



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

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December 4, 2008

### Memorandum

To: Regional Director, U.S. Fish and Wildlife Service, Albuquerque, New Mexico  
(ARD-ES) (Attn: Susan Jacobsen)

District Manager, Pecos District, Bureau of Land Management, Roswell, New Mexico

From: Field Supervisor, New Mexico Ecological Services Field Office, Albuquerque, New Mexico

Subject: Intra-Service Section 7 Conference Opinion on the proposed Issuance of a Section 10(a)(1)(A) Enhancement of Survival Permit for Lesser Prairie-Chicken (LPC) and Sand Dune Lizard (SDL) to The Center of Excellence for Hazardous Materials Management (CEHMM) and proposed implementation of the BLM Candidate Conservation Agreement.

This responds to your request for conferencing with the U.S. Fish and Wildlife Service (FWS) pursuant to section 7 of the Endangered Species Act of 1973, as amended (16 U.S. C. 1531 et seq.) (ESA). CEHMM has applied to the FWS for a section 10(a)(1)(A) enhancement of survival permit (permit) to authorize incidental take of lesser prairie-chicken (*Tympanuchus pallidicinctus*) (LPC) and sand dune lizard (*Sceloporus arenicolus*) (SDL) within all lands currently occupied or potentially occupied by the species within Lea, Eddy, De Baca, Curry, Roosevelt, Quay, and Chavez counties in southeastern New Mexico. LPC and SDL are candidates for listing pursuant to the ESA. As a condition of the proposed permit, CEHMM would be responsible for implementing a Candidate Conservation Agreement with Assurances (CCAA) (FWS 2008) and its parent document, a Candidate Conservation Agreement (CCA) (FWS 2008) which would not be a condition of the proposed permit, but would be complementary to the CCAA so that conservation actions can be undertaken on Federal lands. The Bureau of Land Management (BLM) has also requested to conference on the effects of the approval and implementation of the proposed CCA, under our intra-Service section 7 conference opinion. Both the CCA and CCAA include a suite of conservation measures for the LPC and SDL.

This document transmits the FWS's conference opinion based on review of the permit application by the CEHMM. At issue are the impacts that issuance of the permit may have on the LPC and SDL. This conference opinion was prepared using information from the CCAA, CCA, Environmental Assessment (EA) and other sources of information referenced below.

The LPC and SDL are currently Federal candidate species, and are not listed as federally threatened or endangered pursuant to the ESA. The CCAA and its proposed permit will address incidental take of the LPC and/or SDL should either species become listed during the term of the CCA or CCAA. CCAAs and CCAs provide an effective mechanism for the conservation of rare or imperiled species including species that are candidates for protection under the ESA. The FWS recognizes that taking steps to cooperatively reverse population declines is the most effective way to conserve species that are not currently federally protected.

The FWS has determined there are no other species of fish, wildlife, and plants which are listed under the ESA which occur in or near the action area.

## **CONFERENCE OPINION**

### **Conference History**

The FWS received a request for a conference opinion from the Bureau of Land Management (BLM) on November 21, 2008.

### **DESCRIPTION OF THE PROPOSED ACTION**

The proposed action as described in the EA, is the approval and implementation of a CCA and CCAA between the FWS, BLM, CEHMM, and Participating Landowners/Participating Cooperators to address the conservation needs of the LPC and SDL in southeastern New Mexico and the potential issuance of a Section 10(a)(1)(A) enhancement of survival permit. The CCA and the CCAA are separate agreements; one would apply to participants on Federal lands (CCA), and one would apply to participants on State and/or private lands (CCAA). Under the CCAA, CEHMM would implement conservation measures for the LPC and SDL within the covered area by providing technical assistance to cooperating private and State landowners (Participating Landowners). Participating Landowners can implement voluntary conservation measures for the LPC and/or SDL on their properties. CEHMM would enroll Participating Landowners via Certificates of Inclusion (CI). In addition, under the CCA, CEHMM would enroll Federal leases, permittees, and operators (Participating Cooperators) through Certifications of Participation (CP). The Participating Cooperators along with the FWS, BLM, and CEHMM would work collaboratively so that practices to conduct or maintain specific habitat enhancement/protection measures to benefit LPC and/or SDL conservation would be adopted on Federal, as well as, non-Federal lands. This landscape approach to conservation across a mix of land ownerships provides the greatest benefit to the species because limiting conservation to certain landowners in historical habitat leads to increased habitat fragmentation. The more limited conservation approach could lead to smaller habitat patches than those necessary to meet the needs of individuals and populations. In addition, necessary diversity of habitat structure may be lost. Areas lacking a diversity of habitat structure may potentially harbor higher numbers of predators or parasites, thereby potentially decreasing the expansion of the species range and the recolonization of new areas.

### **Action Area**

The action area includes all or portions of Lea, Eddy, De Baca, Curry, Roosevelt, Quay, and Chaves counties in southeastern New Mexico. The CCA would apply to participants on Federal lands while the CCAA would apply to participants on State and/or private lands.

### **Conservation Measures**

In addition to implementing the conservation measures described under the BLM's Special Status Species Record of Decision and Approved Resource Management Plan Amendment (RMPA), participants in the CCA/CCAA may undertake any of the on the ground actions described below for the LPC/SDL. The procedure would entail individual participants signing a CP/CI for a particular parcel of land (enrolled property) to either implement the conservation measures or provide funding for implementation of conservation measures for the species their actions may affect.

Under the CCA, Cooperating Participants would contribute funds or provide in-kind work as well as, implement conservation actions for the LPC and/or SDL. The funds contributed may be used outside the enrolled property on other high priority lands (lands defined in the RMPA as being important habitat for the LPC and/or SDL). Under the CCAA, individual participants would implement conservation actions on their enrolled properties for the LPC and/or SDL.

For LPC/SDL, voluntary conservation measures under the CCA may include any of the following as determined in negotiations at the time of enrollment during the plan of development and informal conference stages:

1. Establish Plans of Development for enrolled properties.
2. Remove caliche pads and roads on legacy wells where there is no responsible party.
3. Construct all infrastructures supporting the development of a well (including roads, power lines, and pipelines) within the same corridor.
4. Construct new infrastructures in locations which avoid occupied and suitable LPC habitat.
5. Bury new distribution power lines that are planned within 2 miles of occupied LPC habitat (measured from the lek).
6. Minimize total new surface disturbance by utilizing alternative techniques such as co-locating wells, directional drilling, and interim reclamation of drill pads to minimum area necessary to operate the well.
7. Provide escape ramps in all open water sources.
8. Install fence markers along fences that cross through occupied habitat within 2 miles of an active lek.
9. Prohibit tebuthiuron spraying within 500 m of suitable and occupied habitat.
10. Design grazing management plans to meet habitat specific goals for individual ranches that may include stocking rates, rotation patterns, grazing intensity and duration, and contingency plans for varying prolonged weather patterns including drought.
11. Remove mesquite vegetation that invades into the soils preferred by LPC.

In addition, Voluntary Conservation Measures for the LPC/SDL under the CCAA may include any of the following as determined in negotiations at the time of enrollment during the plan of development and informal conference stages:

Common to all Participating Landowners:

- a) Cooperate with the CEHMM in completion of the Certificate of Inclusion (Appendix A). Enrollment under this Agreement and coverage of the enrolled lands will begin on the date the Participating Landowner agrees to implement conservation measures agreed upon by BLM, FWS, NMDGF, and/or designee and signs the Certification of Inclusion. The Agreement is valid until the end of the Agreement term, or until the end of their participation in this Agreement as documented in the CI, either through expiration or termination.
- b) Improve or maintain conservation lands as suitable LPC and/or SDL habitat for the Duration of Conservation” in the CI. Lands can be enrolled under the Agreement and the permit whether or not the Participating Landowner receives funding from the CEHMM or other sources. Technical assistance is available from the NRCS and the FWS to develop plans to improve and maintain habitat for the LPC and/or SDL. Financial assistance for the implementation of these plans may be available through conservation programs of the U.S. Department of Agriculture’s National Food Security Act of 1985, as amended (Farm Bill) and/or the FWS’s Partners for Fish and Wildlife Program (PFW) depending on annual funding. The Certificate of Inclusion will identify, among other things, suitable LPC/SDL habitat to be maintained on the conservation lands and the duration that this habitat will be maintained.
- c) Adhere to stipulations on surface activities required by the BLM RMPA (May 2008) on oil and gas lease developments on enrolled lands at a minimum.
- d) Adhere to rangeland and grazing stipulations required by the BLM RMPA (May 2008) at a minimum for ranch operations.
- e) Allow CEHMM, FWS, and/or NMDGF personnel, with prior notification, to survey enrolled lands for the presence of LPCs and/or SDLs and for habitat suitability for these species.
- f) Allow CEHMM personnel or their designees access to the enrolled lands for purposes of monitoring LPC and/or SDL populations and habitat.
- g) Allow CEHMM personnel or their designees access to the enrolled lands for purposes of compliance monitoring of conservation commitment.
- h) Use herbicides for shinnery oak management only when habitat goals cannot be achieved by other means, such as grazing system management.
  - i. No herbicide treatments will be applied in dune complexes (NRCS sand hills ecological sites) and corridors between dune complexes. Maintain a no-application buffer around dune complexes of 100 m to ensure dunal stability.
  - ii. Prohibit tebuthiuron spraying within 500 m of SDL habitat. In addition, for SDL, prohibit spraying in dune complexes or within corridors, which connect

dune complexes that are within 2000 m of each other. All application of tebuthiuron will be by a licensed applicator and in accordance with the New Mexico supplemental label for wildlife habitat.

- iii. In conducting such treatments, the goal should be to temporarily reduce shinnery oak competition with grasses, allowing grass cover to increase naturally. Herbicides should be used at dosages that would set back (defoliate) shinnery oak, not kill it.
- iv. Large block and linear application of herbicides should be avoided. Application should follow the natural patterns on the landscape such that only patches needing treatment are treated.
  - v. For LPC, herbicide treatment should not be applied around large oak motts, and within 1.5 miles of active lek sites.
- vi. Post-treatment grazing management is essential to success. Grazing will be deferred year round through at least two growing seasons after treatment. If vegetation response to treatment has been hindered due to drought or other factors additional deferments to ensure success of the treatment may be required.
- vii. Experimental treatments outside these guidelines may occur with the approval by FWS. Experimental treatments must be part of a quantitative research design to study vegetation response, viability of shinnery oak, drift, sub-surface spread, the interaction of herbicide treatment and/or grazing management and the response of LPC and SDL to various treatments.
  - i) For livestock ranches, implement grazing management plans intended move towards meeting specific habitat goals for the LPC and/or SDL as defined in the Collaborative Conservation Strategies for the Lesser Prairie-Chicken and Sand Dune Lizard in New Mexico (NM LPC/SDL Working Group 2005) on individual ranches. This may include adjustment of stocking rates, rest-rotation patterns, grazing intensity and duration, avoidance of nesting areas during nesting season, and contingency plans for varying prolonged weather patterns including drought.
  - j) No leasing of lands within the Conservation Lands to wind power development (including any appurtenant turbine towers, roads, fences, or power lines).
  - k) No leasing any lands within the Conservation Lands to oil and gas development (including roads, fences, or power lines), where the private land holder has discretion.
  - l) No conversion of Conservation Lands to crop production (sodbusting) or development as part of maintaining existing LPC and/or SDL habitat.
  - m) Avoid construction of new roads. If unavoidable, route and construct new roads, pipelines and power lines outside of occupied and suitable, unoccupied shinnery dune complexes as delineated by FWS, BLM, NMDGF, and/or designees.
  - n) Provide escape ramps in all open water sources and trenches for LPC and/or SDL.
  - o) Install fence makers along fences that cross through occupied habitat within 2 miles of an active lek.

- p) Avoid well pad construction within 1.5 miles of an active lek, (as defined in the Strategy and/or RMPA), unless reviewed and approved by the CEHMM and FWS.
- q) Initiate control of shinnery oak only after coordinating with and gaining approval from CEHMM and the FWS concerning control procedures so they will not be detrimental to LPC and/or SDL.
- r) Any trenches dug on enrolled property will have escape ramps placed at the ends and approximately every 500 feet to allow for LPC/SDL escape. Trenches may alternatively be covered to avoid entrapment and should be inspected three times a day.
- s) Provide information on annual basis to CEHMM on implementation of conservation commitment, observations of LPC/SDL on enrolled property, and any mortality of either species observed.

#### Optional Conservation enhancements:

A landowner may choose to implement as many of these as desired and this list is not inclusive. Conservation measures from the companion CCA or the Collaborative Conservation Strategy for lesser prairie-chicken and sand dune lizard in New Mexico may be implemented in accordance with stipulations a-r above. All conservation measures must be included on the CI and agreed upon by FWS, CEHMM, and the landowner.

- t) Allow release of captive-reared or translocated LPCs on enrolled lands if deemed appropriate by CEHMM, FWS, and NMDGF personnel.
- u) Participate in annual meetings with the CEHMM, FWS, and other Participating Landowners to discuss progress in recovery of LPCs/SDLs on participating lands. In addition, contribute information to an annual progress report as deemed appropriate by Participating Landowners about range conditions, land management activities, LPC/SDL abundance and distribution, and factors that may be having positive and negative effects on LPC/SDL populations.
- v) Control mesquite invasion especially in sandy soils where shinnery oak-bunch grass is the dominant plant association preferred by LPCs or SDLs. If mesquite control involves the use of herbicides in must be a site greater than 500m from suitable and occupied habitat for SDL. All application of herbicides will be by a licensed applicator and in accordance with the manufactures and Environmental Protection Agency labeling.
- w) Maintain enrollment in the Conservation Reserve Program.
- x) Allow removal of legacy oil and gas wells and infrastructure, and restoration of LPC/SDL habitat.
- y) Provide access for academic and agency researcher to study LPC/SDL on their lands.

A team composed of representatives from the FWS, BLM and CEHMM will develop and review the CPs/CIs to ensure the greatest benefit is occurring for the LPC and/or SDL. The team will

meet initially to review the Participating Landowners' or Participating Cooperators' application and develop the appropriate CP or CI for their lands. Subsequent meetings will occur to review the progress and success of the conservation measures being implemented.

## **STATUS OF THE SPECIES**

### **Lesser prairie chicken**

Biological information (i.e. species description; life history; and population dynamics) on the LPC can be found in the Candidate Conservation Agreement for the Lesser Prairie Chicken and Sand Dune Lizard (CCA 2008) and the EA for a Candidate Conservation Agreement/Candidate Conservation Agreement with Assurances for the Lesser Prairie Chicken and Sand Dune Lizard in New Mexico (FWS 2008). Additional information was gathered from the June 2008 Candidate Assessment and Listing Priority Assignment Form for the LPC. That information is incorporated by reference into this conference opinion.

### **Distribution and Abundance**

The historic range of the LPC encompassed areas with sandy soils supporting shinnery oak (*Quercus harvardii*)-bluestem (*Andropogon* sp.) and sand sage (*Artemisia filifolia*)-bluestem communities in the high plains of southeastern Colorado, southwestern Kansas, western Oklahoma, west Texas, the Texas panhandle, and eastern New Mexico (Bailey 1928). In New Mexico, Ligon (1961) reported the historical range as being the sandhill-bluestem plains, an approximately 120 km (75 mi) wide swath from the northeast border with Colorado to the southeast border with Texas and in northern De Baca County to 48 km (30 mi) west of Ft. Sumner.

In the early twentieth century, LPCs were reportedly common throughout their five-state range (Bent 1932; Baker 1953; Sands 1968; Fleharty 1995). The area occupied by the LPC in the 1880s was first estimated as 358,000 square kilometers (km<sup>2</sup>) (138,225 square miles (mi<sup>2</sup>)), and by 1969 it had declined to an estimated 125,000 km<sup>2</sup> (48,263 mi<sup>2</sup>) due to wide-scale conversion of native prairie to cultivated cropland (Taylor and Guthery 1980; Aldrich 1963). In 2007, mapping efforts by the Colorado Division of Wildlife, Kansas Department of Wildlife and Parks, NMDGF, Oklahoma Department of Wildlife Conservation, and Texas Parks and Wildlife Department, in cooperation with the Playa Lakes Joint Venture, re-estimated the pre-settlement occupied range to be approximately 456,403 km<sup>2</sup> (176,218 mi<sup>2</sup>) (Playa Lakes Joint Venture 2007). Although LPC still occur at some level within each state (Giesen 1998), based on these estimates, the species' distribution has been reduced nearly 86 percent since the time of European settlement (Playa Lakes Joint Venture 2007). The increase in the amount of LPC occupied range since 1980, as previously reported by Taylor and Guthery (1980), is primarily attributable to the short-term expansion of native grassland habitat in Kansas and Colorado under the Conservation Reserve Program (CRP) (Rodgers and Hoffman 2005).

In the 1920s and 1930s, the former range of the LPC in New Mexico was described as all of the sandhill rangeland of eastern New Mexico as far west as De Baca County. Ligon (1927) mapped the breeding range as encompassing portions of seven counties, a small subset of what he described as former range. In the 1950s and 1960s, occupied range was more extensive, indicating reoccupation of some areas. Presently, the NMDGF reports that LPCs are known from portions of seven counties and the occupied range of the LPC in New Mexico is estimated to encompass approximately 5,698 km<sup>2</sup> (2,200 mi<sup>2</sup>) (Davis 2006) compared with its historical range of 22,390 km<sup>2</sup> (8,645 mi<sup>2</sup>). Private and State land supports approximately 40 percent of the LPC population in New Mexico, with the remaining occurring on lands managed by BLM (Davis 2006). In the 1950s, the LPC population was estimated at 40,000 to 50,000 individuals, but by 1972 the population had declined to an estimated 6,000 to 10,000 individuals. NMDGF currently estimates the LPC statewide population to be about 9,443 individuals (Beauprez 2008).

In New Mexico, the most recent LPC population decline began in 1989. LPC counts on leks dropped dramatically in the BLM Caprock Wildlife Habitat Management Area and in west-central Lea County (Smith et al. 1998). Estimated hunter harvest also declined sharply (Cowley 1995), resulting in closure of hunting seasons in New Mexico in 1996. Although the decline may have been precipitated by drought conditions and reduced nest success, it is also likely that population recovery during the drought was hampered by habitat fragmentation and low recruitment. Since 2005, weather conditions have improved resulting in population increases, and Federal and State agencies have focused staff time and funding to address habitat concerns. From 1998-2008 LPC populations within the core area of southern Roosevelt, northern Lea, and eastern Chaves counties have increased (Beauprez 2008). The LPC population south of U.S. Highway 380 in southeastern Chavez County has shown a significant decline over the same ten-year period, even though 5 leks were detected in 2008, the largest number of leks detected since 1998 (Beauprez 2008). The BLM has implemented stipulations and conditions of approval to conserve LPC habitats since the 1980s. Along with its partners, the BLM has also been implementing legacy oilfield reclamation and rangeland restoration programs to enhance LPC habitat.

### **Reasons for Candidate Status**

In the FWS's 2008 Candidate Notice of Review, it was determined that the overall magnitude of threats to the LPC throughout its range is now high, and the species warrants elevation of the listing priority number from an eight to a two.

Threats: The magnitude of threats to LPC depends primarily on the quality, integrity and scale of remaining habitat. At present, long term habitat destruction and modification due to ongoing and increasing agricultural activities, increasing energy development, tree invasion due to fire suppression, collision mortality from fences and power lines and fragmentation are continuing and significant throughout the entire range. Foreseeable threats to habitat degradation caused by human land use also exist. The most serious threats to the lesser prairie-chicken are loss of habitat from conversion of native rangelands to introduced forages and cultivation, recent and planned conversion of Conservation Reserve Program (CRP) lands to cropland, cumulative habitat degradation caused by inappropriate grazing practices, wind energy development, oil and

gas development, woody plant invasion of open prairies due to fire suppression, inappropriate herbicide applications, and habitat fragmentation caused by structural and transportation developments. Many of these threats may exacerbate the normal effects of periodic drought on lesser prairie-chicken populations. In many cases, the remaining suitable habitat has become fragmented by the spatial occurrence 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, areas between habitat patches may harbor high levels of predators or brood parasites, and the probability of recolonization decreases as the distance between suitable habitat patches expands.

### **Sand Dune Lizard**

Biological information (i.e., species description; life history; and population dynamics) on the sand dune lizard can be found in the Candidate Conservation Agreement for the Lesser Prairie Chicken and Sand Dune Lizard (BLM and FWS 2008) and the EA for a Candidate Conservation Agreement/Candidate Conservation Agreement with Assurances for the Lesser Prairie Chicken and Sand Dune Lizard in New Mexico (FWS 2008). Additional information was gathered from the June 2008 Candidate Assessment and Listing Priority Assignment Form for the SDL. That information is incorporated by reference into this conference opinion.

### **Distribution and Abundance**

The SDL is native to a small area of southeastern New Mexico and west Texas. A habitat specialist, the SDL only occurs in sand dune complexes associated with shinnery oak (Degenhardt et al. 1996), with areas often separated by large stretches of habitat unsuitable for SDL.

SDLs are known only from a system of shinnery oak sand dunes located in southeastern New Mexico and west Texas. In New Mexico, the habitat area encompasses only 455,000 acres (711 mi<sup>2</sup>) of BLM, State of New Mexico Land Office (NMSLO), and private lands. The species range in New Mexico consists of 71,396 acres of State trust lands, 286,355 acres of public lands managed by BLM, and 97,025 acres of private property. Seventy-one percent of the minerals within the range of the SDL are federally owned and fall under BLM lease stipulations and their RMPA. Within the geographic range of the species, habitat is localized and fragmented where known populations are separated by vast unoccupied areas. Fitzgerald et al. (1997) observed isolated areas of apparently suitable habitat that did not contain SDLs. It is possible that these observations are the result of local extinction events in isolated areas where recolonization is either impossible or has not yet occurred (Snell et al. 1997). It is also possible that these areas have never been occupied and other factors such as competition with or predation by other species prevent SDL occupation in otherwise suitable habitat. Recent surveys by the BLM have reconfirmed the presence of SDLs within the known geographic range of the species. Several SDLs have been located just outside of the known geographic range, but within shinnery dune habitat, and have included juveniles, indicating that more individuals were likely present (Bird 2007). In Texas, land ownership within the range of the SDL is currently unquantified, but initial research has indicated that both private and State-owned lands contain suitable habitat for

the species in west Texas (Laurencio et al. 2006). At this time, a range-wide population estimate for the SDL has not been calculated (C. Painter, New Mexico Department of Game and Fish, pers. comm. 2007).

### **Reasons for Candidate Status**

Because the range of the species was not formally described until 1997, it is difficult to determine the extent of habitat loss range-wide. Fragmentation, within a small and possibly shrinking geographic range, has led to concern over the future survival of the SDL and a petition was submitted to the FWS on June 6, 2002 for the protection of the species under the ESA. Prior to receiving the petition to list, through its own internal process, the FWS determined in 2001 that listing was warranted, but precluded because of other higher priority species and the SDL was designated as a candidate for listing.

Threats: Increased fragmentation of shinnery oak-dune habitat from removal of shinnery oak for agriculture, cattle grazing, and oil and gas development may isolate SDL populations, increasing the likelihood of extinction (Snell et al. 1997). Habitat disturbance has already occurred within the range of the species, and there is little doubt that the current distribution and range is a small, but unquantified part of its historical range (Snell et al. 1997). Removal of shinnery oak dune complexes within occupied or suitable, unoccupied habitat poses a serious threat to a species that depends on a very specialized dynamic system. Because the dune system is dynamic and dependant on sand movement, removing shinnery oak from occupied and suitable, unoccupied areas could impact the system's ability to form and stabilize dunes while maintaining connectivity among patches of habitat within the species' range.

### **Conservation Efforts**

Although neither the LPC nor the SDL is currently federally listed, activities have occurred in the past in an attempt to reduce the decline of the species. In January 2003, a working group composed of local, State and Federal officials, along with private and commercial stakeholders, was formed to address conservation and management activities for the LPC/SDL. This working group, formally named the New Mexico Lesser Prairie-Chicken/Sand Dune Lizard Working Group, worked diligently for 2.5 years resulting in the publication of the Collaborative Conservation Strategies for the Lesser Prairie-Chicken and Sand Dune Lizard in New Mexico (Strategy) in August 2005 (New Mexico LPC/SDL Working Group 2005). This Strategy provided guidance in the development of BLM's RMPA, approved in 2008.

In April of 2008, the BLM completed the Special Status Species Resource Management Plan Amendment for southeast New Mexico. The RMPA established foundational requirements to be applied to all future activities for Federal surface and Federal minerals (including private surface used for Federal mineral development). These RMPA foundational requirements will be applied to all activities requiring Federal authorization within the RMPA area (refer to Appendix D of the CCA).

The BLM has also developed a habitat predictability model to help define the parameters of the known geographic range of the SDL.

In addition, Restore New Mexico is a proactive conservation partnership between the BLM, other Federal natural resource agencies, non-governmental organizations, and private landowners that was initiated in 2005 to restore New Mexico's grasslands, woodlands, and riparian areas. In southeast New Mexico, the BLM and its conservation partners have restored more than 115,000 acres of mesquite-infested grasslands, thus benefiting LPC and SDL habitat.

## **ENVIRONMENTAL BASELINE**

The environmental baseline includes past and present impacts of all Federal, state, or private actions in the action area; the anticipated impacts of all proposed Federal actions in the action area that have undergone formal or early section 7 consultation; and the impact of state and private actions which are contemporaneous with the consultation process. The environmental baseline defines the current status of the species and its habitat in the action area to provide a platform to assess the effects of the action now under conference.

### **Status of the Species within the Action Area**

#### Lesser Prairie Chicken

As stated previously, the NMDGF reports that LPCs are known from portions of seven counties and the occupied range of the LPC in New Mexico is estimated to encompass approximately 5,698 km<sup>2</sup> (2,200 mi<sup>2</sup>) (Davis 2006) compared with its historical range of 22,390 km<sup>2</sup> (8,645 mi<sup>2</sup>). Private and State land supports approximately 40 percent of the LPC population in New Mexico, with the remaining occurring on lands managed by BLM (Davis 2006). In the 1950s, the LPC population was estimated at 40,000 to 50,000 individuals, but by 1972 the population had declined to an estimated 6,000 to 10,000 individuals. NMDGF currently estimates the LPC statewide population to be about 9,443 individuals (Beauprez 2008).

#### Sand Dune Lizard

In New Mexico, the SDL habitat area encompasses only 455,000 acres (711 mi<sup>2</sup>) of BLM, State of New Mexico Land Office (NMSLO), and private lands. The species range in New Mexico consists of 71,396 acres of State trust lands, 286,355 acres of public lands managed by BLM, and 97,025 acres of private property. Seventy-one percent of the minerals within the range of the SDL are federally owned and fall under BLM lease stipulations and their RMPA. Within the geographic range of the species, habitat is localized and fragmented where known populations are separated by vast areas of unoccupied habitat.

### **Factors Affecting Species Environment within the Action Area**

Within the action area in southern New Mexico, ongoing activities that affect the LPC and SDL include oil and gas development, livestock grazing, and other agricultural activities. On Federal lands and mineral leases managed by BLM, the effects of these actions are minimized through the implementation of the BLM's Sensitive Species RMPA. The effects of these activities on non-Federal lands are currently not reduced through the implementation of conservation measures or agreements.

## **EFFECTS OF THE ACTION**

Current activities related to oil and gas development, livestock grazing, and agricultural practices will continue to occur within the action area covered by the CCA/CCAA. Implementation of the conservation measures associated with the RMPA have provided and will continue to provide for some level of minimization of adverse effects within Federal lands and leases. In addition, voluntary measures implemented under the CCA would provide additional minimization of those adverse effects. The implementation of the conservation measures described in CCAA would reduce the adverse effects of current activities on LPC and SDL that occur on non-Federal lands and leases without the benefit of conservation measures. Implementation of the CCA/CCAA will provide additional minimization of adverse effects associated with continuing activities occurring at the landscape level.

### **Effects to LPC from Oil and Gas Development**

Energy exploration and development occur on public and private surface lands throughout the range of the LPC in New Mexico. While all the effects of oil and gas development on LPCs are not understood, recent studies have suggested that development of oil and gas resources negatively impacts prairie grouse, particularly during the breeding season (Lyon and Anderson 2003; Pitman et al. 2005). Because LPCs require large contiguous tracts of prairie ecosystems to fulfill their life history requirements, the cumulative impacts of roads and increased traffic, well pads, pipelines, overhead transmission lines, compressor stations, and production facilities not only result in direct habitat loss, but also results in fragmentation of remaining suitable habitat (Pitman et al. 2005). Prairie grouse avoid roads, power lines, and other man-made infrastructures (Pitman et al. 2005). Crawford and Bolen (1976) noted that LPC leks adjacent to heavily traveled roads were abandoned at a higher rate than those found further from anthropogenic disturbance. The effect of daily vehicular traffic associated with maintenance of oil and gas operations along these road networks can also impact breeding activities and may further decrease the availability of habitat (Braun et al. 2002). Collisions with overhead transmission lines cause direct mortality to LPCs and may further limit LPC populations (Bidwell et al. 2003). Transmission lines also provide perches for raptors, which could potentially increase the mortality rate of LPCs (Bidwell et al. 2003). Noise associated with oil field activities may impact breeding activities if mating display vocalizations are disrupted by background noise (Davis 2006). Braun et al. (2002) noted that sage-grouse lek attendance was lower on breeding grounds located in close proximity to active mineral resource developments compared to less disturbed lek sites. Braun (1986) speculated that if noises associated with oil field activity deter recruitment of yearling sage-grouse males to breeding grounds, leks may become extinct.

Studies to assess whether sounds from oil and gas exploration may have played a role in the abandonment of a number of historically active lek sites in southeast New Mexico show that abandoned lek sites were exposed to higher ambient noise levels than active sites (Hunt 2004). The same study also reports a significantly higher number of operating wells within one mile of abandoned lek sites. Whether this pattern of lek abandonment reflects sensitivity to noise or some other form of disturbance associated with intensive oil and gas development, or is a

response to factors not associated with drilling, remains unknown. However, all of these studies emphasize the importance of taking behavioral avoidance into consideration when assessing development impacts on LPC habitat. The majority of these issues described above are addressed by the RMPA (BLM 2008), and timing stipulations related to noise disturbance have been in place since the implementation of the RMP in 1997 (BLM 1997).

Please refer to the list of conservation measures within the CCA and CCAA and listed above to minimize the effects of oil and gas development to the LPC. Included amongst those conservation measures are those that limit the number of perches for roosting raptors to decrease predation and address the collision potential by reducing the number of powerlines. In addition, many of the conservation measures will address habitat loss and fragmentation. Within the CCA, there is also a conservation measure that will attempt to offset the effects of oil and gas development through financing or implementing habitat restoration activities.

### **Effects to SDL from Oil and Gas Development**

Currently, 61 percent of land within the range of the SDL in New Mexico has been leased by private landowners, BLM, or the New Mexico State Land Office for oil and gas exploration. Within the 455,000 acres of shinnery oak-dune habitat in New Mexico, there are 3,078 oil pads/injection wells and 259 gas wells. The infrastructure for oil and gas development includes caliche (material composed of calcium carbonate and clay used to stabilize road surfaces in an otherwise sandy substrate) roads, caliche pads where well pumps and drilling rigs are placed, battery tanks, powerlines, pipelines, and injection wells. Excluding associated roads, each oil pad averages two acres and each gas pad averages three acres. Removal and fragmentation of lizard habitat has been caused by the large grid of caliche roads and pads, pipelines, and power lines that are found throughout the shinnery oak dunes. Oil and gas extraction activities have destroyed and fragmented lizard habitat and have resulted in population losses. Currently, there are approximately 24,000 acres of caliche pad disturbance, not including roads, within the area occupied by the species. The negative impacts of roads going through habitat include increased soil compaction, decreased stability of microclimates, behavioral modification, loss of habitat and habitat quality, inhibited access to resources, subdivisions of populations into smaller more vulnerable habitat patches, division of the ecosystem with artificial linear gaps, generation of abrupt edges, and introduction of non-native, invasive weed species, and mortality due to collisions, (Ingelfinger and Anderson 2004; Jaeger et al. 2005; Endriss et al. 2007; Delgado Garcia et al. 2007). Shinnery oak requires permeable sand in order to become established and grow and does not grow in areas with high amounts of calcium carbonate in the sand (Peterson and Boyd 1998). Habitat fragmentation and the reduction of overall shinnery dune habitat will impact survivorship, growth, and reproductive ability; lead to smaller effective populations; and decrease connectivity between populations (Chan et al. 2008). The size of habitat patches and suitable dune complexes will influence the probability of individual patches going extinct in this dynamic system. It is important to view the shinnery oak dune system as dynamic in order to maintain connectivity between patches in each of the geographic areas across the SDLs known range (Chan et al. 2008). When large habitat patches are divided into smaller patches there is increased edge habitat, decreased interior habitat, and increased probability of local extinction.

The majority of the well pads are clustered in the southern part of the species' range in an area 5 mi wide and 16 mi across at its greatest length within the swath of habitat between US Highway 82 and US Highway 62. In this area, there are 142 mi<sup>2</sup> where there are greater than thirteen wells per section (1 mi<sup>2</sup>). Increased oil and gas development, including seismic exploration, in the range of the lizard has caused direct and indirect effects to lizard habitat.

The of conservation measures within the CCA and CCAA and listed above are intended to address the effects of oil and gas development to the SDL. When incorporated into the project proposal they will minimize the loss of suitable habitat patches; loss of suitable dune complexes; soil compaction; habitat fragmentation; decreased stability of microclimates; and decreased connectivity.

### **Effects to LPC from Livestock Grazing**

Grazing is one of the dominant land uses on public and private lands throughout the range of the LPC. The evolutionary history of the mixed-grass prairie resulted in endemic bird species adapting- to a mosaic of lightly to heavily grazed areas (Bragg and Steuter 1996; Knopf and Samson 1997).

Within the range of the LPC, heavy grazing can potentially remove portions of tallgrass and midgrass cover. Uniform or widespread livestock grazing of rangeland, to a degree that leaves less than adequate residual cover remaining in the spring, is considered detrimental to the LPC population because grass height is reduced below that necessary for secure nesting cover and desirable food plants are markedly reduced (Bent 1932; Davis et al. 1979; Crawford 1980; Bidwell and Peoples 1991; Riley et al. 1992; Giesen 1994b). Residual cover at and around nests is thought to increase nest success because the nest is better concealed from predators (Davis et al. 1979; Wisdom 1980; Riley et al. 1992; Giesen 1994b).

The impacts of grazing on LPC habitat can vary widely, depending on climatic conditions, the state or health of range vegetation, and the type of grazing regime utilized. Drought tends to magnify grazing impacts, as both processes reduce plant cover (Giesen 2000). When forage is reduced by drought, what remains tends to be grazed more heavily unless animal numbers are reduced. As a result, some grazed areas may supply adequate habitat during periods of normal rainfall, but may be unable to support LPCs during periods of drought (Merchant 1982). Intensive and/or persistent grazing may reduce or eliminate residual tallgrass cover needed for nesting (Davis et al. 1979; Riley et al. 1992). Heavy grazing that repeatedly interrupts plant succession over a broad area may result in the conversion of tallgrass prairie to shortgrass or forb-dominated habitat (Hoffman 1963; Jackson and DeArment 1963; Litton et al. 1994) or shrub-dominated landscapes.

There are numerous conservation measures within the CCA and CCAA that address the effects of livestock grazing to the LPC. These conservation measures are intended to minimize the effects of uniform or widespread livestock grazing of rangeland resulting in the height of residual cover below that necessary for secure nesting cover and desirable food plants. Maintaining residual cover at and around nests is important in concealing nests against predators.

### **Effects to SDL from Livestock Grazing**

Livestock grazing can pose a significant indirect threat to the SDL. Alteration of native range to increase grass production for domestic livestock is the main reason for shinnery oak removal. Domestic livestock and wildlife grazing practices that reduce the ability of the land to sustain long term plant and animal production (Smith et al. 1996) may lead to the loss of grassland cover, mortality of plant species, and increased erosion. Further, improper grazing practices and increased conversion of rangelands to agricultural production may lead to habitat fragmentation and loss by promoting conditions favorable for shrub encroachment and by increasing infrastructure development, such as roads, drinkers, windmills, water pipelines, and fences (Dinerstein et al. 2000). These land management activities are compounded by extended drought periods and altered hydrologic functions. Conservation measures described within the CCA, CCAA, and Strategy document will minimize the effects of improper grazing to the SDL.

### **Effects to LPC from Agricultural Uses**

One of the potential impacts to the LPC from the conversion of native sandsage-shinnery oak rangeland to cultivation is habitat loss and/or fragmentation. Landscapes having greater than 20 to 37 percent cultivation may not support stable LPC populations (Crawford and Bolen 1976). Fragmentation may threaten local LPC populations through several mechanisms: habitat juxtaposition and remaining patches of rangeland may be smaller than necessary to support populations (Samson 1980); necessary habitat heterogeneity may be lost; habitat between patches may accommodate high densities of predators; and ability to move and/or disperse among suitable patches of habitat may decrease (Wilcove et al. 1986; Knopf 1996).

In the 1940s, 1970s, and 1980s, additional acres of previously unbroken grassland were brought into cultivation (Laycock 1987). Bragg and Steuter (1996) estimated that by 1993, only 8 percent of the bluestem-grama association and 58 percent of the mesquite-buffalo grass association as described by Kuchler (1985) remained. In New Mexico, as well as the other four states with extant LPC populations, there has been a decline in the amount of rangeland acreage over that time period, indicating that loss of important LPC habitat may still be occurring.

Other effects from sources, such as tree planting, fence building, and windbreaks may also impact the structure and continuity of grassland habitats. As a group, prairie grouse may be particularly sensitive to habitat fragmentation due to their short dispersal distances and landscape-scale habitat requirements (Braun et al. 1994). Recent LPC declines in the southern portion of its range in New Mexico, although probably at least in part drought-related, have led to concern over the effects of fragmentation. While it is often difficult to describe cause-and-effect linkages between specific sources of fragmentation and eventual population responses, recent studies have found LPC population declines in New Mexico to be associated with several measures of overall habitat fragmentation, including patch size, edge density, and total rate of landscape change (Woodward et al. 2001; Fuhlendorf et al. 2002).

Additionally, herbicide application on native rangelands to decrease or eliminate the shrub component and increase grass forage for livestock reduces habitat quality for LPC throughout the species' range. Herbicide application (primarily 2,4-D and tebuthiuron) to reduce or

eliminate shrubs from native rangelands is a common ranching practice throughout the species range.

In a study conducted in west Texas, Haukos (1989) documented strong nesting avoidance of tebuthiuron-treated shinnery oak rangelands. Similar behavior was confirmed by three recent studies conducted in New Mexico that examined aspects of LPC habitat use, survival, and reproduction relative to shinnery oak density and herbicide application. First, Bell (2005) documented strong thermal selection for, and dependency of LPC broods on, sand shinnery oak dominance in shrubland habitats. In this study, LPC hens and broods used sites within the sand shinnery community that had statistically higher percent cover and greater density of shrubs.

In a second study, Johnson et al. (2004) observed through telemetry methods that the most common vegetation types in LPC hen home ranges were those dominated by shinnery oak. Hens were detected more often in or near pastures untreated with herbicides. Although hens were detected in both treated and untreated habitats in this study, 13 of 14 nests were located in untreated pastures, and all nests were located in areas dominated by shinnery oak. Areas immediately surrounding nests also had higher shrub composition than the surrounding pastures. This study suggested that herbicide treatment to control shinnery oak adversely impacted nesting LPC.

Finally, a third study conducted by the Sutton Center, in cooperation with the NMDGF, showed that over the course of four years and five nesting seasons, LPCs in the core of occupied range in New Mexico distributed themselves non-randomly among shinnery oak rangelands treated and untreated with tebuthiuron (Patten et al. 2005). They demonstrated statistically that LPCs strongly avoided habitat blocks treated with tebuthiuron, but were not affected by low intensity cattle grazing. Further, herbicide treatment explained nearly 90 percent of the variation in occurrence among treated and untreated areas.

### **Effects to SDL from Agricultural Uses**

Tebuthiuron is an herbicide used to remove shinnery oak from areas in order to convert them to agricultural land or increase grass forage production in areas used for livestock grazing. Direct correlation of the species' decline is not linked to the actual application of tebuthiuron, but instead is linked to the long-term effects associated with the removal of shinnery oak habitat. Snell et al. (1997) found that removal of shinnery oak through herbicide treatment resulted in a dramatic reduction and extirpation of SDLs. The study showed that the species' numbers dropped 70 to 90 percent in areas chemically treated compared to adjacent untreated plots. Some plots experienced 100 percent population loss (Snell et al. 1997). Ongoing removal of shinnery oak on State and private lands in New Mexico is an imminent threat to the species with long-term negative effects.

Additional effects to LPC/SDL may occur as a result of alternative energy development and recreation. These other effects are outside the scope of this consultation.

## **CUMULATIVE EFFECTS**

Cumulative effects include the effects of future state, tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

The BLM manages the majority of the public land within the action area (e.g., 65% surface and 73% mineral). The rest of the action area is made up of private and State lands interspersed with the public land. Unregulated activities on State and private lands such as livestock grazing, inappropriate use of OHVs, agricultural development, residential or commercial development, alternative energy and oil and gas development, conversion of CRP lands to croplands, non-native plant invasion, and inappropriate herbicide application may adversely affect the LPC/SDL through a variety of avenues. Many of these threats may exacerbate the normal effects of periodic drought on LPC and SDL populations.

## **CONCLUSION**

After reviewing the current status of the LPC and SDL, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is the FWS's biological opinion that the action, as proposed, is not likely to jeopardize the continued existence of the LPC and SDL. No critical habitat has been designated for the species; therefore, none will be affected. We base this conclusion on the following:

- The conservation measures associated with implementation of the CCA/CCAA will reduce the effects of Oil and Gas Development by reducing direct effects to the LPC and SDL.
- The approval and implementation of the CCA/CCAA will result in a landscape level conservation program which will result in re-establishments and recolonization of suitable habitats by LPC and SDL.
- Future fragmentation will be reduced and connectivity between existing populations should be restored.
- The clustering of roads and development, with the retirement and restoration of existing roads and development, should reduce direct mortality on LPC and SDL.

As described in the effects section above, potential adverse direct and indirect effects to the LPC from oil and gas activities may include habitat loss; habitat fragmentation; noise disturbance; creation of perches for raptors; and collisions with powerlines. Potential adverse direct and indirect effects to the SDL from oil and gas activities may include loss of suitable habitat patches; loss of suitable dune complexes; soil compaction; habitat fragmentation; decreased stability of microclimates; and decreased connectivity.

Additionally, also discussed in the effects of the action section are those effects caused by improper grazing practices. However; there may be potential adverse direct and indirect effects to LPCs and/or SDLs from improper grazing management and agricultural uses. These effects could result in habitat loss (e.g., reduction of residual cover at and around LPC nests).

Furthermore, livestock grazing can pose a significant indirect threat to the SDL. Alteration of native range to increase grass production for domestic livestock is the main reason for shinnery oak removal. Domestic livestock and wildlife grazing practices that reduce the ability of the land to sustain long term plant and animal production (Smith et al. 1996) may lead to the loss of grassland cover, mortality of plant species, and increased erosion.

In addition, fragmentation may threaten local LPC populations through several mechanisms: habitat juxtaposition and remaining patches of rangeland may be smaller than necessary to support populations (Samson 1980); necessary habitat heterogeneity may be lost; habitat between patches may accommodate high densities of predators; and ability to move and/or disperse among suitable patches of habitat may decrease (Wilcove et al. 1986; Knopf 1996). Other potential adverse effects from agricultural uses may include those associated with tree planting, fence building, and the creation of windbreaks. These actions may potentially impact the structure and continuity of grassland habitats.

Please refer to the list of voluntary conservation measures proposed within the CCA and/or CCAA that will be incorporated into the CI/CP (as determined in negotiations at the time of enrollment) to minimize the effects of oil and gas development, livestock grazing, and agricultural practices to the LPC and/or SDL and their habitats.

In addition to those conservation measures Participating Cooperators in the CCA may contribute funds or conduct in-kind conservation work to benefit the LPC and/or SDL. The contributed funds will be held and utilized by CEHMM to accomplish conservation measures on other high priority areas as determined by the FWS and BLM. Please refer to Appendix C of the CCA for the contribution table. Funds collected will also be used to complete a Population Viability Analysis for both the LPC and SDL in New Mexico.

## **INCIDENTAL TAKE STATEMENT**

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this incidental take statement.

**Amount or Extent of Take**

The proposal to complete a CCA/CCAA for LPC/SDL in southeastern New Mexico includes a suite of conservation measures for the LPC/SDL and their habitats. It is anticipated that the action will provide the greatest benefit to resources within the covered area. This CCA/CCAA is based on adaptive management principles and thus, is a living document. Using adaptive management principles, the FWS and/or the BLM can add or make necessary modifications to existing conservation measures currently found in this CCA/CCAA. Additionally, new conservation measures can be implemented if the FWS and/or the BLM find such measures to be necessary to facilitate the continued conservation of the LPC and/or SDL. Any adaptive management modifications will apply only to future CPs. Implementation of the proposed action will reduce the increase in overall surface disturbance due to various land use practices on Federal, State and private lands. Implementation of the conservation measures proposed would result in beneficial impacts that would minimize or eliminate some threats to the LPC and SDL. This project has the potential to positively impact the status of the species before listing decisions on these species are made, however incidental take of LPCs and SDLs is reasonably certain to occur as a result of short-term impacts from implementation of the proposed action.

The FWS anticipates that the incidental take of LPC and SDL will be difficult to detect for the following reasons: 1) the uncertainty of populations number, 2) the likelihood of finding a dead or impaired specimen, and 3) because losses may be masked by seasonal fluctuations in environmental conditions and natural fluctuations in population numbers. Therefore, it is not possible to provide precise numbers of LPCs and SDLs that will be harassed, harmed, or killed as a result of the proposed action. In such instances where take is difficult to detect and/or quantify, take may be quantified in terms of an aspect of the species' habitat that may be diminished or removed by the action. The FWS cannot quantify the enrolled acres in the CCA/CCAA and the activities that may impact those acres at this time. However, at the time that either or both of the species become listed, the number of acres enrolled, the percent of these acres designated as "conservation lands", what activities, oil and gas development or ranching, and the intensity of these activities will be known. The activities and the conservation commitment on each enrolled property will be documented in the Certificate of Participation – CCA and the Certificate of Inclusion – CCAA. Therefore, incidental take of LPC/SDL will be authorized for the acres enrolled for the activities on the enrolled properties and the percent of conservation lands. Incidental take of LPC/SDL will be exceeded, if participating cooperators or cooperating landowners are not implementing their conservation commitments or the land use has changed such that the level of effects on the conservation lands is not consistent with the level of effects under the CCA/CCAA, as documented in the Certificates of Participation and the Certificates of Inclusion.

**Effect of the Take**

In the accompanying opinion, we have determined that the level of anticipated take is not likely to result in jeopardy to the LPC and SDL. Although we anticipate some take to occur, the implementation of the conservation measures should ultimately result in an overall increase of habitat in the long term.

## **REASONABLE AND PRUDENT MEASURES AND TERMS AND CONDITIONS**

All conservation measures including avoidance, minimizations, restoration and enhancement of LPC/SDL habitats, status surveys, biological and compliance monitoring, and reporting measures provided in the CCA/CCAA for LPC and SDL in New Mexico are incorporated herein by reference as reasonable and prudent measures and terms and conditions to address the incidental take of the LPC/SDL. No additional reasonable and prudent measures were identified during the conference. Annual reporting requirements are detailed in the CCA/CCAA and the report is due on January 1<sup>st</sup> of each year. As long as those reporting requirements are met, the requirements of this incidental take statement will be met, which will take effect upon the listing of either LPC and/or SDL.

The proposed CCAA and its associated documents clearly identify anticipated impacts to LPC/SDL likely to result from the proposed taking and the measures that are necessary and appropriate to minimize those impacts. These measures will be further documented for each property enrolled under the CCAA and together with the terms and conditions described in the section 10(a)(1)(A) permit issued with respect to the proposed CCAA, are hereby incorporated by reference as reasonable and prudent measures and terms and conditions within this incidental take statement pursuant to 50 CFR 402.14(I). Such terms and conditions are non-discretionary and must be undertaken for the exemptions under section 10(a)(1)(A) and section 7(o)(2) of the Act to apply. If the permittee fail to adhere to these terms and conditions, the protective coverage of the section 10(a)(1)(B) permit and section 7(o)(2) may lapse.

For the BLM, all conservation measures described in the proposed CCA, together with the terms, are hereby incorporated by reference as reasonable and prudent measures and terms and conditions within this incidental take statement pursuant to 50 CFR 402.14(I). Such terms and conditions are nondiscretionary and must be undertaken for the exemption under section 7(o)(2) of the Act to apply. If the BLM, or the Participating Cooperators, fails to adhere to these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

The incidental take coverage for LPC and SDL covered by the CCAA and the section 10(a)(1)(A) permit, will become effective upon the listing of these species as threatened or endangered under the Act. The incidental take coverage for LPC and SDL under this Incidental Take Statement for the CCA will become effective upon conversion of this CO to a BO after the listing of these species as threatened or endangered and acceptance of this CO by BLM..

## **REINITIATION NOTICE**

This concludes the conference for the issuance of an section 10(a)(1)(A) enhancement of survival permit associated with the CCAA for the LPC and SDL. This Conference Opinion may be confirmed as a Biological Opinion issued through formal consultation if either the lesser prairie chicken or sand dune lizard is listed in the future. The request must be in writing. If the Service reviews the proposed action and finds that there have been no significant changes in the action as

planned or in the information used during the conference, the Service will confirm the Conference Opinion as the Biological Opinion on the proposed action and no further section 7 consultation will be necessary.

After any future listing of the LPC and/or SDL as threatened or endangered and any subsequent adoption of this Conference Opinion, consultation must be reinitiated if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the proposed action that may affect listed species or critical habitat in a manner not considered in this Conference Opinion; (3) the proposed action is subsequently modified in a manner that causes an effect to listed species not considered in this Conference Opinion; or (4) a new species is listed or critical habitat designated that may be affected by the proposed action.

The FWS appreciates the BLMs efforts to identify and minimize effects to candidate species from this project. For further information please contact Wally Murphy at 505-761-4781.

*Jim Hornis*  
Acting Field Supervisor

12/4/08  
Date

*Bob Mills*  
Deputy Regional Director

5 December 2008  
Date

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