CANDIDATE CONSERVATION AGREEMENT WITH ASSURANCES FOR LESSER PRAIRIE-CHICKENS

between

TEXAS PARKS AND WILDLIFE DEPARTMENT

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 Texas Parks and Wildlife Department (TPWD) and the U. S. Fish and Wildlife Service (USFWS). Participating property owners will be included under the CCAA by signing individual Certificates of Inclusion (CI; Appendix A). Administrators of this CCAA are:

TPWD:	The TPWD designates the following individual as the CCAA Administrator: Dr. Michael E. Berger Wildlife Division Director 4200 Smith School Road, Austin TX, 78744-3291 Phone: 512-389-8092 Email: mike.berger@tpwd.state.tx.us
USFWS:	The USFWS designates the following individual as the CCAA Administrator: Tom Cloud Field Supervisor, Arlington Ecological Services Field Office 711 Stadium Drive, Suite #252, Arlington, TX 76011 Phone: 817-277-1100 Email: tom_cloud@fws.gov
Tracking Number:	TE-132658-0

I. Responsibilities of the Parties

TPWD will be the sole non-federal cooperator in this CCAA, and will be responsible for implementing and administering the CCAA. TPWD will enroll property owners under this CCAA through issuance of Certificates of Inclusion to those property owners who have entered into a TPWD-approved Wildlife Management Plan (WMP) (see Appendix B) for lesser prairie-chickens (*Tympanuchus pallidicinctus*) and are actively implementing conservation measures for the species. TPWD will process and monitor all Certificates of Inclusion to document that the conservation measures implemented on private property will

provide a conservation benefit to lesser prairie-chickens (LPC). TPWD will meet with participating landowners at their request to provide continued technical assistance, including discussions of funding options, for projects that improve and maintain LPC habitat. TPWD will, dependent upon availability, provide funding under the Landowner Incentive Program to benefit LPC habitat on private lands within the Planning Area. TPWD will prepare an annual report for the USFWS that documents activities performed for the CCAA. TPWD 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 LPC conservation and management, and discuss actions that could benefit LPC to be initiated in the upcoming year.

The USFWS will issue a draft permit to TPWD 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 and when the LPC is listed as threatened or endangered. The permit will provide TPWD and participating property owners with authorization for incidental take of LPC and provide regulatory assurances should the species be listed at some time in the future. The term of the CCAA is 20 years. The term of the permit begins on the date of a final rule that lists the LPC as threatened or endangered and continues through the end of the CCAA term. The permit would authorize incidental take of lesser prairie-chicken resulting from otherwise lawful activities on enrolled lands (e.g., crop cultivation and harvesting, livestock grazing, farm equipment operation, recreation). USFWS will, within 30 days of receipt of a completed Certificate of Inclusion from TPWD, notify TPWD in writing (through signature on the CI) of the USFWS' determination of whether the proposed land(s) should be enrolled. The USFWS will review reports submitted by TPWD for compliance with the terms of the CCAA and the CIs in a timely manner. USFWS will, dependent upon availability, provide funding under the Partners for Fish and Wildlife Program or other available USFWS programs to benefit LPC habitat on private lands within the Planning Area.

Property Owners will enroll in the CCAA by agreeing to participate in a TPWD-approved WMP (which will include a list of recommended conservation measures for LPCs and their habitats; see Appendix B) and by completing and submitting a Certificate of Inclusion application. An approved CI will provide the property owner protection under the Enhancement of Survival 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 TPWD personnel (or an agreed upon designee) to survey enrolled lands for the presence of LPC, and for suitability as habitat. Participating landowners will allow TPWD personnel (or an agreed upon designee) access to the enrolled lands for purposes of monitoring LPC populations and habitat. When and where possible, participating landowners will participate in annual discussions and meetings with TPWD and other participating landowners to discuss the status of LPC management and conservation on enrolled lands.

II. Planning Area, Covered Area, and Enrolled Lands

This CCAA pertains to lands in Texas encompassed by the current distribution of LPC, those lands that are unoccupied potential habitat, and those that could provide potential habitat if the current population and distribution of LPC should increase. In particular, this CCAA will include the following Texas counties and this area will be referred to as the Planning Area: Dallam, Sherman, Hansford, Ochiltree, Lipscomb, Hartley, Moore, Hutchinson, Roberts, Hemphill, Oldham, Potter, Carson, Gray, Wheeler, Deaf Smith, Randall, Armstrong, Donley, Collingsworth, Parmer, Castro, Swisher, Briscoe, Hall, Childress, Bailey, Lamb, Hale, Floyd, Motley, Cottle, Cochran, Hockley, Lubbock, Crosby, Dickens, King, Knox, Yoakum, Terry, Lynn, Garza, Kent, Stonewall, Gaines, Dawson, Borden, Scurry, and Andrews. Covered areas are private lands within the Planning Area that provide suitable habitat for LPC, or have the potential to provide suitable LPC habitat with the implementation of conservation management practices. 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 TPWD 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 Certificates of Inclusion. TPWD goal is to enroll 1.2 million acres under this CCAA by 2030.

III. Authorities and Purpose

Sections 2, 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 7 of the ESA requires the USFWS to review programs that it administers and to utilize such programs in furtherance of the purposes of the ESA. 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. Lastly, section 10(a)(1)(A) of the ESA authorizes the issuance of permits to "enhance the survival" of a listed species.

TPWD enters into this CCAA under the authority of PWC, Title 2, Chapter 11, §11.0171 and Chapter 12, §12.0251. The mission of TPWD is to manage and conserve the natural and cultural resources of Texas and to provide hunting, fishing, and outdoor recreation opportunities for the use and enjoyment of present and future generations.

Texas is a large and ecologically complex state where conservation of wildlife species depends on landowners who manage the majority of the important habitats, and thus maintain wildlife diversity (TPWD 2002). TPWD recognizes the intrinsic value of good stewardship and supports landowners who assume this responsibility. The TPWD WMP process is an integral component of the Department's Private Lands and Public Hunting Program (PLPH), which also includes programs and services such as the Technical Guidance to landowners and

managers, technical and financial assistance through the Landowner Incentive Program, Wildlife Management Tax Valuation planning assistance, information on conservation easements and other long term conservation tools, and recognition of exceptional land stewardship through the Lone Star Land Steward Awards Program. The TPWD PLPH focuses on a diverse array of programmatic responsibilities for wildlife habitat management and development, technical assistance, incentive programs, and habitat conservation. TPWD Wildlife Division personnel provide technical assistance to land managers and landowners upon written request for assistance to develop plans and recommendations for voluntary conservation, enhancement and/or development of wildlife habitat. In particular, at the request of landowners, TPWD prepares a written Wildlife Management Plan (see Appendix B) that incorporates recommendations for the specific area and addresses the conservation goals and objectives of the landowner.

The purpose of this CCAA is for TPWD to join with the USFWS to implement conservation measures for the LPC in Texas, in support of TPWD's ongoing and future efforts to manage, conserve, and recover the species. Under this CCAA, TPWD will issue CI to private landowners who enter into TPWD-approved WMPs for LPC and are actively implementing conservation measures for conservation of the species. The conservation measures implemented by participating landowners would generally consist of prescribed grazing, prescribed burning, brush management, Conservation Reserve Program (CRP) and cropland management, range seeding, other upland wildlife habitat management practices, and population management techniques (see Section V. Conservation Measures to be Implemented). An additional purpose of this CCAA is to provide a mechanism of assuring private landowners, through Certificates of Inclusion that no additional conservation measures, other than those agreed upon in the WMP, will be required of them if the LPC 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 private landowners.

Consistent with the USFWS's Candidate Conservation Agreement with Assurances Final Policy (USFWS and NMFS 1999), the conservation goal of this CCAA is to encourage development and protection of suitable LPC habitat on non-Federal lands. The conservation goal will be met by giving the State of Texas and private landowners incentives to implement voluntary conservation measures and providing landowners with funding and regulatory certainty concerning land use restrictions that might otherwise apply should LPC become listed under the ESA. This CCAA could be used as a model for similar agreements for grassland species of management concern in Texas.

IV. Background and Description of Existing Condition

The LPC is a distinct species of North American prairie grouse that inhabits rangelands dominated primarily by shinnery oak (*Quercus havardii*)-bluestem and sand sagebrush (*Artemesia filifolia*)-bluestem vegetation types (Sharpe 1968). Like other prairie grouse that

are polygynous, males characteristically gather in the spring to perform courtship displays on traditional display grounds, 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 the center of the lek, while younger males often display in peripheral areas. Females arrive at the lek in early spring; peak hen attendance at leks is during mid-April.

After mating, hens select a nest site, usually within 3 miles (mi) of a lek (but up to 5-6 miles from the lek), and lay a clutch of 10-12 eggs. Second nests may occur when the first attempt is unsuccessful. Incubation lasts 24-26 days, and young leave the nest within hours of hatching. Broods may remain with females for 12-15 weeks. It has been estimated that LPC have an estimated 5-year maximum life span (Campbell 1972).

The autumn and winter diet of LPC is dominated by vegetative matter; during the spring and summer months insects increase in proportion in the diet. Shinnery oak leaf galls, catkins, leaves, and acorns may comprise 60-70% of the autumn and winter diet; fragrant sumac (*Rhus aromatica*) and sand sagebrush are also important winter foods. When available, grain sorghum is often used as winter food. 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 LPC are conversion, degradation, and fragmentation of habitat. The conversion of native sand sagebrush and shinnery oak rangeland to improved pastures and cropland have been documented as important factors in the decline of the LPC. Although acres of former cropland have been enrolled in the CRP in the northeastern and southwestern panhandle, LPC 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 old world bluestem (*Bothriochloa* spp.) or weeping lovegrass (*Eragrostis curvula*), which do not meet food, brood-rearing, and thermal habitat requirements for the LPC.

A mixture of heavily, moderately, lightly grazed and ungrazed native rangelands are all essential components of LPC habitat, and should occur in a mosaic pattern on a landscape scale. However, in most areas, an insufficient amount of lightly grazed or ungrazed habitat is available to support successful LPC nesting. Overutilization of rangeland by livestock, to a degree that leaves less than adequate residual cover remaining in the spring, is considered detrimental to LPC populations because grass height is reduced below that necessary for nesting cover, and desirable food plants are markedly reduced.

Systematic surveys of the number of Texas counties where LPC occur began in 1940 (Henika 1940; Texas Game, Fish, and Oyster Commission 1945; Litton 1978). Annual surveys to determine population trends of LPC in Texas were initiated in 1952 (Lionberger 2005). From the early (Henika 1940, Sullivan et al. 2000) to mid (Texas Game, Fish, and Oyster Commission 1945; Litton 1978)1940's to the early 1950's (Seyffert 2001), it is estimated that the range of the LPC in Texas encompassed portions of 34 counties. Researchers considered

the occupied range at the mid 20th century (1940-1950) to be a reduction from the historical range (ca. 1900). In 1989, TPWD produced an occupied range map that indicated LPC inhabited portions of 12 counties (Sullivan et al. 2000). In 2005, TPWD reported that LPC were found in portions of a minimum of 16 counties.

Between 1942 and 1986, TPWD annually estimated density of leks/mi^2 of suitable habitat on a designated Study Area in Hemphill County, and used the same methodology for a Study Area in Wheeler County between 1942 and 1985; these surveys were resumed for Study Areas in both counties in 1997. During the 1942-1986 time period, density of leks in the Hemphill County Study Area remained fairly stable and averaged 0.21 leks/mi^2. In 2004, density estimated on this study area was 0.35 leks/mi^2 (Lionberger 2005), just less than twice the 1942-1986 average. In Wheeler County, the 1942-1985 average was 1.31 leks/mi^2, and the 2004 estimate was 0.10 leks/mi^2 (Lionberger 2005), 13 times lower than the 1942-1985 average.

Survey methodology was modified by TPWD in 1997 by establishing Study Areas on private land at various locations to allow monitoring of the major populations through subsampling efforts. The purpose of the Study Area methodology is to intensively collect demographic data in an area as a subsample of the larger regional population. Including the above-described long-term survey efforts, Study Areas in the northeastern Panhandle include the 67,298-acre Area in Hemphill County, the 6,720-acre Area in Wheeler County, and a 6,540-acre Area in Gray County (this Area was initiated in 2000). Study Areas in the Permian Basin/Western Panhandle include a 13,440-acre Area in Gaines County established in 1997, a 9,221-acre Area in Bailey County established in 1997, and a 12,378-acre Area in Yoakum County initiated in 1999.

The most recent LPC lek surveys were conducted in April 2005 (Lionberger 2005) on Study Areas in the Permian Basin/Western Panhandle (Study Areas in Bailey, Yoakum, and Gaines counties) and in the Northeastern Panhandle (Study Areas in Gray, Hemphill, and Wheeler counties). The Permian Basin/Western Panhandle surveys estimated 7.7 males/lek and the lek density was estimated at 0.31 leks/mi^2. In particular, the Bailey County Study Area appears relatively stable, and the Yoakum County Study Area appears to be increasing. The Northeastern Panhandle surveys estimated 8.3 males/lek with an estimated lek density of 0.34 leks/mi^2. In particular, the Hemphill and Wheeler County Study Areas appear relatively stable, and the Gray County Study Area appears to be declining.

Much of the remaining suitable habitat for LPC is becoming increasingly fragmented by cultivation, roads, structural development, oil and gas exploration, wind energy development, and brush encroachment. As of March 2005, there were approximately 13,773,650 acres of cropland (dryland and irrigated) in the counties that comprise the Planning Area for this CCAA (see Section II: Planning Area, Covered Area, and Enrolled Lands). Of those 13.7 million acres, approximately 3,139,810 acres are in active CRP land use until at least 2006 or 2007. In comparison, approximately 14,368,700 acres in the planning area for this CCAA are

currently designated as rangeland or wildlife land by the Natural Resources Conservation Service (NRCS) (NRCS 2005).

Although it initially appears that a large proportion of the CCAA Planning Area is currently in rangeland-wildlife land, the patterns of placement on the landscape, and the management practices implemented on these lands contribute significantly to whether these acres are available and useable habitat for LPC populations. For example, fragmentation (i.e., patterns of land use on the landscape) may exacerbate the 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 LPC 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 LPC has a high reproductive potential in years of adequate conditions. Thus, drought conditions are unlikely to be the sole causative factor in long-term LPC population declines.

Texas Parks and Wildlife Department has conducted a wide variety of outreach and conservation efforts for LPCs, and is committed to the continuation of outreach and conservation in the future. Past TPWD outreach and conservation efforts for LPCs include listening sessions with private landowners, inter-agency conservation forums, participation in LPC Interstate Working Group activities (e.g., LPC DVD development and production), development of the Managed Lands Permit Program for LPCs in Texas, support and delivery of the Landowner Incentive Program (LIP), support and delivery of conservation programs within the Farm Bill (e.g., EQIP, CRP), technical assistance to landowners and managers (including development of written WMPs), and directed program and research funding. Current TPWD outreach and conservation efforts for LPCs include all of the above in addition to the LIP for Grassland Birds in Bailey and Lamb counties. Future TPWD conservation and outreach efforts will address all of the above in addition to development of a dynamic web application that will allow users to report LPC observations.

V. Conservation Measures to be Implemented

The goal of the CCAA is to conserve, restore and/or enhance necessary non-federally owned LPC habitats in Texas. For purposes of the CCAA, lands in public ownership within current or historic LPC range are assumed to be protected and should be managed for LPC where feasible.

The necessary CCAA conservation measures are intended to conserve, restore, and/or enhance LPC habitat so that progress toward sustainable population levels can occur. CI applications and the supporting TPWD-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 LPC 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 LPC (and perhaps therefore, distribution) (Hagen et al. 2004). As a result, conservation measures implemented to improve, recover and/or enhance LPC habitat should focus on providing adequate nesting and brood-rearing habitat components. The conservation practices listed below are structured to restore and then maintain native prairie habitats as nesting and brood-rearing habitat, and will also meet the habitat needs of many other short and midgrass-dependent species as well.

LPC habitat types (e.g., nesting, foraging, and brood-rearing habitats) should be distributed in a mosaic over large, contiguous blocks of rangeland habitat. For example, nesting habitat (tall grass 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 lesser prairie chicken management. Another method to achieve patchiness on the landscape is through prescribed grazing, the schedule of which would include considerations of forage quantity and location, livestock numbers, and drought. In addition, grazing plans related to lesser prairie chickens are intended to produce variable and patchy 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 seral stages, is optimal for LPC (Hagen et al. 2004).

The following are recommended conservation measures for LPC 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 TPWD-approved WMP process. Although not included in the list, it is important to state that in addition to the listed techniques, an enrolled property that already has suitable LPC habitat and would be managed "as is" or be further improved would also constitute an approved conservation measure within this CCAA. Sources for the list of habitat conservation measures include Litton et al. (1994), Mote et al. (1999), NRCS and WHMI (1999), Miller and Brown (2000), NRCS (2001), 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 following list of conservation measures is a synthesis of available information, and reflects our current understanding of LPC 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 property owners and technical assistance providers (TPWD, NRCS, USFWS biologists) evaluate and monitor LPC population responses to implemented practices using the principles of adaptive resource management (Walters and Holling 1990).

Prescribed Grazing

a. Duration and intensity of grazing must be balanced to increase or maintain good nesting and brood-rearing habitats, in addition to creating planned patterns of patchiness on the landscape. Therefore, a long-term (5-10 year) prescribed grazing plan (or schedule) must be prepared for all pastures.
b. Light to moderate grazing in deferred (i.e., grazing postponed until grassland plants have matured) and/or rest-rotation (i.e., system of multiple pastures through which livestock are rotated) grazing systems (i.e., those systems intended to create habitat patchiness on the landscape) will create suitable interspersion of different vegetation heights and composition, hence providing an interspersion of nesting and brood-rearing habitats (Hagen et al. 2004). By providing pasture rest periods for vegetational response, prairie chicken food species (forbs) and nesting cover (mid-tall grasses) are enhanced (Litton et al. 1994).
c. A grazing plan that includes light to moderate grazing to ensure 40-60% of mid to tall grass species will be available as residual nesting and brood-rearing habitats. This vegetative response and pattern on the landscape can be maintained using patch-burning methods in which 20-30% of an area is burned annually (within the prescribed grazing and fire schedules and plans for the property) (Hagen et al. 2004).
d. A grazing schedule and stocking rate in sand shinnery oak habitat that produces greater than 65% vertical screening cover in the first foot above ground level and 50% overhead cover will benefit lesser prairie chicken nesting habitat (Litton et al. 1994).
e. Under certain circumstances, large pastures and fewer livestock water sources used in combination with patch burning, will result in a diversity of grazing pressures (and therefore a diversity of habitat patches) on the landscape.
f. Under certain circumstances, production of native food (i.e., forbs) for lesser prairie chickens may be achieved through employing the "flash grazing" technique on areas on upland clay loam sites (i.e., tight ground) during the February-March period. During this period, cattle are concentrated for a short duration (dependent upon the site, moisture conditions, and how long before noticeable soil disturbance occurs). The purpose of this concentrated cattle presence is to effect soil disturbance during winter months with cattle hoof action; if these feed grounds have been stimulated sufficiently and appropriately by cattle during flash grazing, native forbs will respond during the growing season. This technique calls for careful management on a site-specific basis (Litton et al. 1994).

Prescribed Burning

a. Late winter-early spring burns are the preferred timing for LPC and many other nesting grassland birds. Ecological and landscape-level theory of late winter-early spring burns is that the burn year's burn unit (or patch) is lush green "right away" brood range (clean bare ground, then insects, and then high-nutrient green leaf material), the following year (or 2) the patch is then nesting habitat, and finally it is then fuel load again for a subsequent burn (considering a 4-5 year burn cycle). Under certain circumstances, it may be appropriate to conduct summer burns.
b. Conduct planned prescribed burns from late winter through early spring every 4-5 years to increase green forage and insect availability in subsequent spring and summer seasons. Avoid annual burning of large areas to conserve residual nesting cover. In addition, care should be taken to ensure that residual nesting cover is available every breeding season within 1 mile of each known lek.
c. Implement patch burning techniques to provide structural, compositional, and spatial diversity of habitat requirements on the landscape (Bidwell et al. 2003).
d. The size of burn units is scale-dependent; approximately 20-35% of combined property rangeland and CRP should be burned each year in order to preserve residual nesting cover (Mote et al. 1999).
e. Include deferment in the grazing management plan in order to build fine fuel in burn units. Fire guards should be placed to protect unique habitats and control fire spread; fire guards in LPC ecological sites will likely consist of disked firebreaks, shredded areas, and/or drilled wheat for "green" fire guards.
f. In shinnery oak-midgrass systems, care must be taken to conserve shinnery oak motts, sand dunes, and other unique habitats. Burn flat inter-dunal areas, and leave sand dunes with shinnery, in order to delineate size and shape of patches on the landscape. Burns should be conducted in early spring to increase the coverage of warm-season bunchgrasses, and grazing deferment during the previous growing season may be required to provide sufficient fine fuel loads. In instances where shinnery oak canopy coverage exceeds 50%, herbicides such as 2,4-D or tebuthiuron may need to be applied at sub-lethal rates prior to burning to improve treatment success.

Brush Management

Sand sagebrush and shinnery oak

a. Eliminate the regular use of broadcast herbicides; use of herbicides should be limited to those areas where site recovery through the reduction of brush is required and planned, and a long-term plan for maintenance of site processes through the use of prescribed grazing and fire is in place. 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 (after initial application to restore the site) to maintain and control brush species (Bidwell et al. 2003).
b. Any brush management should result in a mosaic of treated and untreated areas distributed over the landscape to provide an interspersion of vegetative structures and composition dominated by grasses and shrubs for nesting cover, and areas

with a diversity of vegetation for brood-rearing, foraging, and winter cover (NRCS 2001, Hagen et al. 2004). After management activities are complete, brush (sand shinnery oak and sand sagebrush) should be maintained in small low-stature patches to provide food and cover for LPC (Bidwell and Peoples 2004).

c. Brush control treatments should not reduce sand sagebrush or shinnery oak to less than 25-30% canopy within one year after treatment (Hagen et al. 2004). Brush control treatments are appropriate in areas with greater than 40-50% canopy.
d. During sand sagebrush control, care should be taken to protect sand plum thickets and areas of aromatic sumac (NRCS 2001). During shinnery oak control, care should be taken to protect sand dune areas (only flat inter-dunal areas should be treated) and small 3-5 acre patches of shinnery oak that will produce mast crops.
e. Suppression, rather than eradication, should be the goal of brush management in most cases. In addition to application rate, pattern of application is also important. Care should be taken to create mosaics of vegetative structure, to avoid unique areas (e.g., sand dunes, plum thickets, small shinnery oak motts), and to create patterns that provide suitable interspersion of nesting and brood-rearing habitat while reducing wind erosion potential in sandy soils (Hagen et al. 2004).

Mesquite

f. Mesquite should be eliminated using mechanical and/or herbicidal treatments, as applicable. Treatment of other woody vegetation greater than 10 feet in height should be considered.

Conservation Cover

a. Convert cropland, introduced grasses and other introduced forages, and other disturbed sites (e.g., caliche roads and well pads) into native warm season grasses and forbs, based upon site-specific recommendations (based on ecological site descriptions, USDA-NRCS Ecological Site Guides, historic plant community, and LPC habitat needs) included in the TPWD-approved WMP for the enrolled property. Do not convert these sites to a monoculture of grasses or use non-native species.

Conservation Reserve Program (CRP)

b. Implement 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). Dependent upon whether CRP acreage is CP-1 or CP-2 practice, the management activities (e.g., prescribed burning, discing, interseeding with native grasses or perennial forbs, etc.) most beneficial to LPC will be site-specific, and tailored to the property through the FSA CRP contract administration, NRCS technical assistance, and the TPWD-approved WMP process.
c. CRP grasslands of native grasses, forbs, and shrubs should range in height from approximately 13.5-30 inches (Hagen et al. 2004). The optimum CRP mixture would consist of warm season perennial bunch grasses, native legumes, forbs, and

woody shrub plantings (Litton et al. 1994). This multi-species seeding creates an important diversity of vegetation heights and growth-forms.

d. Restore pastures with expired CRP contracts to a site-appropriate native plant community (based upon ecological site descriptions, historic plant community, USDA-NRCS Ecological Site Guides, and LPC habitat needs) (Bidwell et al. 2003).

Range Planting

e. Seeding may be necessary to improve degraded rangeland or to convert other landuses to rangeland. Under these circumstances, seeding mixtures and techniques must be tailored to the ecological site. Avoid creation of monocultures of introduced species. Mixtures that include adapted forbs and legumes will enhance the mixture for LPC (NRCS 2001).

f. Lands to be re-established in native species should use a selected mixture of native grasses, forbs and shrubs that are warm season bunch varieties, 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 switchgrass, little bluestem, sideoats grama, plains bristlegrass, Illinois bundleflower, and a shrub component (e.g., 4-wing saltbush, aromatic sumac, sand plum) (Litton et al. 1994).

Upland Wildlife Habitat Management

Cultivation and tillage practices

a. Minimum tillage farming practices with minimal pesticide use provide additional and supplemental food supplies for LPC (Litton et al. 1994). These tillage practices on cropland that leave stubble (12 inches or more in height) and waste grain on the soil surface during winter periods enhance food availability for the LPC (NRCS 2001). Plowing or burning these stubble fields during the fall and winter should be discouraged.

Food plots

b. In certain areas, and under certain circumstances, where and when native food sources are not available supplemental feed in the form of food plots may be beneficial. In these situations, cultivated areas of alfalfa, wheat, milo, grain sorghum, and oats may provide food resources during fall and winter. Food plots should be planted within 1 mile 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 (Litton et al. 1994, NRCS 2001, Bidwell and Peoples 2004, Hagen et al. 2004).

Other practices

c. Strip discing (fallow discing) will stimulate growth of native foods for LPC (Litton et al. 1994). 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 leks on a 2 to 3-year rotation. Discing for native food management may be done at any time during the dormant season; however, late March is

generally best because soil disturbance during this period destroys a minimum of existing food and cover. If soil moisture is available, vegetative growth will quickly cover the disced area, reducing potential wind or water erosion problems.

d. Clear overgrown vegetation on leks to enhance their value and use.
e. Permanent barbed-wire and some electric fences can be lethal to LPC in flight; the use and installation of fences should be coordinated with other practices (e.g., water distribution, patch burning) to achieve prescribed grazing goals and minimize potential impacts to LPC. Where feasible, 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.
f. Remove all upland trees from the lesser prairie-chicken management area, including field windbreaks. Lesser prairie-chickens do not require trees, and strongly avoid them (Bidwell et al. 2003).

Population Management

a. Predator control may be appropriate under certain circumstances to improve the viability of small and isolated populations. This practice should not be undertaken without a complete understanding of LPC and predator population dynamics, and a clearly stated objective for the management action.
b. Although not currently an accepted or proven population management practice, trapping and transplanting of wild or captive-reared LPC in order to supplement or restore wild populations may be considered in the future.

VI. Benefits Expected

Expected benefits to LPC will accrue as a result of implementation of conservation measures. In general, expected benefits to LPC will be realized through improvement in population performance; expansion of occupied range; improvement, conservation, protection, maintenance, and restoration of habitat; and/or a reduction in threats (i.e., five listing factors/threats) to the species. 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 were also implemented on other necessary non-federal properties, would preclude or remove the need to list the LPC as threatened or endangered (USFWS and NMFS 1999).

Expected conservation benefits for LPC 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. In addition, currently occupied, vacant, and potential LPC habitats will be connected, protected, conserved, enhanced and/or restored through measures described in TPWD-approved WMPs and issued CIs.

Furthermore, LPC conservation will be enhanced by providing ESA regulatory assurances for participating property owners. 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 through assurances for utilizing best management practices and conservation measures to protect and enhance LPC habitat, and to sustain and improve population performance (i.e., increased population numbers, increased survival, reduced mortality, expansion of occupied range).

VII. Level/Type of Take/Impacts

Should the LPC 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 agricultural, recreational (e.g., viewing or other non-consumptive uses) and other related activities (e.g., crop cultivation and harvesting, livestock grazing, farm equipment operation). Oil and gas exploration and operation may be authorized as a form of incidental take if TPWD considers existing and future developments on potential enrolled lands to be consistent with the definition of covered areas (Section II, above) through its WMP process. Such assessments will be made on a case-by-case basis, and will include consideration of well density, well location, and ongoing and/or future reclamation activities.

The LPC is an upland game species in Texas, and TPWD manages the harvest through its Managed Lands Program (MLP). Within this program, TPWD issues harvest permits to qualifying landowners (i.e., those with a TPWD-approved WMP for LPC). As a result, TPWD is able to manage the harvest and collect necessary data, while concurrently providing recreational harvest opportunities on those lands that are being actively managed for LPC. The MLP for LPC became effective in spring 2005; prior to this time, TPWD issued permits to hunters who indicated an interest in hunting LPC during the 2-day fall season in one or more of the eight legal counties. If the LPC is listed as a threatened or endangered species at some point in the future, hunting will no longer be permitted.

Incidental take and the resulting effects to LPC are expected to be minimal. Because habitat conservation and restoration measures will be in place, impacts from above-mentioned agricultural, recreational, natural resource-related, and other related activities would be limited to minor disturbance from various activities. Incidental take will likely occur sporadically, and is not expected to nullify the conservation benefits expected to accrue under the CCAA. The actual level of take of LPC is largely unquantifiable; however, all efforts possible will be made to quantify take during the effective lifetime of this CCAA.

VIII. Assurances Provided

Through this CCAA, the USFWS provides TPWD and cooperating property owners with TPWD-issued Certificates of Inclusion, assurances 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 this CCAA, will be required should the LPC become listed as a threatened or endangered species in the future. Unless otherwise stated, these assurances will be authorized with the issuance of an enhancement of survival permit under section 10(a)(1)(A) of the ESA.

The USFWS will provide TPWD and participating landowners with the ESA regulatory assurances found at 50 CFR 17.32(d)(5). Consistent with the FWS'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 LPC 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 TPWD and participating landowners. The permit will authorize Participating Landowners to incidentally take LPC 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 LPC. Future non-enrolled landowners wishing incidental take authorization for LPC after any future effective ESA listing date could apply for authorization through the USFWS' Habitat Conservation Plan or Safe Harbor Agreement permitting programs.

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

The assurances listed below apply to participating property owners. The assurances apply to the enrolled properties and are applicable only with respect to the species covered by this CCAA (LPC).

Changed circumstances provided for in the CCAA. The impacts of various factors (e.g., drought, energy development) are factored into the conservation measures for LPC in this CCAA. Changes could occur in the extent or rate of these factors. The Parties (TPWD and USFWS) agree that if changes in factors impacting habitats occur, a review of the changes and impact on habitats (or the ability of habitat to reduce impact) will be made. If this review supports the conclusion that additional habitat conservation measures are necessary, the Parties will take an adaptive management approach and address the change by minor amendment to the conservation measures, or take other actions as permitted in the CCAA. If additional conservation measures are necessary to respond to changed circumstances and the measures are set forth in the CCAA's operating conservation program, the property owner will implement the

appropriate measures specified in the CCAA after consultation with a qualified technical assistance provider (e.g., TPWD, USFWS, NRCS biologist). The Parties agree to work together in good faith to address the changed circumstance to the best of their abilities.

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 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 the participating property owner, but only if such measures maintain the original terms of the CCAA to the maximum extent possible. Additional conservation measures will not involve the commitment of additional land, water, or 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 the participating property owner. 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 LPC. The USFWS will consider, but not be limited to, the following factors:

- Size of the current range of LPC;
- 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 LPC; and
- Whether failure to adopt additional conservation measures would appreciably reduce the likelihood of survival and recovery of LPC in the wild.

X. Monitoring and Reporting

TPWD will be responsible for annual monitoring through its WMP process and TPWD will be responsible for annual reporting requirements related to this CCAA. These annual monitoring and reporting activities by TPWD 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) summary and brief description of habitat management activities and habitat conditions in the CCAA area, including all enrolled lands; (3) evaluation of effectiveness of habitat management activities

implemented on enrolled lands during the reporting year at meeting the intended conservation benefits of the CCAA; (4) population surveys conducted during the reporting year on enrolled private lands; and (5) funds used for habitat conservation on enrolled private lands. Reports will be due January 31 of each year to the Administrators of this CCAA, and to any participating landowners.

XI. Notification of Take Requirement

By signature of this CCAA, permitted landowners and TPWD agree to provide the USFWS with an opportunity to evaluate the LPC or LPCs before any authorized take occurs. Notification that take will occur must be provided to the USFWS at least thirty (30) days in advance of action. If permitted take is conducted on an ongoing basis, the USFWS may consider annual notification (e.g., conservation plans, land use plans) sufficient.

XII. Duration of CCAA and Permit

This CCAA will be for a duration of 20 years from the date the CCAA is signed by TPWD and the USFWS. The associated permit will become effective on the date of a final rule that lists LPC as threatened or endangered and continues through the end of the CCAA term. The permit will cover participating landowners from the date their lands are enrolled under the CCAA until the end of the CCAA and permit term (if the permit is issued). 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 until the end of the permit term.

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 landowner or successor in interest to the 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).

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.

XV. Amendment of the Permit

The permit, if issued, may only be amended in writing and with notification to TPWD 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 TPWD. TPWD 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, TPWD 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 to CIs will become final when signed by the affected parties and attached to the original CCAA.

XVI. Termination of the CCAA

As provided for in Part 8 of the USFWS' CCAA Policy (64 FR 32726, June 17, 1999), TPWD 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, TPWD is required to surrender the enhancement of survival permit at termination, thus relinquishing take authority (if LPC have become listed at time of termination) and the assurances granted by the permit. TPWD 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 relocate affected species within 90 days of the notice.

XVII. Permit Suspension or Revocation

The FWS 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.

XVIII. 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.

XIX. Dispute Resolution

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

XX. Succession and Transfer

This CCAA shall be binding on and shall inure to the benefit of Participating non-Federal Cooperators 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 enhancement of survival 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 TPWD or any subsequent non-Federal Cooperator in writing of any transfer of ownership, so that the TPWD or other non-Federal Cooperator can attempt to contact the new owner, explain the responsibilities applicable to the enrolled land, and seek to interest the new owner in entering into a Wildlife Management Plan with an attendant CI. 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 LPC.

XXI. Availability of Funds

Funding to recruit (including outreach and education activities) willing landowners, identify appropriate lands for enrollment, survey for LPC, prepare CCAA CI, plan for habitat conservation and management, and implement conservation measures is not included in this CCAA. Nothing in this CCAA prevents TPWD 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 FWS 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.

XXII. Relationship to Other Agreements

The terms of this CCAA shall be governed by and construed 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.

XXIII. 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.

XXIV. 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:

TPWD designee: Dr. Michael E. Berger
Wildlife Division Director
4200 Smith School Road
Austin TX, 78744-3291

USFWS designee Tom Cloud
Field Supervisor, Arlington Ecological Services Field Office
711 Stadium Drive, Suite #252
Arlington, TX 76011

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.

11-2-06

Executive Director
Texas Parks and Wildlife

Date

11/2/06

11-2-06

Regional Director
U.S. Fish and Wildlife Service

Date

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Appendix A.

CERTIFICATE OF INCLUSION

In The
Candidate Conservation Agreement with Assurances for the Lesser Prairie Chicken (*Tympanuchus pallidicintus*) Between the Texas Parks and Wildlife Department and the US Fish and Wildlife Service

This certifies that the Participating Landowner of the property described in the attached and referenced TPWD-approved Wildlife Management Plan [attach completed Plan] are included within the scope of the attached draft Permit No. _____ to be finalized and issued if and when the lesser prairie-chicken is listed as endangered or threatened to the Texas Parks and Wildlife Department (TPWD) 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 TPWD'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 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. 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 TPWD and the US 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.

_____ _____
TPWD Representative Date

_____ _____
USFWS Representative Date

_____ _____
Participating Landowner Date

Appendix B.

TPWD-APPROVED WILDLIFE MANAGEMENT PLAN

as referenced in the
Candidate Conservation Agreement with Assurances for the Lesser Prairie Chicken (*Tympanuchus pallidicintus*) Between the Texas Parks and Wildlife Department and the US Fish and Wildlife Service

TEXAS PARKS & WILDLIFE DEPARTMENT

WILDLIFE MANAGEMENT PLAN

SECTION 1 – TRACT IDENTIFICATION AND CONTACT INFORMATION

Tract Name: _____ **Majority County:** _____
Additional Counties (if any): _____
Owner: _____ **Agent or Manager:** _____
Address: _____ **Address:** _____
City, State, Zip: _____ **City, State, Zip:** _____

Telephone numbers of person submitting form:
Specify: ☐ *Agent* ☐ *Landowner* **Home:** _____
Business: _____ **Ranch:** _____
Fax: _____ **Mobile:** _____
Email:

Location of Property (distance and direction from nearest town; specify highway/road numbers:

Is Acreage Under High Fence? ☐ **Yes** ☐ **No** ☐ **Partial (Describe)** _____
Acreage under high fence: _____

SECTION 2 – HABITAT MANAGEMENT GOALS AND RECOMMENDATIONS:
Complete the following information, include additional sheets if necessary

1. Describe the landowner's wildlife management goals and objectives, including a description of the landowners goals for wildlife-associated recreation:

2. Habitat Types and Amounts in Acres

Cropland/Food Plots:	_____	**Bottomland/Riparian:**	_____
Non-native Pasture:	_____	**Wetlands:**	_____
Native Grassland/Savannah:	_____	**Timberlands:**	_____
Native Rangeland/Brush:	_____		

Other (describe): _____

Total acres included in this Management Plan: _____

3. Describe current habitat types and plant composition:

4. Describe past/current history of land use, habitat manipulation and wildlife management, including livestock and exotics:

5. Habitat Management - current practices and recommendations:

6. Livestock Management – current practices and recommendations:

	Present	Recommended
Kind and Class of Livestock		
Stocking Rate (acres/animal unit)		
Grazing Management System(s)		

Type of Livestock Operation: ☐ cow/calf ☐ registered herd ☐ stockers ☐ yearlings

7. Watering Facilities – type and location of existing facilities and future plans:

8. Supplemental Feeding - current practices and recommendations:

9. Appendices – Additional information on species identified in this plan:

SECTION 3 – DEER AND BIG GAME MANAGEMENT

1. List deer harvest history for past three seasons (include exotics):

Year	Bucks	Does	Total Deer	Exotics

2. Methods used to determine population density and date to submit data

Survey Technique	Comments	Submit by date
Spotlight:		
Aerial:		
Mobile:		
Other:		

3. Population Management Goals Recommended by Biologist

Recommended Density Goal for Deer Population (Acres/Deer): _____

Recommended Sex Ratio (does/buck): _____

Desired Fawn Production (fawns/doe): _____

4. List Density Estimates for the past three seasons and techniques used to determine these estimates (include exotics):

Year	Bucks	Does	Fawns	Acres/Deer	Exotics

5. Landowner/Agent's Desired Harvest: _____ Bucks _____ Does

SECTION 4 – MANAGEMENT RECOMMENDATIONS FOR VARIOUS GAME AND NONGAME WILDLIFE SPECIES

1. Specific Habitat Management Recommendations and Population Management Goals

2. Wildlife Harvest and Record Keeping Recommendations

3. Habitat Management Recommendations Benefiting Multiple Species:

SECTION 5 – COMMENTS AND RECOMMENDATIONS CONCERNING RARE AND DECLINING WILDLIFE SPECIES

1. Habitat Management Recommendations for Rare Species:

2. Landowner Incentive Program Participation:

3. Comments Concerning Any State/Federally listed Threatened/Endangered Species or Species of Concern:

SECTION 6 – PARTICIPATION IN USDA FARM BILL PROGRAMS

1. Indicate specific program(s) and practices to be implemented:

2. Indicate where practices will be applied, time frame for completion, and expected wildlife benefits:

SECTION 7 – PLAN PREPARATION

1. Individual Preparing Plan:

Name: _____ **Title:** _____

Address: _____

Phone(s): _____

2. Individual preparing the plan: ☐ **Landowner** ☐ **Manager** ☐ **Resource Management Professional** ☐ **Consultant** ☐ **Certified Wildlife Biologist**

3. 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 TPWD to use this information for its purposes, but not to release it to other parties or agencies without my approval.

_____ _____ _____

Landowner/Agent Signature ***Printed Name*** ***Date Signed***

TEXAS PARKS & WILDLIFE

TEXAS PARKS AND WILDLIFE DEPARTMENT CERTIFICATION

Circle One: ☐ **Approved** ☐ **Disapproved**

_____ _____

Authorized TPWD 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 Texas Parks and Wildlife Department and the US Fish and Wildlife Service

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.

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 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 Candidate Conservation Agreement with Assurances.

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

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.

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.

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.

Landowner Incentive Program: TPWD 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 LPC traditionally gather in the spring to perform courtship displays. Also referred to as booming ground, display ground.

LIP: *see* Landowner Incentive Program

LPC: Lesser Prairie Chicken

Managed Lands Program: TPWD program that is designed to encourage effective habitat management for native wildlife species. For LPCs, this is an incentive/habitat focused program that provides landowners involved in a formal management program with an LPC hunting season and harvest opportunities.

MLP: *see* Managed Lands Program

Natural Resources Conservation Service: A federal government agency within the US 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: Landowners who have entered into a TPWD-approved Wildlife Management Plan for lesser prairie-chickens and are actively implementing conservation measures for the species.

PWC: Parks and Wildlife Code, the authority that establishes and governs regulations pertaining to wildlife in the state of Texas.

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 U.S. Fish and Wildlife Service 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.

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

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

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