Range-wide Conservation Plan for Lesser Prairie-Chicken

**Background** – The lesser prairie-chicken (*Tympanuchus pallidicinctus*), hereafter LEPC, is a species of grouse found in shrublands and grasslands of the Southern Great Plains. Historically, the LEPC was common in areas of Kansas, Colorado, New Mexico, Oklahoma and Texas. About 90% of its former range is no longer suitable for the species due to extensive conversion of prairies to croplands and prairie habitat degradation and fragmentation.

In response to a 1995 petition to list the LEPC as a threatened species under the federal Endangered Species Act (ESA), the US Fish and Wildlife Service (USFWS) determined a listing was “warranted, but precluded.” This means that evidence supported listing the species under the ESA, but that the USFWS had higher-priority species to address at that time. The USFWS is now moving forward with the listing process for LEPC. Unless there is sufficient certainty that management actions will be taken that will maintain viable populations of LEPC, the USFWS may move to list the species. A listing may lead to additional federal regulations and restrictions on human uses and development within the species range.

**Range-wide LEPC Plan** – A Lesser Prairie-Chicken Interstate Working Group (IWG), including participation by the Kansas Department of Wildlife, Parks & Tourism, has been working to coordinate management efforts and research needs among the five states (KS, CO, OK, NM, TX) in which LEPCs are found (http://www.wafwa.org/html/prairie_chicken.shtml). Federal and state funds have been made available for habitat conservation and restoration on private lands through cooperative partnerships with landowners.

The IWG contracted with The Ecosystem Management Research Institute (EMRI) (www.emri.org) to help develop the range-wide conservation plan. The plan will address:

- The science describing the habitat and other needs of LEPC’s and identification of research/data gaps.
- Characteristics of high quality LEPC habitat, and actions that would maintain or restore quality habitat.
- Appropriate habitat improvement/conservation goals (how much habitat is needed and how it should be distributed to maintain viable LEPC populations) and long-term management actions/strategies to achieve these goals.
- How LEPC conservation can be done while minimizing effects on human economies and developments.
- Coordinated management strategies – including interagency coordination and incentive or other programs that will make restoration and maintenance of LEPC habitat economically possible for landowners.

**LEPC Population & Habitat Goals** – The IWG convened a team of scientists who are experts on LEPC to: (1) help identify population and habitat goals, and (2) develop a method to evaluate LEPC habitat, impacts, and potential benefits to habitat from mitigation. In August 2012, the team identified an overall population goal of 66,000 birds, to be the average population size over a period of approximately 10 years (recognizing that the population can fluctuate considerably from year to year due to weather). This population goal was divided among four “ecoregions” as follows: shinnery oak ecoregion - 10,000 birds (range 5,000-
15,000), sand sagebrush ecoregion - 6,000 birds (2,000-8,000), mixed grass ecoregion - 20,000 birds (10,000-30,000), and the short grass ecoregion - 30,000 birds (20,000-40,000).

The science team set a goal for the amount of habitat (acreage) necessary to achieve these populations and delineated “focal areas” where management efforts for LEPC should be concentrated. Focal areas will provide large blocks of habitat (minimum of 25,000 acres of high quality habitat), with a goal that at least 70% of each focal area will be high quality habitat. Focal areas will be connected by “linkage zones” that provide suitable habitat conditions to allow for movement of birds, and will be no more than 20 miles apart. Assuming that focal areas should support 75% of the desired population, it was estimated that 6.3 million acres should be designated as focal areas across the range of LEPC. Of this, 4.5 million acres would be in Kansas because of the size of the LEPC population and its potential habitat in this state. Focal area locations were based on the current known distribution and abundance of LEPC, areas expected to be high quality habitat (even if current population status is not known), areas with high potential for successful habitat restoration, inclusion in or proximity to public lands that may be managed for LEPC habitat, and (where possible) avoidance of areas with high development potential.

**Coordinated Management** – Existing and future LEPC management programs will be coordinated to concentrate management actions within focal areas. Management programs include the LEPC Initiative of the Natural Resource Conservation Service, the USFWS’s Partners Program, programs on US Forest Service national grasslands and Bureau of Land Management lands, as well as state wildlife habitat improvement programs and efforts of non-government organizations that target LEPC habitat improvements. These programs provide incentives to allow willing landowners to improve LEPC habitat at little or no cost to the landowner. Programs are also being implemented to assure landowners that if they improve LEPC habitat on their property they will not be subject to additional restrictions to their land management activities. The range-wide plan will summarize existing management programs, additional actions that are needed to maximize the effective delivery of these programs, and responsible parties for each action.

The range-wide plan will also propose actions to better address possible impacts associated with energy developments. Opportunities for programs such as conservation banking and other mitigation credit systems will be addressed. Candidate Conservation Agreements with Assurances will be addressed for energy development (e.g., oil and gas, wind, and transmission) to provide conservation benefits for the species while addressing needs of energy developers.

Finally, the range-wide plan will identify key information gaps that should be priorities for new or continuing research. Opportunities for adaptive management will be encouraged so that research efforts can learn from on the ground management and conservation actions.

The range-wide LEPC conservation plan will be completed by March 2013. Public input is encouraged as the plan is developed.