a specific conservation measure at the local or landscape scale is expected to produce overall net benefits although it may simultaneously create a potential temporary source of risk to individual birds. For example, removal of encroaching eastern red cedar is likely to result in a positive population response by LEPC over the long term, despite the potential for some level of temporary disturbance to the bird from the machinery used. The overall net impact of these actions is positive and will result in beneficial effects to the species. Typically, implementation of this CCAA will result in fewer short-term adverse impacts to LEPC than would have otherwise occurred had this CCAA not been implemented.

The estimated anticipated level of incidental take associated with this CCAA is directly related to the number of landowners and amount and habitat quality of acreages covered under the management plans tiered to this agreement. Accurately estimating the total number of participants is impossible at this time. However, the maximum amount of incidental take anticipated to occur with implementation of this agreement can be roughly estimated using information from Table 1 and the Estimated Occupied Range (EOR) of the LEPC in the planning area. Habitat quality for the LEPC, as derived from the OKLEPCSPT, is highest in classes 7 and

8 and non-existent in classes 1 and 2. The density (number/per unit area) of LEPCs would be expected to be highest in classes 7 and 8. Because classes 1 and 2 are expected to be unoccupied, or perhaps only briefly occupied, they are incapable of supporting LEPCs in their current condition. Density of LEPCs in these two classes is expected to be zero. However, not all of the counties within the agreement planning area are located within the LEPC EOR. Take would only be anticipated from the areas containing suitable habitat (classes 3 through 8) within the LEPC EOR. The extent of the LEPC EOR in the planning area encompasses slightly over 4 million acres; however, over 3 million acres of this area is in cropland and likely not occupied by the LEPC except for brief foraging periods during winters when habitat quality outside of the cropland areas are poor. Likewise, the EOR includes municipalities, roads, lakes, streams and other features that are not suitable LEPC habitat. Take of the LEPC would not be expected to occur in these areas. The actual amount of occupied LEPC habitat in the planning area likely is less than 1 million acres. Additionally, the stated goal of this CCAA is to enroll a minimum of 100,000 acres by 2020. Assuming the minimum objective is reached, the CCAA would influence about 10% percent of the occupied portion of the EOR in Oklahoma. If, on average, LEPC densities are about two birds per square mile in good quality habitat, there could be as many as 312 LEPCs within the targeted enrollment/implementation area of this CCAA and an overall population of about 3,125 birds within the entire planning area. Over the remaining 17 years of the life of the CCAA, it is feasible to assume that another 100,000 acres may be enrolled. If an additional 100,000 acres are enrolled, the CCAA would influence about 20% percent of the occupied portion of the EOR in Oklahoma, and there could be as many as 625 LEPCs within the enrolled area.

Because only a portion (25 percent) of the planning area is occupied and habitat quality for LEPC varies considerably throughout the planning area, the actual number of LEPC is expected to be less than 3,125 birds. In 2000, the estimated total Oklahoma LEPC population was only thought to be about 3,000 birds (Horton 2000) and current populations are believed to be smaller. By using the habitat quality classes derived from the OKLEPCSPT, and adjusting the density of LEPC to more closely track habitat, we can roughly estimate the number of LEPC that might occur within the entire EOR. If we assign an average density of 1.5 birds/square mile in class 7 and 8 habitats, and average density of 1 bird/square mile in class 5 and 6 habitat, and an average density of 0.5 birds/square mile in class three and four habitat, the total number of birds that might occur within the counties encompassing the entire EOR in Oklahoma would be over 8,044 birds. But we know that only about 25 percent of the EOR is actually suitable habitat. Adjusting the estimated LEPC population to account for the area of suitable habitat, the estimated number of LEPC within the suitable portions of the EOR would be 2,011 birds. Thus the total number of LEPC that might reasonably be expected to occur within the targeted 100,000 acres encompassed by this agreement would be 201 birds. If an additional 100,000 acres are enrolled between 2020 and 2037, then a total of 402 birds would be reasonably expected to occur within the 200,000 acres.

The actual estimated incidental take by landowners enrolled under this agreement and the resulting effects to LEPC are expected to be minimal. The primary purpose of the agreement is to place habitat protection and enhancement measures on enrolled lands. These measures are intended to have a long-term beneficial effect to LEPC and any direct impacts would be limited to minor disturbance from various agricultural or recreational activities or from activities related to LEPC habitat protection or improvement (see following table). Although densities of LEPC

are expected to be highest in habitat classes 7 and 8, we anticipate any habitat improvement would be very minor. Habitat improvements are expected to be more extensive in habitat classes 3 through 6 but the densities of LEPC are expected to be lower in these areas than in class 7 or 8 habitats. We also anticipate that over the life of this agreement, planned habitat improvements could lead to increases in the number of LEPC occurring within the planning area. Because quantifying the actual improvement in LEPC numbers is difficult, precisely quantifying the actual level of take is equally difficult. Over the life of this agreement, we will monitor the extent of occupied habitat and corresponding habitat conditions. Additionally, landowners will be required to report mortality from incidental take to the ODWC who will report annually to the USFWS.

Under a worst case scenario, all 402 birds might be taken in the form of harm, harassment, or direct mortality. However, because the CCAA is a conservation program developed for the benefit of the LEPC, the worst case scenario is not anticipated to occur. Lacking a more precise estimate of incidental take, we anticipate that no more than 5% of nests with eggs or broods/year and no more than 5% of LEPCs/year would be taken on enrolled lands due to the implementation of conservation measures and from ongoing otherwise lawful agricultural, recreational, and limited-development activities. Based on current conditions, we assume that 402 LEPCs might occur on the 200,000 acres expected to be enrolled over the life of the program and that these 402 birds, under optimum conditions, would construct about 201 nests/year. Therefore, we anticipate that, on average, no more than 10 nests with eggs or broods/year would be taken in the form of mortality. We also anticipate that no more than an average of 20 LEPCs/year would be taken in the form or mortality. As the number of LEPCs increase in Oklahoma due to the CCAA and other similar conservation programs, as is expected, an increase in the amount of authorized incidental take will be considered by the Service if formally requested by the ODWC.

Generally, application of the management actions outlined in the "Conservation Measures" section will have the effect of minimizing any incidental take through improvements in habitat quality and condition. Specific measures which can be used to minimize incidental take include, but are not limited to:

- Balancing duration and intensity of grazing to increase or maintain good nesting and brood-rearing habitats, in addition to creating planned patterns of patchiness on the landscape.

- Deferring grazing, as needed, to increase habitat patchiness on the landscape will create suitable interspersion of different vegetation providing an interspersion of nesting and brood-rearing habitats (Hagen et al. 2004), enhancing food species (forbs) and increasing nesting cover (mid-tall grasses) for LEPC (Litton et al. 1994).

- Implementing patch burning techniques to provide appropriate structural, compositional, and spatial diversity of habitat components on the landscape (Bidwell et al. 2003). Late winter-early spring burns are the preferred timing for LEPC and many other nesting grassland birds. Under certain circumstances, it may be appropriate to conduct summer burns. A late winter through early spring burn should be conducted once every 4-5 years to increase green forage and insect availability in subsequent spring and summer seasons. Annual burning of large areas should be avoided to conserve residual nesting cover.

- Eliminating the routine annual use of broadcast herbicides. If grazing management is appropriate for the productivity of the land, and fire is periodically used to direct grazing and maintain/balance brush canopy and density, then herbicides should only be necessary in limited applications to maintain and control brush species (Bidwell et al. 2003).

- Protecting sand plum thickets and areas of aromatic sumac for use as cover by LEPC (NRCS 2001).

- Removing all upland trees, including field windbreaks, from areas intended to be used by LEPC. LEPCs do not require trees, and strongly avoid them (Bidwell et al. 2003). Target species include black locust, Osage orange, hackberry (not to include Netleaf Hackberry), Russian olive, autumn olive, mesquite, Siberian elm, Lacebark elm, and eastern red cedar. Removing trees helps eliminate perching opportunities for avian predators of LEPC. Removal of shinnery oak motts of any size is **not** recommended.

CONSERVATION MEASURE	NATURE OF IMPACTS/TAKE	AMOUNT/EXTENT OF IMPACTS/TAKE	MINIMIZATION PRACTICE THAT MAY BE USED TO MINIMIZE ANTICIPATED ADVERSE EFFECTS
Prescribed Fire	• Construction of fire breaks will cause temporary soil disturbance and remove cover/habitat, disturbance of nesting birds, invasive species establishment • Implementation of controlled burns will cause habitat loss and may temporarily disturb breeding activities or cause birds to be displaced • Motorized vehicular activity may cause individual birds to be displaced or result in collisions with vehicles	• Effects are expected to be short-term in duration and are not expected to produce significant, lasting changes in species distribution of abundance • Displaced individuals may have increased energy demands or be subjected to increased risk of predation but the effects are expected to be of short duration and localized in extent	• Treat invasive species and noxious weeds that become established, unless ODWC and Service biologists determine it is not necessary to minimize adverse effects. A written justification for exceptions must be provided. • Avoid burning within 4.8 km of an active lek during the breeding season (March to June). Burning within 4.8 km of leks may occur during other periods. Burning from February to March may be conducted after birds have ceased lekking activities in the morning. • Avoid burning during nesting season. • Ensure vehicles have sufficient noise suppression devices (mufflers) • Improve habitat conditions such that suitable resources are available to offset increased energy demands of LEPC. • Post fire erosion control devices need to be used where ash flows may impact surface water used by the interior least tern, Arkansas River shiner, and Arkansas darter, unless ODWC and Service biologists determine such practices are not necessary to minimize adverse effects. A written justification for exceptions must be provided. • Use existing trails and roads as travel lanes

CONSERVATION MEASURE	NATURE OF IMPACTS/TAKE	AMOUNT/EXTENT OF IMPACTS/TAKE	MINIMIZATION PRACTICE THAT MAY BE USED TO MINIMIZE ANTICIPATED ADVERSE EFFECTS
Grazing	• Livestock may trample nests or cause nesting birds to flush • Livestock may cause disruption of breeding and display activities • Construction of permanent fences may cause injury or death of individual birds due to collision. Fences also may facilitate predation by serving as travel lanes for predators. Fence posts may serve as raptor perches and facilitate hunting by avian predators • Feeding and herding of livestock may cause physical disturbance • Improper placement of salt and mineral supplements may cause habitat degradation	• Pitman et al. (2006) estimated nest loss from trampling by cattle to be about 1.9% of known nests. • Displaced individuals may have increased energy demands or be subjected to increased risk of predation but the effects are expected to be of short duration and localized in extent • Livestock concentration at supplement stations can lead to trampling of vegetation but the effects should be very localized	• Participating landowners will routinely monitor for appropriate grazing duration and intensity to ensure habitat quality objectives are met and over-utilization is avoided • Adhere to the grazing management strategy within the WMP. • New fences in high risk areas will be marked. Existing fences with documented collision and within 4.8 km of known leks will be marked. Keep fence lines cleared of trees. Remove any unneeded fences. • Encourage new fences to be built to specifications to limit impact on the LEPC • Minimize pasture visits, particularly near leks and known nests during the breeding and nesting season. • Co-locate salt and mineral supplements in areas of other disturbance or in proximity to structures that LEPC tend to avoid.
Pesticide use in Cultivated	• Application of insecticides to	•	• Participating landowners will monitor areas where

CONSERVATION MEASURE	NATURE OF IMPACTS/TAKE	AMOUNT/EXTENT OF IMPACTS/TAKE	MINIMIZATION PRACTICE THAT MAY BE USED TO MINIMIZE ANTICIPATED ADVERSE EFFECTS
Areas to Control Insects	control grasshoppers and other pests can reduce food supplies or cause toxicity if treated insects are consumed	• Temporary loss of insect food resources	application occurred for signs of moribund LEPCs, and document and report any moribund LEPCs to ODWC and the Service. Buffers around aquatic systems will be consistent with approved label instructions. Pesticides will be applied only by licensed applicators.
Brush Control – Mechanical	• Creation of brush piles which can serve as perches or shelter/attractant for other predators • Disturbance	• Increased energy use, nest abandonment, increased risk of predation •	• Defer mechanical brush control during nesting season • Avoid or minimize creation of brush piles and burn any brush piles created as soon as possible
Brush control – Chemical	• Creation of raptor perch sites (tree skeletons) • Direct elimination of food source (plants) or indirect removal of food source (insects) associated with treated/affected plant species •	• Increased energy use, nest abandonment, increased risk of predation	• Defer treatment during mating/nesting season • Removal of raptor perch sites will reduce predation by raptors and facilitate long-term improvement in habitat quality • Spot treat problem areas, use specific (as opposed to broad spectrum) herbicides.
Shrub management – Mechanical	• Disturbance • Creation of brush piles which can serve as perches or shelter/attractant for other predators	• Increased energy use, nest abandonment, increased risk of predation	• Defer mechanical brush control during nesting season
Shrub management – Chemical	• Disturbance	• Increased energy use, nest abandonment,	• Defer treatment during mating/nesting season

CONSERVATION MEASURE	NATURE OF IMPACTS/TAKE	AMOUNT/EXTENT OF IMPACTS/TAKE	MINIMIZATION PRACTICE THAT MAY BE USED TO MINIMIZE ANTICIPATED ADVERSE EFFECTS
	• Direct elimination of food source (plants) or indirect removal of food source (insects) associated with treated/affected plant species	increased risk of predation • Diminished physiological condition, increased energy use and risk of predation due to longer travel distances to food resources or increased foraging/feeding times	• Spot treat problem areas, using specific (as opposed to broad spectrum) herbicides. • Tebuthiuron will not be used to treat desirable shrubs unless other conservation measures would not achieve desired results. • Treat portions of pasture in successive years rather than entire ranch at one time, unless ODWC and Service biologists determine it is not necessary to minimize adverse effects. A written justification for exceptions must be provided.
Revegetation	• Planting activities (including seedbed prep, cover crop establishment and actual planting)	• May cause temporary disturbance (although LEPC use of areas requiring revegetation is expected to be minimal) • Monocultures or non-native plants will provide minimal or no habitat for LEPC	• Defer activities during nesting season • Use only native mixtures in accordance with ecological site guidelines and incorporate shrubs and forbs when possible and treat any noxious weeds that become established
Forage Harvest/Haying	• Temporary removal of brood-rearing habitat • Destruction of nests • Disturbance	• Temporary harm and harassment	• Harvest forage from inside out • Defer haying until after nesting season
Watering facilities	• Drowning may occur	• Direct mortality as a result of drowning	• Use suitable escape ramps

CONSERVATION MEASURE	NATURE OF IMPACTS/TAKE	AMOUNT/EXTENT OF IMPACTS/TAKE	MINIMIZATION PRACTICE THAT MAY BE USED TO MINIMIZE ANTICIPATED ADVERSE EFFECTS
	• Some avoidance associated with use of elevated structures or electrical infrastructure may occur	anticipated to be extremely rare.	• Solar powered equipment will be used to replace windmill towers and/or associated powerlines. unless ODWC and Service biologists determine it is not necessary to minimize adverse effects. A written justification for exceptions must be provided. Alternatively, associated powerlines may be buried.
Wildlife Viewing	• Lek abandonment/disturbance	• Temporary harm and harassment	• Minimize disturbance to lek sites
Collection of injured or deceased animals	• Probable mortality of injured animals.	• Consider need for rehabilitators or use the services of known rehabilitators.	• Report any injured LEPC to the ODWC NW Regional Office in Woodward, OK, (580-254-9173) to allow ODWC or their authorized representative to collect injured animals and attempt to rehabilitate and release back into area collected, if possible. • ODWC or USFWS may necropsy deceased individuals to determine cause of mortality and take steps to reduce or eliminate causal agent.
Rescue of individuals anticipated to be taken in accordance with Permit conditions	• Stress • Possible injury or mortality of target animals	• Rescue of individuals is anticipated	• USFWS will implement measures to minimize that take which may include trapping / capturing and relocating to suitable habitat off-site.

VIII. Assurances Provided

Through this CCAA, the USFWS provides assurances to ODWC and cooperating property owners with ODWC-issued CI, that no additional conservation measures or additional land, water, or resource use restrictions, beyond those voluntarily agreed to and described in the Potential Conservation Measures (Section V) section of this CCAA or in the approved WMP, which will be required should the LEPC become listed as a threatened or endangered species in the future. Unless otherwise stated, these assurances will be authorized with the issuance of an Permit under section 10(a)(1)(A) of the ESA.

The USFWS will provide ODWC and participating landowners with the ESA regulatory assurances found at 50 CFR 17.22(d)(5) or 17.32(d)(5), as applicable. Consistent with the USFWS's Candidate Conservation Agreement with Assurances Final Policy (USFWS and NMFS 1999), conservation measures and land, water, or resource use restrictions in addition to the measures and restrictions described in this CCAA will not be imposed with respect to legal activities on enrolled lands should the LEPC become listed under the ESA in the future. These assurances are authorized for the enrolled lands identified in the CI. In the event of unforeseen circumstances, the USFWS will not require the commitment of additional land, water, or other natural resources beyond the level otherwise agreed to for the species in this CCAA without written consent of ODWC and participating landowners. The Permit will authorize participating landowners to incidentally take LEPC as long as such take is consistent with this CCAA and the associated Permit.

Coverage under the Permit will only apply to participating landowners who enroll lands under this CCAA prior to any future effective ESA listing date of LEPC. Future non-enrolled landowners wishing incidental take authorization for LEPC after any future effective ESA listing date could apply for authorization through the USFWS' Habitat Conservation Plan or Safe Harbor Agreement permitting programs, as appropriate.

IX. Assurances Provided to Property Owner in Case of Changed or Unforeseen Circumstances

"Changed circumstances" are those alterations in circumstances that can reasonably be anticipated and planned for in the CCAA (e.g., wildfire, drought). Changed circumstances might include minor wildfires that temporarily alter suitability of available breeding or winter habitat across portions of the landscape. "Unforeseen circumstances" are changes in circumstances that could not reasonably have been anticipated by the ODWC and the USFWS at the time of the CCAA's negotiation and development, and that result in a substantial and adverse change in the status of the covered species. An example of an unforeseen circumstance might be a large, catastrophic wildfire that negatively alters a majority of LEPC habitat within the covered area. The assurances listed below apply to participating landowners. The assurances apply to the enrolled properties where the agreement is being properly implemented and are applicable only with respect to the species (LEPC) covered by this CCAA.

Changed circumstances provided for in the CCAA. The impacts of various factors (such as wildfire, drought, floods, tornados, and energy development), which are out of the landowners control, are addressed broadly by the conservation measures for LEPC utilized in this CCAA. Where a conservation measure is anticipated to have incidental take, conservation measures have been identified and made a part of that action, which will eliminate or minimize the potential adverse effects of the identified action, thereby reducing take. If additional conservation measures not provided for in the CCAA's operating conservation program are necessary to respond to changed circumstances, the USFWS will not require any conservation measures in addition to those provided for in the CCAA without the consent of ODWC and the property owner, provided the CCAA is being properly implemented. Flexibility in the implementation of the conservation measures may be allowed should ODWC determine that, based on ecological considerations, it would result in an overall net benefit for the LEPC. For example, although prescribed fire typically would not be implemented during the lekking period, there may be instances on certain enrolled properties where burning during the lekking period would result in minimal to no adverse effects , encourage heterogeneity on the landscape and provide an overall net benefit to the LEPC. The long-term benefits of the CCAA will not only offset but greatly outweigh the anticipated minor negative effects of anticipated take.

(a) Wildfire. Wildfire impacts affecting single or limited numbers (for purposes of this CCAA, fewer than 10% of the total number CI's in effect at the time) of individual CI's will be handled on a case by case basis with the individual landowners to determine the management practices to be applied. If one or more wildfires destroys or effectively eliminates more than 50% of lesser prairie-chicken habitat covered by one or more CI's, to the extent that the ability to reach the protected habitat objective is not possible within the CCAA time frame, ODWC will notify the Service within 30 days of that determination. Within 90 days of notification, the affected parties will meet and evaluate the conservation measures and identify potential actions which could be employed to address the change in circumstances. The Parties will meet with the CI holder and develop habitat restoration plans to be implemented voluntarily on an agreed upon schedule. Adaptive management approaches will maximize likelihood of success.

(b) Drought. Variation in precipitation amounts is not an uncommon event, within LEPC range. Annual monitoring and conservation measures in the CCAA and CIs are expected to address minor year to year variations in precipitation amounts. However, prolonged droughts over much of western Oklahoma may create conditions that reduce seasonally available habitat beyond normal annual variation and cause changed circumstances on the landscape. Prolonged periods of drought are defined here as precipitation amounts 15% or more below the long term average for 2 or more successive growing seasons. In this event, the ODWC will notify the Service within 30 days of that determination. Within 90 days of notification, the parties will meet and evaluate the drought conditions and, if opportunities exist, employ changes to the conservation measures to address local conditions. The Parties will identify potential actions which could be employed to address the change in circumstances for a given parcel of land. The Parties will meet with CI holders that graze their lands to evaluate if current livestock grazing practices should be temporarily modified and if the CI holder would be willing to do so. Conservation

measures that may be used to address drought conditions include grazing deferment, rotation, or other management changes designed to retain residual and live vegetation; development of grass banks for use during drought conditions; development of additional water sources for livestock and LEPC and prescribed fire management or similar vegetation management to minimize effects of additive impacts.

(c) Energy development. Much, if not all, of the planning area identified in this CCAA has, or is believed to have, the potential for energy development. In cases where the landowner controls only surface rights and is required to open their lands to energy development after the CI is signed, all efforts to apply the Best Management Practices will be made. Determination of the impact of energy development on individual CIs will be made by the ODWC through the monitoring process. Modifications or additions to management practices may be adopted for the individual CI, in concert with the CI holder, based on the adaptive management approach and the circumstances on each CI. If, however, extensive development of energy resources begins to occur where the landowners do not hold the mineral rights, and the mineral owner or energy developer is unwilling to voluntarily implement the Best Management Practices on sufficient habitat areas, and the ODWC estimates that the ability to achieve the habitat protection targets (overall high conservation gain) could be compromised, then a changed circumstance is deemed to be in effect. The ODWC will notify the Service within 30 days of that determination. Within 90 days of notification, the parties will meet and evaluate the circumstances in the population area and determine if opportunities exist to change the conservation measures to address the habitat protection target.

The Parties may determine that the cumulative energy development affects the potential to reach the habitat protection objectives. The Parties would seek to develop additional or modified conservation measures that could be applied outside the CCAA process or additional conservation measures to be considered by the CI holders or in future CIs. If the landowner or the ODWC are unable get the energy developer to implement the recommended conservation measures, that portion of acreage affected by the changed circumstances may be excluded from the conservation land, but if it is out of the landowner's control, the landowners incidental take coverage will remain for their activities. However, if the species is listed the O&G operators will need to seek incidental take coverage, as the coverage under the CCAA is only available to the landowner.

(d) Flooding. Flooding impacts affecting single or limited numbers (for purposes of this CCAA, fewer than 10% of the total number CI's in effect at the time) of individual CI's will be handled on a case by case basis with the individual landowners to determine the management practices to be applied. If one or more flood events destroys or effectively eliminates more than 50% of lesser prairie-chicken habitat covered by one or more CI's, to the extent that the ability to reach the protected habitat objective is not possible within the CCAA time frame, ODWC will notify the Service within 30 days of that determination. Within 90 days of notification, the affected parties will meet and evaluate the conservation measures and identify potential actions which could be employed to address the change in circumstances. The Parties will meet with the CI holder and

develop habitat restoration plans to be implemented voluntarily on an agreed upon schedule. Adaptive management approaches will maximize likelihood of success.

(e) Tornados. Tornado impacts affecting single or limited numbers (for purposes of this CCAA, fewer than 10% of the total number CI's in effect at the time) of individual CI's will be handled on a case by case basis with the individual landowners to determine the management practices to be applied. If one or more tornados destroys or effectively eliminates more than 50% of lesser prairie-chicken habitat covered by one or more CI's, to the extent that the ability to reach the protected habitat objective is not possible within the CCAA time frame, ODWC will notify the Service within 30 days of that determination. Within 90 days of notification, the affected parties will meet and evaluate the conservation measures and identify potential actions which could be employed to address the change in circumstances. The Parties will meet with the CI holder and develop habitat restoration plans to be implemented voluntarily on an agreed upon schedule. Adaptive management approaches will maximize likelihood of success.

(f) Broadcast Herbicides.
Broadcast of herbicides should only be used in very limited circumstances and only when habitat goals cannot be achieved by other means to control invasive, non-native plants and other exotic species in situations where their density increases on the landscape to the level that the habitat for LEPC is threatened.

Changed circumstances not provided for in the CCAA. If additional conservation measures not provided for in the CCAA's operating conservation program are necessary to respond to changed circumstances, the USFWS will not require any conservation measures in addition to those provided for in the CCAA without the consent of ODWC and the property owner, provided the CCAA is being properly implemented.

Unforeseen circumstances. If additional conservation measures are necessary to respond to unforeseen circumstances, the Director of the USFWS may require additional measures of ODWC and the participating landowner, but only if such measures maintain the original terms of the CCAA. These additional conservation measures will not involve the commitment of additional land, water, financial compensation, or additional restrictions on the use of land, water, or other natural resources available for development or use under the original terms of the CCAA without the consent of ODWC and the participating landowner. Public funds to support implementation of these additional conservation measures may not be available and the landowner could be responsible for the cost of implementing these additional voluntary measures.

The USFWS will have the burden of demonstrating that unforeseen circumstances exist, using the best scientific and commercial data available. These findings must be clearly documented and based upon reliable technical information regarding the status and habitat requirements of LEPC. The USFWS will consider, but not be limited to, the following factors:

- Size of the current range of LEPC;
- Percentage of range affected by the need for additional conservation measures and covered by the CCAA;
- Percentage of range conserved by the CCAA;
- Ecological significance of that portion of the range covered by the CCAA;
- Level of knowledge about LEPC; and
- Whether failure to adopt additional conservation measures would appreciably reduce the likelihood of survival and recovery of LEPC in the wild.

X. Monitoring and Reporting

ODWC will be responsible for annual monitoring through its WMP process and ODWC will be responsible for annual reporting requirements related to this CCAA. These annual monitoring and reporting activities by ODWC will fulfill the compliance and biological monitoring requirements of the CCAA. Information in annual reports will include, but not be limited to, the following: (1) summary and brief description of landowners enrolled under the CCAA during the reporting year, including copies of completed CIs; (2) a digital polygon of each enrolled property that is compatible with common mapping programs (e.g. ArcMap); (3) summary and brief description of habitat management activities and habitat conditions in the CCAA area, including all enrolled lands (acres); (4) evaluation of effectiveness of habitat management activities implemented on enrolled lands during the reporting year at meeting the intended conservation benefits of the CCAA; (5) if herbicides are used to manage shinnery oak, an evaluation of the use of herbicides on shinnery oak to ensure application rates defoliate but do not kill shinnery oak; (6) population surveys conducted during the reporting year on enrolled non-federal lands; (7) amount of incidental take described by number acres of suitable habitat converted to unsuitable, and all dead or injured LEPCs, including lost nests with eggs or broods/year, reported or documented; and(8) funds used for habitat conservation (implementation of conservation measures) on enrolled non-federal lands. Reports will be due January 31 of each year to the Administrators of this CCAA, and to any participating landowners.

Landowners need to report all dead or injured LEPCs to ODWC in a timely manner (preferably within 48 hours). This will allow ODWC to monitor the level of birds killed. This will also allow ODWC or the USFWS the opportunity to collect specimens for research purposes. Further, this will allow ODWC to become aware of any problem areas if multiple birds are injured or killed in a certain area.

XI. Notification Requirement for Planned actions that might result in Take

By signature of this CCAA and associated CIs, participating landowners and ODWC agree to provide the USFWS with an opportunity to evaluate any planned action that potentially would result in authorized take in the form of direct mortality or injury of LEPCs before that action is implemented and the potential for take occurs. Notification that such take may occur must be provided to the USFWS at least 30 days in advance of the action. The USFWS will consider annual reports and WMPs sufficient notification for permitted take that occurs on an ongoing

basis, such as temporary disturbances from the implementation of various conservation measures and from otherwise lawful ongoing agricultural, recreational, and limited-development actions.

XII. Duration of CCAA and Permit

This CCAA will be for a duration of 25 years from the date the CCAA is signed by ODWC and the USFWS. The associated Permit will become effective on the date of a final rule that lists LEPC as threatened or endangered and continues through the end of the CCAA term. Any CI that has been approved begins upon the date of the final signature and continues through the end of the CCAA term. If the CCAA is modified at any time in the future, those modifications will not be required of landowners who possess a CI at the time of the modification, unless mutually agreed upon by the ODWC and participating landowners. The Permit will cover participating landowners from the date their lands are enrolled under the CCAA. Enrolled lands will be maintained in their existing and/or improved states (as outlined in the WMP that accompanies the CI for the enrolled property) from the date the land is enrolled under the CCAA.

XIII. Modifications

After approval of the CCAA, the USFWS may not impose any new requirements or conditions on, or modify any existing requirements or conditions applicable to, a participating landowner or successor in interest to the participating landowner, to compensate for changes in the conditions or circumstances of any species or ecosystem, natural community, or habitat covered by the CCAA except as stipulated in 50 CFR 17.22(d)(5) and 17.32(d)(5). If the LEPC is listed and then later becomes delisted due to recovery, ODWC may discuss with the Service any potential changes or amendments to the CCAA or Permit conditions that may be appropriate.

XIV. Modification of the CCAA

Any party may propose modifications or amendments to this CCAA by providing written notice to, and obtaining the written concurrence of, the other parties. Such notice shall include a statement of the proposed modification, the reason for it, and its expected results. The parties will use their best efforts to respond to proposed modifications within 60 days of receipt of such notice. Proposed modifications will become effective upon the other parties' written concurrence. Participating landowners enrolled prior to a modification or amendment will not be required to implement additional conservation, but they may voluntarily choose to do so. Participating landowners enrolling after a modification or amendment will be required to implement the Plan as amended at the time of enrollment.

XV. Amendment of the Permit

The Permit, if issued, may only be amended in writing and with notification to ODWC stating the proposed amendment or modification. The Permit may be amended by the USFWS to accommodate changed circumstances in accordance with all applicable legal requirements including, but not limited to the ESA, the National Environmental Policy Act, and the USFWS' permit regulations at 50 CFR 13 and 50 CFR 17, but such amendment shall require the agreement of ODWC. ODWC can propose an amendment to its Permit by providing a statement

describing the proposed amendment and the reasons for it to the USFWS. Upon issuance of a proposed amendment or modification, ODWC will coordinate a meeting with, or conference call to, the affected parties (CI holders) and discuss and provide explanation of the amendment. Amendments or modifications made in accordance with Section 10 of the ESA will become final when signed by the ODWC (Permit Holder) and the Service. Approved amendments shall be attached to the original CCAA. Amendments or modifications to CIs will become final when signed by the affected parties and attached to the original CCAA.

XVI. Withdrawal from CI

Due to the voluntary nature of this agreement, the participating landowner may withdraw from this agreement at any time without penalty, with 10 days written notification to the ODWC. Withdrawal does not negate or diminish the benefits or assurances provided to the participating landowner under the CI for Covered Activities prior to the date of the withdrawal from CCAA participation. Any authorization to cause incidental take of lesser prairie-chickens as a result of activities identified in section VII of the CCAA on the enrolled lands identified in the Wildlife Management Plan, as well as any regulatory assurances will be revoked from the effective withdrawal date.

XVII. Termination of the CCAA

As provided for in Part 8 of the USFWS' Candidate Conservation Agreement with Assurances Policy (64 FR 32726, June 17, 1999), ODWC may, for good cause, terminate implementation of the CCAA's voluntary management actions prior to the CCAA's expiration date, even if the expected benefits have not been realized. If the CCAA is terminated, however, ODWC is required to surrender the Permit at termination, thus relinquishing take authority (if the LEPC has become listed at time of termination) and the assurances granted by the Permit. ODWC is required to give 60 days written notice to the other parties of intent to terminate the CCAA, and must give the USFWS an opportunity to find and transfer the Permit to an alternative Permittee or issue individual Permits to landowners to continue the CCAAs conservation program within 90 days of the notice.

XVIII. Permit Suspension or Revocation

The USFWS may suspend or revoke the Permit for cause in accordance with the laws and regulations in force at the time of such suspension or revocation (50 CFR 13.28(a)).

XIX. Remedies

Each party shall have all remedies otherwise available to enforce the terms of this CCAA and the Permit, except that no party shall be liable in damages for any breach of this CCAA, any performance or failure to perform an obligation under this CCAA or any other cause of action arising from this CCAA.

XX. Dispute Resolution

The USFWS, ODWC, and Participating Landowners agree to work together in good faith to resolve any disputes, using dispute resolution procedures agreed upon by all parties.

XXI. Succession and Transfer

This CCAA shall be binding on and shall inure to the benefit of participating landowners and their respective successors and transferees in accordance with applicable regulations (50 CFR 13.24 and 13.25). The rights and obligations under this CCAA are transferable to subsequent non-federal Cooperators pursuant to 50 CFR 13.25. The Permit (if issued) is also transferable to the new non-federal Cooperator pursuant to 50 CFR 13.25. If the CCAA and Permit are transferred, the new non-federal Cooperator will have the same rights and obligations with respect to enrolled lands as the original Cooperator.

Participating Landowners (i.e., enrollees) shall notify the ODWC or any subsequent non-federal Cooperator in writing of any transfer of ownership, so that ODWC or other non-federal Cooperator can attempt to contact the new owner, explain the responsibilities applicable to the enrolled land, benefits, and seek to interest the new owner in adopting the existing WMP with a transfer of the CI. Once the landowners' property is no longer in their possession, their requirements under the CI are discharged. Alternatively, prior to a potential listing decision, the new owner may develop a new WMP and sign a new CI to enroll the property formerly enrolled. Assignment or transfer of CI shall be governed by federal statutes and USFWS regulations in force at the time. If new landowners do not become party to this or another CCAA through the issuance of CI, they will not receive the benefits of the Permit authorizing incidental take of LEPC.

XXII. Availability of Funds

ODWC's mission is the management, protection, and enhancement of wildlife resources and habitat for the scientific, educational, recreational, aesthetic, and economic benefits to present and future generations of citizens and visitors to Oklahoma. ODWC's annual budget, approximately $30 million, is generated from the sale of annual hunting and fishing licenses and special taxes through the Wildlife and Sport Fish Restoration Program on sporting equipment and motorboat fuels paid by anglers, boaters, and recreational shooters. Funding to recruit (including outreach and education activities) willing landowners, identify appropriate lands for enrollment, survey for LEPC, prepare CCAA CI, plan for habitat conservation and management, and implement conservation measures is not included in this CCAA. However, ODWC has committed significant resources to the LEPC in the past decade and will continue to use those resources to implement this CCAA. Nothing in this CCAA prevents ODWC or the USFWS from obligating additional funding for this CCAA in the future.

Implementation of this CCAA is subject to the requirements of the Anti-Deficiency Act and the availability of appropriated funds. Nothing in this CCAA will be construed by the parties to require the obligation, appropriation, or expenditure of any money from the U.S. Treasury. The parties acknowledge that the USFWS will not be required under this CCAA to expend any federal agency's appropriated funds unless and until an authorized official of that agency affirmatively acts to commit to such expenditures as evidenced in writing.

XXIII. Relationship to Other Agreements

The terms of this CCAA shall be governed by and implemented in accordance with applicable Federal law. Nothing in this CCAA is intended to limit the authority of the USFWS to fulfill its responsibilities under federal laws. All activities undertaken pursuant to this CCAA or the Permit must be in compliance with all applicable state and federal laws and regulations.

Similar Agreements may be developed that include this CCAA's plan and Permit area. If this occurs, landowners may have an option as to which Agreement they wish to participate in. In some circumstances, it may be more appropriate to participate in another agreement based upon land use activities, such as O&G development. At present, three additional agreements are being planned or discussed; CCAA for O&G activities, 5-state LEPC comprehensive CCAA, and commercial wind energy Habitat Conservation Plan. Any future agreements will need to recognize pre-existing agreements and not conflict with the terms and conditions in their Permits.

There are other established agreements that address the LEPC and/or the dunes sagebrush lizard (DSL, or sand dune lizard), such as the Texas Conservation Plan and New Mexico CCAAs. It should be noted that these agreements include language pertaining to shinnery oak management practices for the DSL. These management practices are not applicable to Oklahoma, because the DSL does not occur in Oklahoma.

XXIV. No Third-Party Beneficiaries

This CCAA does not create any new right or interest in any member of the public as a third-party beneficiary, nor shall it authorize anyone not a party to this CCAA to maintain a suit for personal injuries or damages pursuant to the provisions of this CCAA. The duties, obligations, and responsibilities of the parties to this CCAA with respect to third parties shall remain as imposed under existing law.

XXV. Notices and Reports

Any notices and reports, including monitoring and annual reports, required by this CCAA shall be delivered to the persons listed below, as appropriate:

ODWC designee:	Richard Hatcher Director P.O. Box 53465 Oklahoma City, OK 73152
USFWS designee:	Dixie Porter, Ph. D. Field Supervisor, Oklahoma Ecological Services Field Office 9014 E. 21st St. Tulsa, OK 74129

IN WITNESS WHEREOF, THE PARTIES HERETO have, as of the last signature date below, executed this Candidate Conservation Agreement with Assurances to be in effect as of that date.

Director
Oklahoma Department of Wildlife Conservation

1/05/13
Date

~~Deputy~~ Regional Director
U.S. Fish and Wildlife Service

1/25/13
Date

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Appendix A

CERTIFICATE OF INCLUSION

In The Agricultural
Candidate Conservation Agreement with Assurances for the Lesser Prairie Chicken (*Tympanuchus pallidicintus*) Between the Oklahoma Department of Wildlife Conservation and the U.S. Fish and Wildlife Service

This certifies that the Participating Landowner of the property described in the attached and referenced Oklahoma Department of Wildlife Conservation (ODWC)-approved Wildlife Management Plan [attach completed Plan] (reference #: _____) are included within the scope of the attached Permit No. _____ which will become effective, <u>if and when the lesser prairie-chicken is listed as endangered or threatened</u>, to the Oklahoma Department of Wildlife Conservation (ODWC) under the authority of Section 10(a)(1)(A) of the Endangered Species Act of 1973, as amended 16 U.S.C. 1539(a)(1)(B). Such Permit authorizes incidental take of lesser prairie-chickens by participating landowners, as part of a Candidate Conservation Agreement with Assurances (CCAA), to support ODWC's ongoing and future efforts to manage, conserve, and recover lesser prairie-chickens. Pursuant to that Permit and this certificate, the participating landowner is authorized for incidental take of lesser prairie-chickens as a result of activities identified in section VII of the CCAA on the enrolled lands identified in the Wildlife Management Plan. Permit authorization is subject to carrying out conservation measures identified in the Wildlife Management Plan, the terms and conditions of the Permit, and the terms and conditions of the CCAA, entered into pursuant thereto by ODWC and the U.S. Fish and Wildlife Service. By signing this Certificate of Inclusion, the participating landowner agrees to carry out the conservation measures described in the attached Wildlife Management Plan. Due to the voluntary nature of this agreement, the participating landowner may withdraw from this agreement at any time without penalty, with 30 days written notification to the ODWC and the USFWS. Any authorization to cause incidental take of lesser prairie-chickens as a result of activities identified in section VII of the CCAA on the enrolled lands identified in the Wildlife Management Plan will be revoked from the date of notification, as will any regulatory assurances within the CCAA and Permit. Any CI that has been approved begins upon the date of the final signature and continues through the end of the CCAA term. If this CCAA is modified at any time in the future, those modifications will not be required of landowners who possess a CI at the time of the modification, unless mutually agreed upon by the ODWC and participating landowners

Participating Landowner	Date
ODWC Representative	Date
Dixie Porter, Ph.D, Field Supervisor Oklahoma Ecological Services Field Office	Date

Appendix B. **Reference#:_____**

ODWC-APPROVED WILDLIFE MANAGEMENT PLAN
FOR AGRICULTURAL LAND
as referenced in the
Candidate Conservation Agreement with Assurances for the Lesser Prairie-chicken (*Tympanuchus pallidicintus*) Between the Oklahoma Department of Wildlife Conservation and the U.S. Fish and Wildlife Service

Wildlife Habitat Improvement Plan

Landowner Name: _____ Date: _____
Address: _____
_____
_____
County: _____
Legal Description of enrolled lands: _____
Telephone #: _____

Goals and Objectives
Describe the landowner's wildlife management goals and objectives

Property Description and Suitability
Describe current habitat conditions and their ability/inability to reach management goals. Describe limiting factor(s) for species managing for (LEPC).
Describe all ongoing land management activities (existing conditions), including any that may be detrimental to LEPC.
Describe existing infrastructure (roads, houses, oil and gas structures, fences, etc.)

Other Management Considerations
Describe tasks outside of the Plan of Operations or contractual obligations that could help landowner/operator reaching their stated management goal(s). This is also an opportunity to identify other resource concerns outside of the stated objectives. Be sure to determine if landowner has leased the wind rights to property. Be sure to identify if the landowner is also the mineral rights owner.

Other Resource Considerations
Describe other species of concern (i.e. federally listed, proposed for listing, candidate or state listed species). Describe how this species will be beneficially or negatively impacted.

Wildlife Habitat Plan of Operations
Describe in detail task/projects that are to be done as prescribed. A plan map that will identify project boundary, field identifiers and individual project locations should be reference. Also reference a list of conservation practices that will include practice name, treatment amount, field location and timing (see below).

Plan Map

- Copy of the most recent aerial photography available. Current digital photography is available in each field office.
- Title Block – showing "Wildlife Habitat Management Plan Map", client's name, the name of the conservation district (if applicable), county, state, approximate total acres, and date prepared
- Map scale
- North arrow
- Legal description
- Boundary lines of the planning unit outlined
  - Clear delineation of Conservation Lands
  - Obvious distinction between Conservation Lands and Enrolled Lands
- Field boundaries and numbers
- Map symbol legend

Plan of Operations Practice List and Timeline, including all maintenance necessary to maintain high conservation value for the duration of the CI.

Example:

Year One					
Conservation Measure	**NRCS Practice Code**	**Practice Description**	**Field**	**Amount**	**Month**
Brush Management	314.	Cutting and Spraying—High density	2	4.7 ac	June
Firebreak	394	Installed using normal farm equipment such as tractor and disk	1	2.9 ac	November
Firebreak	394	Installed using normal farm equipment such as tractor and disk	1	0.6 ac	November

Year Two					
Conservation Measure	**NRCS Practice Code**	**Practice Description**	**Field**	**Amount**	**Month**
Prescribed burn	338	Applied to open grasslands and wooded areas with some volatile woody species	1	422.5	February
Firebreak	394	Installed using normal farm equipment such as tractor and disk	4, 5	2.5 ac	October
Firebreak	394.	Installed using normal farm equipment such as tractor and disk	4,5	0.6 ac	October

Prescribed burn	338	Applied to open grasslands and wooded areas with some volatile woody species	4	445 ac	December

Year Three					
Conservation Measure	**NRCS Practice Code**	**Practice Description**	**Field**	**Amount**	**Month**
Brush Management	314.	Cutting and Spraying—High density	4	6 ac	June
Prescribed burn	338	Applied to open grasslands and wooded areas with some volatile woody species	5	265.9 ac	December

Year Four					
Conservation Measure	**NRCS Practice Code**	**Practice Description**	**Field**	**Amount**	**Month**
Firebreak	394	Installed using normal farm equipment such as tractor and disk	2	0.8 ac	January
Prescribed burn	338	Applied to open grasslands and wooded areas with some volatile woody species	2	146.4 ac	February
Brush Management	314	Cutting and Spraying—High density	4	6.8 ac	June

Individual Preparing Plan:

Name: _____

Address: _____

Phone(s): _____

2. Landowner/Agent Affidavit

By my signature below, I certify that I am the landowner of the above described property or a specifically authorized agent for the landowner. Authorized agent is defined as any person with verbal or written authorization to make decisions on behalf of the landowner. I also certify that the above information is true and correct to the best of my knowledge. I authorize ODWC to use this information for its purposes, including reporting to USFWS, but not to release it to other parties or agencies without my approval.

_____

Landowner/Agent Signature

OKLAHOMA DEPARTMENT OF WILDLIFE CONSERVATION CERTIFICATION

Check One: ☐ **Approved** ☐ **Disapproved**

_____ _____

Authorized ODWC Signature **Date**

Name:

Title: _____

Certification provides that this Wildlife Management Plan was reviewed and is found to be biologically and technically sound with regard to management of wildlife populations and habitats.

U.S. FISH AND WILDLIFE SERVICE CERTIFICATION

Check One: ☐ **Approved** ☐ **Disapproved**

_____ _____

Authorized USFWS Signature **Date**

Name:

Title: _____

Certification provides that this Wildlife Management Plan was reviewed and is found to be biologically and technically sound with regard to management of wildlife populations and habitats.

Appendix C.

GLOSSARY OF TERMS

as referenced in the
Candidate Conservation Agreement with Assurances for the Lesser Prairie Chicken (*Tympanuchus pallidicintus*) Between the Oklahoma Department of Wildlife Conservation (ODWC) and the U.S. Fish and Wildlife Service (USFWS)

Candidate Conservation Agreement with Assurances: Formal agreement between the USFWS and one or more parties to address the conservation needs of proposed or candidate species, or species likely to become candidates, before they become listed as endangered or threatened. This approach provides non-federal property owners who voluntarily agree to manage their lands or waters to remove threats to candidate or proposed species assurances that their conservation efforts will not result in future regulatory obligations in excess of those they agree to at the time they enter into the agreement. . The goal of the CCAA is to conserve, restore, and/or enhance necessary non-federally owned LEPC habitats in Oklahoma.

Candidate Species: Species for which USFWS has sufficient information on file relative to status and threats to support issuance of proposed listing rules.

CCAA: *see* Candidate Conservation Agreement with Assurances

Certificate of Inclusion: Certificate issued to a participating landowner that includes the enrolled lands in the assurances of the CCAA (through the Enhancement of Survival Permit associated with the CCAA) that no additional conservation measures or additional land, water, or resource use restrictions, beyond those voluntarily agreed to and described in the "Conservation Measures" section of the CCAA, will be required should the addressed candidate species become listed as a threatened or endangered species in the future.

CI: *see* Certificate of Inclusion

Conservation Lands: Those lands on which management practices will be implemented and/or maintained.

Conservation measures for lesser prairie-chickens: Actions that a non-federal property owner voluntarily agrees to undertake when entering into a CCAA.

Conservation Reserve Program: A Farm Service Agency (FSA) program created to provide technical and financial assistance to eligible farmers and ranchers to address soil, water, and related natural resource concerns on their lands in an environmentally beneficial and cost-effective manner.

CRP: *see* Conservation Reserve Program

Enhancement of Survival Permit: A permit issued by the USFWS under the authority of section 10(a)(1)(A) of the Endangered Species Act. It allows an otherwise prohibited action that benefits the conservation of a listed species. These permits are issued as part of a CCAA.

Enrolled lands: Lands that have been enrolled in this CCAA that have been issued a Certificate of Inclusion.

Fire Frequency: Fire return interval, or a measure of how often fire returns to a particular landscape, property, or habitat. Fire frequency influences what plant community persists on a particular landscape.

ESA: The Endangered Species Act of 1973. The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth.

Escape Ramps: A device placed in a water tank to allow any wildlife that might fall into that tank a means of escape, to prevent accidental drowning.

Habitat Conservation Plan (HCP): A USFWS management plan designed to offset any harmful effects the proposed activity might have on a species that is listed as endangered or threatened. The HCP process allows development to proceed while promoting listed species conservation.

Habitat Diversity: A term describing the amount of heterogeneity on a landscape. Increased habitat diversity tends to meet more of a species' habitat needs throughout all seasons.

High Conservation Benefit: The benefits of the conservation measures implemented by a property owner under the CCAA, when combined with those benefits that would be achieved if it assumed that conservation measures were also to be implemented on other necessary properties, would preclude or remove any need to list the covered species (*i.e.,* the LEPC)

Incidental take: When lawful, non-federal activities result in "take" of threatened or endangered wildlife. "Take" is defined in the Endangered Species Act (ESA) as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect any threatened or endangered species.

Invasive species: A species that is not indigenous to a landscape, and which, if not managed or treated, will eventually replace the native plant community on that landscape.

Landowner Incentive Program: ODWC incentive program for landowners that is focused on ensuring long-term sustainability of healthy populations of native wildlife within regional ecosystems. The program provides financial incentives and technical assistance to private landowners interested in conserving rare species and unique wildlife communities on their property.

Lek: Traditional display ground where male LEPC traditionally gather in the spring to perform courtship displays. Also referred to as booming ground or display ground.

LIP: *see* Landowner Incentive Program

LEPC: Lesser Prairie Chicken

Natural Resources Conservation Service: A Federal government agency within the U.S. Department of Agriculture that provides technical assistance and incentives to private landowners and manager toward the private landowner's goals to conserve their soil, water, and other natural resources.

Non-federal cooperator: Includes, but is not limited to, states, local governments, Native American tribes, businesses, organizations, and private individuals, and includes owners of land as well as owners of water or other natural resources.

NRCS: *see* Natural Resources Conservation Service

Participating landowner: Agricultural landowners who have entered into an ODWC-approved Wildlife Management Plan for lesser prairie-chickens and are actively implementing conservation measures for the species.

Planning Area: For the purpose of this CCAA, this area includes the following counties: Alfalfa, Beaver, Beckham, Cimarron, Custer, Dewey, Ellis, Harper, Major, Roger Mills, Texas, Woods, Washita, and Woodward.

Plant Successional States: The predictable change in vegetation that follows disturbance (wildfire, clearing, excessive herbivory, etc.) on a site, progressing from bare ground to climax plant community. In the planning area for this CCAA, early states of succession are characterized by lower plant density, lots of bare ground and numerous annual forbs, while the climax community is characterized by native warm season grasses, perennial forbs and shrubs, with minimal bare ground.

Regulatory assurances: Assurances that provide non-federal property owners who voluntarily agree to manage their lands or waters to remove threats to candidate or proposed species that their conservation efforts will not result in future regulatory obligations in excess of those they agree to at the time they enter into the Agreement.

Safe Harbor Agreement: A voluntary arrangement between the USFWS with the purpose to promote voluntary management for listed species on non-federal property while giving

assurances to participating landowners that no additional future regulatory restrictions will be imposed.

Stocking Rate: Stocking rate is defined as the number of grazing animals or animal units on a given amount of land over a certain period of time.

Technical assistance providers: Agencies that provide technical management assistance to landowners. These include ODWC, NRCS, and USFWS.

ODWC-approved WMP: A wildlife management plan that has been approved by ODWC.

USFWS: United States Fish and Wildlife Service

Wildlife Management Plan: A management plan designed to provide assistance to landowners upon request for voluntary conservation, management, or restoration of wildlife habitat. It is designed to meet landowner goals while conserving biodiversity.

WMP: *see* Wildlife Management Plan

Appendix D

OKLAHOMA LESSER PRAIRIE-CHICKEN CONSERVATION PLAN