

**FINAL**  
**Environmental Assessment for the**  
**Amended Renewable (Wind and Solar) Energy, Power Line, and Communication Tower**  
**Habitat Conservation Plan and Incidental Take Permit for the Lesser Prairie-Chicken**

**LPC Conservation LLC**  
**Colorado, Kansas, New Mexico, Oklahoma, and Texas**



**March 2025**

**U.S. Fish and Wildlife Service**  
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## ACRONYMS AND ABBREVIATIONS

2021 EA	<i>2021 Final Environmental Assessment for the Renewable (Wind and Solar) Energy, Power Line, and Communication Tower Habitat Conservation Plan and Incidental Take Permit for the Lesser Prairie-Chicken</i>
2021 Plan Area	all areas affected by activities associated with the Covered Activities and Conservation Program, as assessed in the 2021 EA
2024 HCP Plan Area	all areas affected by activities associated with the Covered Activities and Conservation Program, as described in the Amended HCP
Amended HCP	amended <i>Renewable (Wind and Solar) Energy, Power Line, and Communication Tower Habitat Conservation Plan</i>
Applicant	LPC Conservation LLC
BGEPA	Bald and Golden Eagle Protection Act of 1940
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CI	Certificate of Inclusion
Conservation Program	activities that would benefit the lesser prairie-chicken through habitat preservation and restoration
Covered Activities	activities that may result in take of listed species for which LPC Conservation LLC has requested an incidental take permit
DPS	distinct population segment
EA	Environmental Assessment
ESA	Endangered Species Act of 1973
FR	Federal Register
ITP	incidental take permit
LEPC	lesser prairie-chicken
LEPC habitat	herbaceous and hay/pasture land cover types
LPIWG	Lesser Prairie-Chicken Interstate Working Group
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act of 1966
Permit Area	the area in which Covered Activities occur
Plan Expansion Area	areas within the 2024 HCP Plan Area that were not included in the 2021 Plan Area and, thus, were not assessed in the 2021 EA
Proposed Action	issuance of an amended ITP that includes the Plan Expansion Area
Service	U.S. Fish and Wildlife Service
USC	United States Code

## 1 PROJECT OVERVIEW AND BACKGROUND

### 1.1 Introduction and Background

The U.S. Fish and Wildlife Service (Service) issued an Incidental Take Permit (ITP) to LPC Conservation LLC (Applicant) in December 2021 for the incidental take of lesser prairie-chicken (LEPC; *Tympanuchus pallidicinctus*) due to habitat loss, fragmentation, and degradation resulting from wind, solar, power line, and communication tower project development in its estimated occupied range (including portions of Colorado, Kansas, New Mexico, Oklahoma, and Texas). Because the LEPC was not federally listed at that time, the ITP became effective on the same date federal listing of the LEPC became effective (March 27, 2023).

The LEPC estimated occupied range has been revised since the issuance of the ITP, based on LEPC occurrence documented in eastern Colorado and western Kansas (Northern Area), as well as small areas in southeastern Colorado into northern Oklahoma (Central Area) and central New Mexico (Southern Area; Figures 1-1 and 1-2; Lesser Prairie-Chicken Interstate Working Group [LPIWG] 2022). This revision to the estimated occupied range is primarily associated with a connection between two previously separated regions within the northern portion of the range (LPIWG 2022).

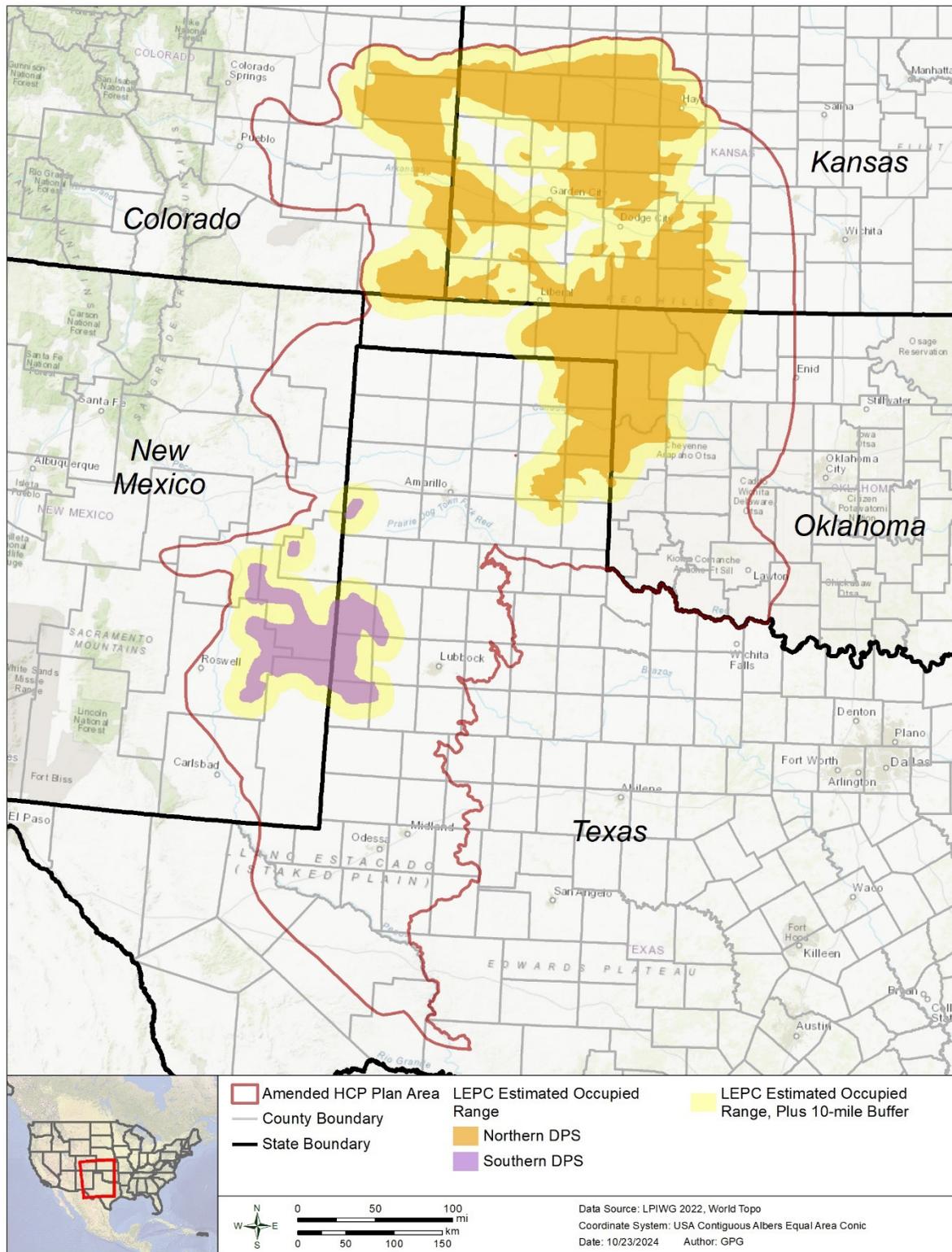
The Service received an application for an amendment to the ITP, which would authorize the incidental take of LEPC due to habitat loss, fragmentation, and degradation resulting from enrolled project development in the expanded portion of the LEPC range (the portion of the LEPC range that is outside of the area authorized by the 2021 ITP; Figure 1-1). As part of the application, the Applicant has prepared the amended *Renewable (Wind and Solar) Energy, Power Line, and Communication Tower Habitat Conservation Plan* (Amended HCP; Attachment A) that specifies, among other things, the impacts that would be likely to result from taking LEPC due to enrolled projects within the current LEPC range and the measures the Applicant and all participants would undertake to minimize and mitigate such impacts.

The Service has prepared this Environmental Assessment (EA) in accordance with the National Environmental Policy Act of 1969 (NEPA), as amended (42 United States Code [USC] §§ 4321–4347; 42 USC §§ 4371–4375 [2020]), to evaluate the effects of implementing the Applicant's proposed Amended HCP. This EA provides an evaluation of the impacts of, and alternatives to implementation of, the Amended HCP on the human environment, and will incorporate the results of the 2021 *Final Environmental Assessment for the Renewable (Wind and Solar) Energy, Power Line, and Communication Tower Habitat Conservation Plan and Incidental Take Permit for the Lesser Prairie-Chicken* (2021 EA; Service 2021) by reference.

#### 1.1.1 Permit Structure

The proposed amendment would not change the programmatic permit structure, which is described in the 2021 EA (Service 2021) and incorporated herein by reference.

RENEWABLE ENERGY, POWER LINE, AND COMMUNICATION TOWER  
 PROPOSED AMENDMENT TO THE HCP AND ITP FOR LESSER PRAIRIE-CHICKEN



**Figure 1-1. 2024 HCP Plan Area and estimated occupied range of lesser prairie-chicken in Colorado, Kansas, New Mexico, Oklahoma, and Texas.**

RENEWABLE ENERGY, POWER LINE, AND COMMUNICATION TOWER  
 PROPOSED AMENDMENT TO THE HCP AND ITP FOR LESSER PRAIRIE-CHICKEN

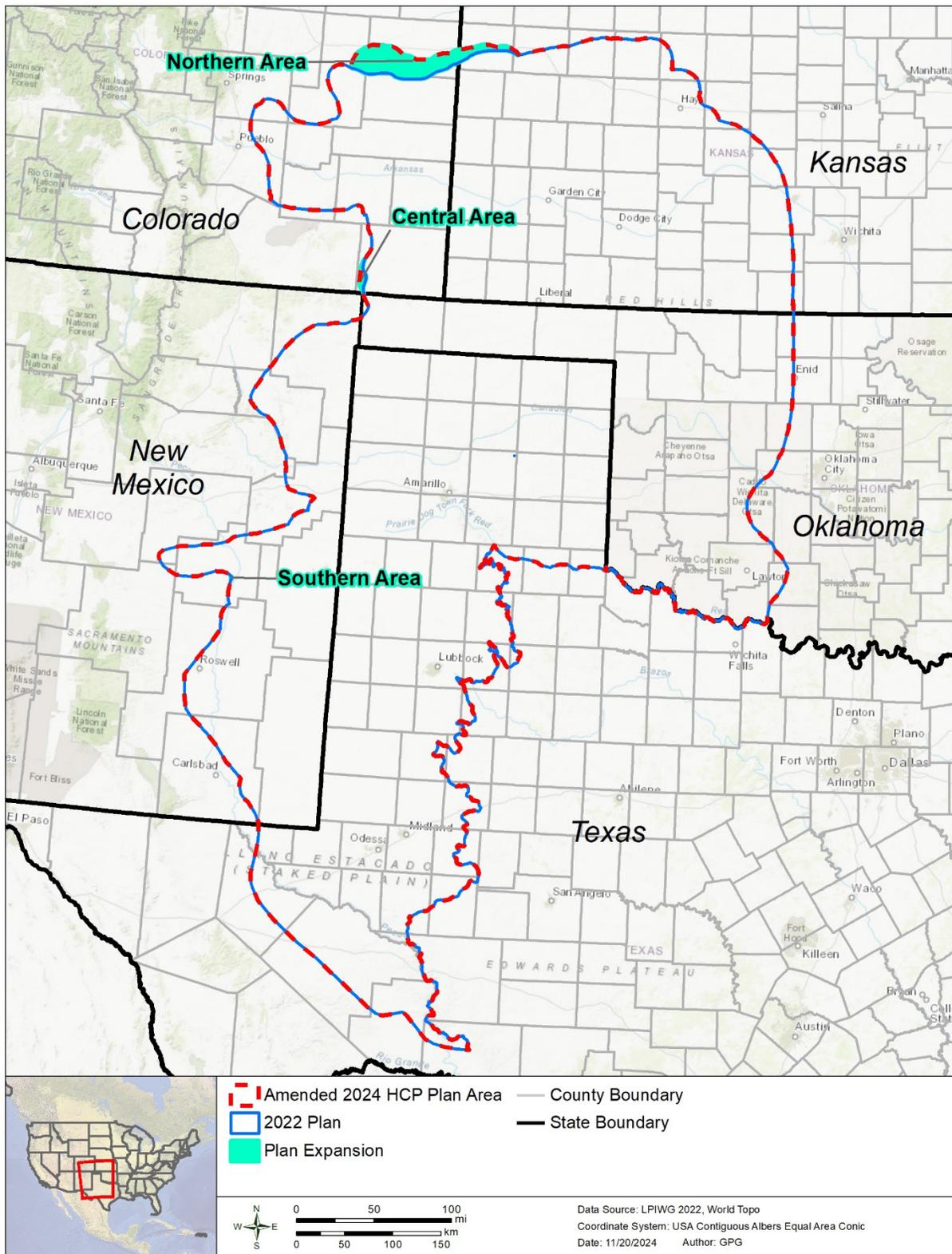


Figure 1-2. Location of the Plan Expansion Area within Colorado, Kansas, New Mexico, and Oklahoma.

### **1.1.2 Plan Area and Permit Area**

**2021 Plan Area.** The 2021 Plan Area (Figure 1-2) included all areas affected by activities associated with the Covered Activities (activities that may result in take of listed species for which LPC Conservation LLC has requested an ITP) and Conservation Program (activities that would benefit the LEPC through habitat preservation and restoration), as assessed in the 2021 EA (a total of 92,224,490 acres; Service 2021).

**2024 HCP Plan Area.** The 2024 HCP Plan Area (Figures 1-1 and 1-2) includes all areas affected by activities associated with the Covered Activities and Conservation Program, as described in the Amended HCP prepared by the Applicant in March 2025 (Attachment A). The 2024 HCP Plan Area is very similar to the 2021 Plan Area, but is approximately 1% larger in overall size (a total of 92,957,555 acres). It includes the entirety of the 2021 Plan Area, as well as an additional 733,065 acres of land, which is primarily in Colorado and Kansas, but also includes small areas in Oklahoma and in New Mexico (Figure 1-2; Appendix A).

**Plan Expansion Area.** The portion of the 2024 HCP Plan Area that was not included in the 2021 Plan Area, and thus was not assessed in the 2021 EA, is referred to herein after as the Plan Expansion Area. The Plan Expansion Area includes additional lands within Baca, Lincoln, Kit Carson, and Cheyenne counties in Colorado; Thomas and Sherman counties in Kansas; De Baca County in New Mexico; and Cimarron County in Oklahoma (Figure 1-2), each of which were also included in the 2021 Plan Area.

The amended Permit Area is a subset of the Plan Expansion Area and includes areas where take of LEPC may occur due to implementation of the Amended HCP, but excludes protected lands (as described in Section 1.5 of the HCP). The specific boundaries of the amended Permit Area cannot be reasonably delineated at this time because they are dependent on the locations of the projects that enroll in the HCP and on the locations of exclusion areas. As such, the amended Permit Area shares the same boundary as the Plan Expansion Area (Figure 1-2).

## **1.2 Regulatory Background**

### **1.2.1 Endangered Species Act**

The regulatory background associated with the Endangered Species Act of 1973 (ESA) is described in the 2021 EA (Service 2021), which is incorporated herein by reference. It is noted that two Distinct Population Segments (DPS) of the LEPC were listed by the Service, effective March 27, 2023 (87 Federal Register [FR] 72674). The Southern DPS, which includes portions of New Mexico and western Texas, was listed as endangered; the Northern DPS, which includes portions of Colorado, Kansas, Oklahoma, and northeastern Texas, was listed as threatened with a 4(d) rule that allows for activities associated with some routine agricultural practices (Figure 1-1).

### **1.2.2 National Environmental Policy Act**

The regulatory background associated with NEPA is described in the 2022 EA, which is incorporated herein by reference.

## **2 PURPOSE AND NEED**

### **2.1 Purpose of the Environmental Assessment**

Consistent with the 2021 EA, the purpose of the proposed action is to provide a means by which applicants and the Service can streamline the ESA compliance process for non-federal projects with the potential to impact the federally listed LEPC within the Plan Expansion Area. Streamlining the process allows the Service to process ITPs in an accelerated fashion, while meeting industry needs for expedited ESA compliance and providing continued conservation for the LEPC.

The purpose of the federal action is to address the application for an amended ITP to authorize take of the LEPC for Covered Activities (as described in Section 2 of the amended HCP and Section 3 of this EA) within the Plan Expansion Area. If the amended HCP meets the issuance criteria described in Section 10(a)(2)(B) of the ESA and 50 CFR 13.21, then the Service shall issue an amended ITP for Covered Activities.

The purpose of this EA is to inform the public of our Proposed Action (issuing an amended ITP that includes the Plan Expansion Area), the effects of the Proposed Action and its alternatives on the human environment, seek information from the public, and use the information collected and analyzed to make better informed decisions concerning this application for an amended ITP.

### **2.2 Proposed Action – Issuance of an Incidental Take Permit**

The proposed federal action being evaluated by this EA is the request from the Applicant to the Service for an amended ITP authorizing take of the LEPC, a species listed as endangered (Southern DPS) and threatened (Northern DPS) under the ESA, and the implementation of the associated Amended HCP. The Service's Proposed Action is to issue an amended ITP to the Applicant on the conditions predicated in the Amended HCP. The purpose of issuing an amended ITP to the Applicant is to authorize take of LEPC associated with projects located in the Plan Expansion Area that obtain a Certificates of Inclusion (CI) through the process summarized below in Section 3.1.4 and described in detail in Section 5.4.1 of the Amended HCP.

### **2.3 Need for Proposed Action**

The Service's need for the amendment to the ITP is to continue to provide a mechanism by which we can issue permits for take of LEPC by non-federal entities (in this instance, wind, solar, power line, and communication tower project developers) resulting from otherwise lawful activities in an expedited fashion, reduce the workload on federal employees, and meet industry scheduling requests. Amending the ITP would eliminate the need for processing multiple, individual HCPs and ensures consistent mitigation and minimization measures for the LEPC related to wind, solar, power line, and communication tower activities. Processing HCP requests requires review of each applicant's HCP; review of avoidance, minimization, and mitigation measures for each individual project; preparation of appropriate NEPA documentation; analysis under an intra-Service consultation; and may require coordination through multiple Service offices.

The wind, solar, power line, and communication tower industries' need for an amended ITP is to streamline the process of securing incidental take authorization, which can impact project schedules and budgets through the need for field surveys, compliance coordination, and identification of appropriate mitigation. The current ITP, and this proposed amendment, would support an expedited and consistent process for ESA compliance for these projects.

## **2.4 Decision to be Made**

The Service must decide whether to amend the ITP to extend the 2021 Plan Area to include an additional 733,065 acres (the Plan Expansion Area).

## **3 ALTERNATIVES**

Regarding compliance with NEPA, the CEQ implementing regulations require federal agencies to consider a range of alternatives that provide different ways in which to address and respond to major public issues, management concerns, and resource opportunities associated with a federal action (85 FR 43304). In assessing possible alternatives, the Service should also consider its statutory requirement pursuant to Section 10(a)(1)(B) of the ESA, whereby certain limitations are placed on the Service with respect to actions that may be undertaken.

Given that the Service previously considered a range of alternatives in the 2021 EA, the alternatives considered in this EA are limited to the Proposed Action (approving the request for an amended ITP) or the No-Action Alternative (not approving the request for an amended ITP).

### **3.1 Alternative 1 (Proposed Action): Issue an Amended Incidental Take Permit for the Applicant's Amended Habitat Conservation Plan**

Under Alternative 1, the Service would approve the Amended HCP and issue an amended ITP for the incidental take of the LEPC for Covered Activities in the Permit Area. As the ITP-holder, the Applicant (in the role of HCP Administrator) would oversee enrollment of projects and manage the requirements of the HCP and ITP, as summarized below.

#### **3.1.1 Covered Activities**

The Covered Activities would primarily include ground-disturbing activities associated with wind, solar, power line, and communication tower development (e.g., site preparation, construction of temporary infrastructure necessary to complete construction, construction of project infrastructure) within the Plan Expansion Area that could impact potentially suitable LEPC habitat. It should be noted that the authorized take of potentially suitable LEPC habitat (currently authorized at a maximum of 500,000 acres within the 2021 Plan Area) would not change under this ITP amendment (e.g., the maximum amount would remain 500,000 acres within the 2024 HCP Plan Area).

The Covered Activities include ground disturbance associated with maintenance activities occurring throughout project operation and decommissioning, but do not include general operation of the enrolled projects within the Plan Expansion Area. As such, long-term impacts associated with project operation are beyond the scope of this assessment and are excluded from

further analysis. These activities are described in Section 3.1.1 of the 2021 EA (Service 2021), which is incorporated herein by reference.

### **3.1.2 Avoidance and Minimization Measures**

Section 5.3 of the Amended HCP provides details on measures that would be taken by CI-holders (renewable energy, power line and communication tower companies enrolled under the HCP) to avoid and minimize the impact of the taking associated with enrolled projects. These measures are summarized in Section 3.1.2 of the 2021 EA (Service 2021), which is incorporated herein by reference.

### **3.1.3 Mitigation**

Impacts to suitable habitat that cannot be avoided or remain after minimization measures have been implemented are described in Section 5.3.3 of the Amended HCP, and in Section 3.1.3 of the 2021 EA (Service 2021), which is incorporated herein by reference.

### **3.1.4 Enrollment, Monitoring, and Reporting Processes**

The processes for enrollment, monitoring, and reporting for potentially eligible projects seeking to obtain a Certificate of Inclusion are described in Section 3.1.4 of the 2021 EA (Service 2021), which is incorporated herein by reference.

### **3.1.5 Adaptive Management**

Implementation of the HCP has been designed to allow for adaptive management throughout the ITP term, which expires on December 10, 2051. The adaptive management process is described in Section 5.5 of the Amended HCP, and in Section 3.1.5 of the 2021 EA (Service 2021), which is incorporated herein by reference.

## **3.2 Alternative 2: No-Action Alternative**

Under Alternative 2, the Service would not issue an amended ITP and, therefore, this programmatic permitting structure would not be available for willing participants to apply for CIs through the Applicant's HCP within the Plan Expansion Area. The Service assumes that many of the activities that would continue under the No-Action Alternative would include the Covered Activities, described above in Section 3.1.1. These otherwise potentially participating entities (i.e., renewable energy, power line and communication tower companies) would need to modify their design and/or operations under the No-Action Alternative to either avoid take, obtain an Incidental Take Statement under Section 7, or obtain an ITP under Section 10(a)(1)(B) of the ESA.

Amendment of the ITP under Alternative 1 would allow for a greater number of projects to utilize a standardized enrollment process for take of LEPC. It is likely that issuance of an amended ITP under Alternative 1 would result in more enrolled projects that would commit to a standardized set of avoidance, minimization, mitigation, monitoring, and adaptive management processes. In addition, mitigation under the No-Action Alternative would be the responsibility of each individual project, potentially resulting in a less effective, piecemeal mitigation approach with fewer opportunities to plan for LEPC habitat conservation on a landscape scale.

## 4 AFFECTED ENVIRONMENT

Analysis of the affected environment under NEPA typically includes assessments of actions on elements such as: biological environment (vegetation; wildlife; and listed, proposed, and candidate species), physical environment (land use, noise, and visual resources), and cultural resources. A full description of the elements analyzed under the 2021 EA (Service 2021) is available online at [Lesser Prairie-chicken Habitat Conservation Plan - Renewables](#).

As described in Section 1.2.2, the 2021 EA was developed in accordance with the CEQ's 2020 implementing regulations relating to the NEPA (85 FR 43304).<sup>1</sup> Consistent with the 2021 EA, this EA presents a detailed analysis of resources that would be subject to short- or long-term effects if an amended ITP is issued authorizing take of LEPC within the Plan Expansion Area. It was concluded that potential impacts associated with climate change would be similar and minimized to the extent feasible under the two alternatives being considered. Following the determination for other resources that were not carried forward for detailed analysis in the 2021 EA (i.e., geology and soils, water resources, air quality, hazardous materials/waste, recreation, socioeconomic resources, and transportation), climate change is not discussed further. The rationale for this exclusion follows.

### Climate Change

Ground-disturbing activities associated with each of the two alternatives would have similar, localized, and minor effects on emissions that contribute to climate change. Impacts would occur during construction, maintenance, and decommissioning of enrolled projects, and during grassland improvement and management activities associated with the Conservation Program. These activities would be conducted in accordance with federal, state, and local air permit requirements. These localized, minor effects would be distributed throughout the 2024 HCP Plan Area over the permit term, spreading out impacts over time and space, and would be similar across the two alternatives. As such, climate change impacts associated with ground-disturbing activities is excluded from further analysis.

### 4.1 Biological Environment

#### 4.1.1 Vegetation

The Plan Expansion Area occurs within two Level III ecoregions (i.e., the High Plains and Southwestern Tablelands ecoregions; U.S. Environmental Protection Agency 2013), both of which are described in the 2022 EA (Service 2022a) and incorporated herein by reference.

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<sup>1</sup> Executive Order 14154, Unleashing American Energy (Jan. 20, 2025), and a Presidential Memorandum, Ending Illegal Discrimination and Restoring Merit-Based Opportunity (Jan. 21, 2025), require the Department to strictly adhere to the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 et seq. Further, such Order and Memorandum repeal Executive Orders 12898 (Feb. 11, 1994) and 14096 (Apr. 21, 2023). Because Executive Orders 12898 and 14096 have been repealed, complying with such Orders is a legal impossibility. The [bureau] verifies that it has complied with the requirements of NEPA, including the Department's regulations and procedures implementing NEPA at 43 C.F.R. Part 46 and Part 516 of the Departmental Manual, consistent with the President's January 2025 Order and Memorandum.

## **4.1.2 Wildlife**

### **4.1.2.1 General Wildlife**

The two ecoregions in which the Plan Expansion Area occurs support a suite of common wildlife species. These species are described in the 2021 EA (Service 2021), which is incorporated herein by reference.

There are several protected lands within the Plan Expansion Area, including national forests, state wildlife management areas, conservation easements, and public lands managed by the U.S. Forest Service. These areas are precluded from the Covered Activities under the Amended HCP (see Section 1.5 of Attachment A).

### **4.1.2.2 Eagles**

The Plan Expansion Area supports habitat for bald (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*), both of which may occur year-round. Eagle habitat and potential eagle occurrence in the Plan Expansion Area are expected to be consistent with the 2021 Plan Area, which are described in the 2021 EA (Service 2021) and incorporated herein by reference.

### **4.1.3 Listed, Proposed, and Candidate Species**

Nine federally listed, proposed, or candidate species may occur within the Plan Expansion Area, including one mammal, four birds, two fish, and two insects (see Table 4-1). Of these, seven species were discussed in Section 4.1.3 of the 2021 EA (Service 2021), which is incorporated herein by reference. Since issuance of the 2021 EA, four species have been proposed for listing under the ESA: tricolored bat (*Perimyotis subflavus*; proposed endangered), monarch butterfly (*Danias plexippus*; proposed threatened), Suckley's cuckoo bumble bee (*Bombus suckleyi*; proposed endangered), and western regal fritillary (*Argynnis idalia occidentalis*; proposed threatened). No proposed or designated critical habitat is located within the Plan Expansion Area.

**Table 4-1. Federally Listed, Proposed, and Candidate Species with the Potential to Occur within the Plan Expansion Area for the Renewable (Wind and Solar Energy, Power Line and Communication Tower Habitat Conservation Plan and Incidental Take Permit for the Lesser Prairie-chicken.**

Species Name	Federal Status	State Status	Habitat/Notes <sup>1</sup>
<b>Mammals</b>			
Tricolored bat <sup>1</sup> <i>Perimyotis subflavus</i>	FPE	NL	<p>During non-hibernating seasons, the species roosts amongst leaf clusters in live or recently dead deciduous hardwood trees. The species has also been observed roosting among pine needles, human-made structures (e.g., barns, beneath porch roofs, bridges, concrete bunkers), and rarely in caves. Females tend to return year after year to the same summer roosting locations. Tricolored bats hibernate in mines and caves, returning to the same hibernaculum each year (U.S. Fish and Wildlife Service [Service] 2024d).</p> <p>Located on the western edge of the species' range, the potential for the tricolored bat to occur within the Plan Expansion Area is limited to the Central Area (in southeastern Colorado and northern Oklahoma) (Service 2025).</p>
<b>Birds</b>			
Eastern black rail <i>Laterallus jamaicensis</i> ssp. <i>jamaicensis</i>	FT	NL	<p>Habitat requirements for the eastern black rail are included in Attachment B (see Table B-1) of the 2021 EA, which is incorporated herein by reference.</p> <p>Within the Plan Expansion Area, the eastern black rail may occur within portions of the Northern and Central areas (in eastern and southeastern Colorado, respectively) during the breeding season (Service 2024a, 2025).</p>
Lesser prairie-chicken <i>Tympanuchus pallidicinctus</i>	FT	NL	<p>Northern Distinct Population Segment (DPS) with populations in southeastern Colorado, southcentral to western Kansas, western Oklahoma, and the northeast Texas Panhandle. Ecoregions for this DPS include short-grass, mixed-grass, and sand sagebrush regions (Service 2021b). Require large, ecologically functioning grasslands with a diversity of grass and shrub species. Tend to avoid areas with anthropogenic structures and trees (Service 2022b).</p> <p>Within the Plan Expansion Area, the Northern DPS occurs within the Northern and Central areas (Figures 1-1 and 1-2).</p>
Lesser prairie-chicken <i>Tympanuchus pallidicinctus</i>	FE	NL	<p>Southern DPS with populations in eastern New Mexico and across the southwest Texas Panhandle. Found only in prairie and agricultural land with shinnery oak prairie (Service 2021b). Require large, ecologically functioning grasslands with a diversity of grass and shrub species. Tend to avoid areas with anthropogenic structures and trees (Service 2022b).</p> <p>Within the Plan Expansion Area, the Southern DPS occurs within the Southern Area (Figures 1-1 and 1-2).</p>
Piping plover <sup>1, 2</sup> <i>Charadrius melodus</i>	FT	ST – CO, KS, NM	<p>Habitat requirements for the piping plover are included in Attachment B (see Table B-1) of the 2021 EA, which is incorporated herein by reference.</p> <p>Within the Plan Expansion Area, the piping plover may occur within portions of the Northern and Central areas (eastern Colorado and northwestern Oklahoma, respectively) during the migratory season (Service 2024b, 2025).</p>

**Table 4-1. Federally Listed, Proposed, and Candidate Species with the Potential to Occur within the Plan Expansion Area for the Renewable (Wind and Solar Energy, Power Line and Communication Tower) Habitat Conservation Plan and Incidental Take Permit for the Lesser Prairie-chicken.**

Species Name	Federal Status	State Status	Habitat/Notes <sup>1</sup>
Rufa red knot <i>Calidris canutus rufa</i>	FT	NL	Habitat requirements for the rufa red knot are included in Attachment B (see Table B-1) of the 2021 EA, which is incorporated herein by reference.  Potential for the rufa red knot to occur within the Plan Expansion Area is limited to a portion of the Central Area (in northwestern Oklahoma) during the migratory season (Service 2024c, 2025).
<b>Fish</b>			
Pallid sturgeon <sup>1</sup> <i>Scaphirhynchus albus</i>	FE	SE – KS	Habitat requirements for the pallid sturgeon are included in Attachment B (see Table B-1) of the 2021 EA, which is incorporated herein by reference.  Potential for the pallid sturgeon to occur within the Plan Expansion Area is limited to a portion of the Northern Area (in eastern Colorado; Service 2025).
Pecos bluntnose shiner <sup>1</sup> <i>Notropis simus pecosensis</i>	FT	SE – NM	Habitat requirements for the Pecos bluntnose shiner are included in Attachment B (see Table B-1) of the 2021 EA, which is incorporated herein by reference.  Potential for the Pecos bluntnose shiner to occur within the Plan Expansion Area is limited to the Southern Area in New Mexico (Service 2025).
<b>Insects</b>			
Monarch butterfly <i>Danaus plexippus</i>	FC	NL	Habitat requirements for the monarch butterfly are included in Attachment B (see Table B-1) of the 2021 EA, which is incorporated herein by reference.  The monarch butterfly may occur in each of the three areas comprising the Plan Expansion Area (Service 2025).
Suckley's cuckoo bumble bee <i>Bombus suckleyi</i>	FPE	NL	<u>An obligate social parasite bumble bee species dependent on western bumble bees (<i>Bombus occidentalis</i>) and Nevada bumble bees (<i>Bombus nevadensis</i>) as nest hosts. Requires a diversity of native floral resources as adults. (Service 2024e).</u>  Potential for Suckley's cuckoo bumble bee to occur within the Plan Expansion Area is limited to the portion of the Northern Area in northern Colorado (Service 2025).
Western regal fritillary <i>Argynnis idalia occidentalis</i>	FPT	NL	Occurs within tallgrass prairies and wet prairie habitats with more leaf litter and lower grazing intensities (Caven et al. 2017, Selby 2007, Service 2023). Avoids bare ground, altered landscapes, and developed areas that surround prairie remnants (Selby 2007). Flowering plants provide nectar for adults, whereas larvae feed exclusively on violets (Crawford and Tronstad 2020; Service 2023).  Potential for the western regal fritillary to occur within the Plan Expansion Area is limited to the portion of the Northern Area in eastern Colorado (Service 2025).

## Species Status:

FC = candidate for federal listing; FE = federally endangered; FPE = proposed endangered for federal listing; FPT = proposed threatened for federal listing; FT = federally threatened; NL = not listed; SE = state endangered; ST = state threatened.

## Other Abbreviations:

CO = Colorado, KS = Kansas; NM = New Mexico.

**Table 4-1. Federally Listed, Proposed, and Candidate Species with the Potential to Occur within the Plan Expansion Area for the Renewable (Wind and Solar Energy, Power Line and Communication Tower Habitat Conservation Plan and Incidental Take Permit for the Lesser Prairie-chicken.**

Species Name	Federal Status	State Status	Habitat/Notes <sup>1</sup>
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1. Federally listed, proposed, and candidate species with the potential to occur within the Plan Expansion Area but not expected to occur in similar habitat as the lesser prairie-chicken (LEPC; i.e., herbaceous and hay/pasture) are unlikely to be impacted by the issuance of an Incidental Take Permit for LEPC and have been dismissed from detailed analysis.
2. The Colorado Parks and Wildlife Department lists the subspecies of the piping plover (*Charadrius melodus circumcinctus*) as a state-listed threatened species. For the purposes of this analysis, the parent species and subspecies will be considered to be the same.

A total of 17 state-listed species may occur within the Plan Expansion Area (see Attachment B). Each of these species were assessed in Section 4.1.3 and Attachment B of the 2021 EA, which are incorporated herein by reference.

As discussed in Section 3 of this EA, the issuance of an ITP would only authorize incidental take of LEPC associated with otherwise lawful activities. Projects seeking to enroll in the HCP or CCAA and obtain coverage would be required to provide documentation of ESA compliance for species not covered under the programmatic permit as part of the application package, which would be reviewed by both the Applicant and the Service (see Section 8.4 of the HCP). Similarly, enrolled projects would be required to adhere to state regulations relating to state-listed endangered and threatened species (see Attachment B).

## 4.2 Physical Environment

### 4.2.1 Land Use

Land use within the Plan Expansion Area is not substantially different from that described for the 2021 Plan Area. However, a larger portion of the Plan Expansion Area is composed of cultivated croplands compared to the 2021 Plan Area (54% compared to 33%, respectively). Consistent with the higher percentage of cultivated croplands, suitable LEPC habitat is present within a lower proportion of the Plan Expansion Area than the 2021 Plan Area (43% compared to 62%, respectively). Also consistent with land use, the Plan Expansion Area includes a greater percentage of soils designated as prime farmland than the 2021 Plan Area (59% compared to 38%, respectively; Natural Resource Conservation Service 2023). Additional information relating to land use is included in Section 4.2.1 of the 2021 EA (Service 2021), which is incorporated herein by reference.

### 4.2.2 Noise

The Plan Expansion Area is primarily composed of rural communities (U.S. Census Bureau 2023), which is consistent with the 2021 Plan Area. Therefore, ambient noise in the Plan Expansion Area is not expected to be different from those in the 2021 Plan Area. A description of ambient noise levels was assessed in Section 4.2.2 of the 2021 EA, which is incorporated herein by reference.

### **4.2.3 Visual Resources**

Visual resources or “aesthetics” refer to the human perception of natural beauty on the landscape and the scenic qualities of an area. The Plan Expansion Area is located adjacent to the 2021 Plan Area, and is consistent with the 2021 Plan Area in that it is made up of primarily rural communities with similar land use and vegetation types. Therefore, visual resources within the Plan Expansion Area are consistent with those described in Section 4.2.3 of the 2021 EA (Service 2021), which is incorporated herein by reference.

### **4.3 Cultural Resources**

Cultural resources are prehistoric and historic archeological sites, districts, structures, or locations considered significant to a culture, subculture, or community for scientific, traditional, religious, or other reasons. Cultural resources within the Plan Expansion Area are expected to be consistent with those described in Section 4.3 of the 2021 EA (Service 2021), which is incorporated herein by reference.

## **5 ENVIRONMENTAL CONSEQUENCES**

The impact analysis in this EA includes two alternatives. Alternative 1 (the Proposed Action) would result in approval of the Amended HCP and issuance of an amendment to the ITP for the incidental take of LEPC for Covered Activities in the Plan Expansion Area. Alternative 2 (the No-Action Alternative) provides a baseline condition to which the Proposed Action can be compared. The No-Action Alternative describes the future conditions that can be expected if the Amended HCP is not approved. Therefore, a programmatic permitting structure would not be available for participants to apply for CIs for activities within the Plan Expansion Area. In this instance, renewable energy, power line and communication tower developers would need to coordinate with the Service on an as-needed, project-specific basis.

As noted in Section 3.1.1, there is no difference between the amount of authorized Covered Activities in the 2021 ITP and the proposed amendment; therefore, up to 500,000 acres of potentially suitable LEPC habitat would be impacted under both alternatives. The two alternatives differ with respect to whether a programmatic ITP permitting mechanism is granted for renewable energy, power line and communication tower project development within lands in the Plan Expansion Area, along with the associated level of commitment to minimizing and mitigating effects to the LEPC and its habitat.

### **5.1 Biological Environment**

#### **5.1.1 Vegetation**

Under both alternatives, up to 500,000 acres of suitable LEPC habitat (i.e., herbaceous and hay/pasture vegetation communities) would be impacted. Under the Proposed Action, vegetation impacts associated with Covered Activities would occur within the 2024 HCP Plan Area, which includes the Plan Expansion Area. Therefore, impacts would potentially be spread across a larger area compared to the 2022 Plan Area. However, the difference would be insignificant. Further, impacts to these vegetation communities would be fully offset by implementation of the

proposed Conservation Program (see Section 5.1.1 of the 2021 EA and Section 5 of the Amended HCP). Therefore, we do not anticipate any impacts to vegetation within the Plan Expansion Area beyond those described and fully analyzed in the 2021 EA (Service 2021). Most impacts to vegetation would be temporary, and not expected to be significant. Further analysis of the effects of the alternatives on vegetation is not considered necessary.

## **5.1.2 Wildlife**

### **5.1.2.1 General Wildlife**

There is no difference between Covered Activities in the 2021 ITP and the proposed amendment. Under both alternatives, up to 500,000 acres of suitable LEPC habitat (i.e., herbaceous and hay/pasture) would be impacted. Under the Proposed Action, impacts to wildlife associated with Covered Activities within the 2024 HCP Plan Area potentially would be spread across a larger area compared to the 2021 HCP Plan Area, but the difference would be insignificant. Therefore, we do not anticipate any impacts to wildlife within the Plan Expansion Area beyond those described and fully analyzed in the 2021 EA (Service 2021). Most impacts to wildlife from the Covered Activities would be temporary, and are not expected to be significant. Further analysis of the effects of the alternatives on wildlife is not considered necessary.

### **5.1.2.2 Eagles**

There is no difference between Covered Activities in the 2021 ITP and the proposed amendment. Under the Proposed Action, impacts to eagles associated with Covered Activities within the 2024 HCP Plan Area potentially would be spread across a larger area compared to the 2021 HCP Plan Area, but the difference would be insignificant. As part of the CI application process, impacts to eagles would be assessed in order to comply with the Bald and Golden Eagle Protection Act of 1940 (BGEPA). Therefore, we do not anticipate any impacts to eagles within the Plan Expansion Area beyond those described and fully analyzed in the 2021 EA (Service 2021). Most impacts to eagles from the Covered Activities would be temporary, and not expected to be significant. Further analysis of the effects of the alternatives on eagles is not considered necessary.

## **5.1.3 Listed, Proposed, and Candidate Species**

As described above, projects seeking to enroll in the Amended HCP would be required to provide documentation of ESA compliance for species not covered under the programmatic ITP. Similarly, enrolled projects would be required to adhere to state regulations relating to state-listed endangered and threatened species. Therefore, only impacts to the LEPC are discussed further in this section.

At the time the 2021 EA was issued, the LEPC was proposed for federal listing. Since that time, the Service listed two DPSs of the LEPC under the ESA; the Northern DPS was listed as threatened, and the Southern DPS was listed as endangered (88 FR 4087–4089). Critical habitat has not been designated for the LEPC. The amount of suitable LEPC habitat that would be allowed to be impacted under the amended ITP would be the same (500,000 acres) as what is currently allowed. Under the Proposed Action, impacts to LEPC would be spread across a larger area, but the difference would be insignificant. Therefore, we do not anticipate any impacts to

LEPC within the Plan Expansion Area beyond those described and fully analyzed in the 2021 EA (Service 2021). Further analysis of the effects of the alternatives on the LEPC is not considered necessary.

## **5.2 Physical Environment**

### **5.2.1 Land Use**

Under the Proposed Action, impacts to land use associated with Covered Activities within the 2024 HCP Plan Area, and therefore, would potentially be spread across a larger area compared to the 2021 HCP Plan Area. However, the difference would be insignificant. Further, the Plan Expansion Area is consistent with the 2021 Plan Area in that the land use is primarily cultivated croplands, hay/pasture, and other agricultural-related land uses. Therefore, we do not anticipate any impacts to land use within the Plan Expansion Area beyond those described and fully analyzed in the 2021 EA (Service 2021). Most impacts to land use would be temporary, and are not expected to be significant. Further analysis of the effects of the alternatives on land use is not considered necessary.

### **5.2.2 Noise**

Under the Proposed Action, noise impacts associated with Covered Activities within the 2024 HCP Plan Area would potentially be spread across a larger area compared to the 2021 HCP Plan Area, but the difference would be insignificant. Further, the Plan Expansion Area is consistent with the 2021 Plan Area in that it is primarily composed of large, undeveloped, open areas with dispersed rural communities. Therefore, we do not anticipate any impacts due to noise within the Plan Expansion Area beyond those described and fully analyzed in the 2021 EA (Service 2021). Most impacts due to noise would be temporary, and are not expected to be significant. Further analysis of the effects of the alternatives due to noise is not considered necessary.

### **5.2.3 Visual Resources**

Under the Proposed Action, impacts to visual resources associated with Covered Activities within the 2024 HCP Plan Area potentially would be spread across a larger area compared to the 2021 HCP Plan Area, but the difference would be insignificant. Further, the Plan Expansion Area is consistent with the 2021 Plan Area in that it is primarily made up of large, undeveloped, open areas with dispersed rural communities. Therefore, we do not anticipate any impacts to visual resources within the Plan Expansion Area beyond those described and fully analyzed in the 2021 EA (Service 2021). Most impacts to visual resources would be temporary, and are not expected to be significant. Further analysis of the effects of the alternatives on visual resources is not considered necessary.

## **5.3 Cultural Resources**

The Covered Activities and associated maximum acres of impact would be the same between both alternatives. Under the Proposed Action, impacts would potentially be spread across a larger area, but the difference would be insignificant. As part of the CI application process,

impacts to cultural resources would be assessed in order to comply with Section 106 of the National Historic Preservation Act of 1966 (NHPA). Therefore, we do not anticipate any impacts to cultural resources within the Plan Expansion Area beyond those described and fully analyzed in the 2021 EA (Service 2021). Impacts to cultural resources would not be expected to be significant. Further analysis of the effects of the alternatives on cultural resources is not considered necessary.

## **6 PAST, PRESENT, AND FUTURE EFFECTS IN ADDITION TO ENVIRONMENTAL CONSEQUENCES**

Since the issuance of the 2021 EA, the forecasted growth in the development of wind energy and transmission projects remain generally unchanged, according to the more recent 2023 Energy Outlook (U.S. Energy Information Administration 2023). However, growth in solar development has increased from an average of 3.4% per year to 4.0% per year (Solar Energy Industries Association 2020, 2024). While the majority of this development within the Plan Expansion Area may be covered under the Amended HCP, there would still likely be wind, solar, power line, and communication tower development beyond would be associated with the amended ITP (if approved). However, the increased annual growth of 0.6% in solar development would not be expected to result in substantial impacts within the Plan Expansion Area beyond those described in the 2021 EA (Service 2021). Impacts resulting from the development of renewable energy, power line and communication tower projects would vary from temporary to long-term, and would not be expected to be significant.

Forecasted oil and gas production also are relatively unchanged from what was anticipated at the time the 2021 EA was issued. Therefore, we do not anticipate additional impacts associated with oil and gas development within the Plan Expansion Area beyond those described and analyzed in the 2021 EA (Service 2021). Impacts resulting from oil and gas development would generally be temporary, and are not expected to be significant.

Noise and visual impacts resulting from the Covered Activities would be temporary; therefore, additional impacts are not anticipated. Impacts to the biological environment (vegetation; wildlife; listed, proposed, and candidate species), land use, and cultural resources associated with future energy development in the Plan Expansion Area are discussed below.

### **6.1 Biological Environment**

#### **6.1.1 Vegetation**

Implementation of the Amended HCP in the Plan Expansion Area could result in long-term or permanent impacts to vegetation resulting from the removal (e.g., aboveground facilities and access roads), conversion (e.g., where vegetation would be maintained along rights-of-way), and degradation (e.g., if plant growth is reduced as a result of soil compaction or if invasive plant communities establish and outcompete native communities) of suitable LEPC habitat (see Section 5.1.1 of the 2021 EA). However, impacts to these vegetation communities would be fully offset by implementation of the proposed Conservation Program. Therefore, additional impacts to vegetation within the Plan Expansion Area are not anticipated to result from the issuance of an amended ITP.

### **6.1.2 Wildlife**

Implementation of the Amended HCP in the Plan Expansion Area could result in long-term or permanent impacts to wildlife and eagles resulting from the removal, fragmentation, or degradation of herbaceous and hay/pasture habitat (see Section 5.1.2 of the 2021 EA). However, long-term and/or permanent impacts to wildlife and eagles are not expected because impacts to habitat would be fully offset by implementation of the proposed Conservation Program. Therefore, additional impacts to wildlife and eagle habitat within the Plan Expansion Area are not anticipated to result from issuance of an amended ITP.

Further, as described in Section 5.4.2 of the 2021 EA, it is anticipated that industry-standard best management practices (referred to as BMPs) would be implemented for projects developed in the Plan Expansion Area during both project construction and operation to reduce the potential for direct mortality and disturbance to wildlife and eagles. Projects would also be expected to pursue and obtain eagle take permits or nest disturbance permits to comply with the BGEPA, if warranted. As such, the issuance of an amended ITP is not expected to result in significant additional effects to bald or golden eagle populations, and effects to wildlife are expected to be minor and would not reduce naturally occurring populations to below the levels needed for maintaining viability at local or regional levels.

### **6.1.3 Listed, Proposed, and Candidate Species**

Implementation of the Amended HCP in the Plan Expansion Area could include long-term or permanent impacts to LEPC associated with the loss of suitable habitat and the subsequent displacement of individuals (Section 5.1.3.1 of the 2021 EA). However, long-term and/or permanent impacts to the LEPC are not expected because impacts to habitat would be fully offset by implementation of the proposed Conservation Program. Further, other reasonably foreseeable projects within the Plan Expansion Area potentially impacting suitable LEPC would need to modify their design and/or operations under the No-Action Alternative to either avoid take, obtain an Incidental Take Statement under Section 7, or obtain an ITP under Section 10(a)(1)(B) of the ESA. Therefore, issuance of an amended ITP and implementation of the Amended HCP would contribute discountable additional impacts to LEPC within the Plan Expansion Area.

## **6.2 Physical Environment**

### **6.2.1 Land Use**

Implementation of the Amended HCP in the Plan Expansion Area could include long-term or permanent impacts to land use associated with the loss or conversion of herbaceous and hay/pasture land cover types (Section 5.2.1 of the 2021 EA). Herbaceous lands account for approximately 35% of the Plan Expansion Area (which includes a total of 733,065 acres), and hay/pasture accounts for 4%. However, the amount of land impacted by the Covered Activities is expected to be substantially less than the acres of suitable LEPC habitat impacts that would be authorized under the ITP because a large percentage of those acres would be associated with LEPC impact buffers (see Table 3 in Section 4.3 of the HCP), where ground disturbance is not proposed. Further, with the exception of those lands where aboveground facilities or access roads

would be constructed, impacts to land use would be temporary. Therefore, issuance of an amended ITP and implementation of the Amended HCP would contribute discountable additional impacts to land use within the Plan Expansion Area.

### **6.3 Cultural Resources**

Implementation of the Amended HCP in the Plan Expansion Area could result in impacts to cultural resources during ground-disturbing activities (Section 5.3 of the 2021 EA). However, as part of the CI application process, impacts to cultural resources would be assessed in order to comply with Section 106 of the NHPA. It is expected that many oil and gas, renewable energy, and transmission projects would have federal authorizations (e.g., Section 404 of the Clean Water Act of 1972) that would require consultation under Section 106 of the NHPA, or other state regulations that require consideration and avoidance of potential impacts to cultural resources. As such, it is expected that most of these projects would avoid and/or minimize impacts to cultural resources to the extent feasible. With the implementation of avoidance and/or minimization measures, issuance of an amended ITP and implementation of the Amended HCP would contribute discountable additional impacts to cultural resources within the Plan Expansion Area.

## **8 CONSULTATION AND COORDINATION**

### **8.1 Agency Coordination**

The Service sent notifications requesting input from potentially affected tribal governments within and surrounding the 2021 Plan Area during the public comment period associated with the 2021 EA. The Service did not receive any comments or letters from tribal entities on the draft EA, and no substantive changes were made to the final EA based on tribal coordination. In support of the application to amend the ITP for LEPC resulting from habitat loss, fragmentation, and degradation from renewable energy, power line and communication tower development within the Plan Expansion Area, the Applicant coordinated with the Service. Additionally, each individual project enrolled under the Amended HCP would be required to coordinate with all applicable federal, state, and local agencies to ensure compliance with the appropriate statutes and regulations and to inform a project-specific LEPC impact analysis.

### **8.2 Distribution of the Draft Environmental Assessment**

In accordance with the NEPA, this amended EA, as well as the Amended HCP, was made public for 30 days to solicit public comments. Comments received on the amended EA were incorporated into this final EA, and are included as Attachment E.

**Attachment A. 2024 Renewable (Wind and Solar) Energy, Power Line, and  
Communication Tower Habitat Conservation Plan for the Lesser  
Prairie-Chicken**

*Available online at:*

<https://www.fws.gov/lpc/partners-lpc-conservation>

**Attachment B. State-Listed Species with the Potential to Occur within the Plan  
Expansion Area and be Impacted by the Issuance of the Amended  
Incidental Take Permit for the Lesser Prairie-Chicken**

**Table B-1. State-listed Wildlife Species with the Potential to Occur within the Plan Expansion Area for the 2024 Renewable (Wind and Solar) Energy, Power Line and Communication Tower Habitat Conservation Plan and Amended Incidental Take Permit for the Lesser Prairie-chicken.**

Species Name	Federal Status	State Status	Habitat/Notes
<b>Mammals</b>			
Black-footed Ferret <i>Mustela nigripes</i>	FE <sup>1</sup>	SE – CO, SE – KS	Limited to open habitat such as semi-arid grasslands, steppe, and shrub steppe. Black-footed ferrets are limited by prairie dog ( <i>Cynomys</i> spp.) occurrence, as they depend on prairie dogs for food and prairie dog burrows for shelter (Service 2019).
Eastern Spotted Skunk <i>Spilogale putorius</i>	NL	ST – KS	Prefer forest edges and upland prairie grasslands, including where rock outcrops and shrub clumps are prevalent. Woody fencerows and abandoned farm buildings are important habitat (Kansas Department of Wildlife and Parks [KDWP] 2024a).
<b>Birds</b>			
Bell's Vireo <i>Vireo bellii</i>	NL	ST – NM	Arid regions along streams or in dry arroyos and gulches, especially in shorter vegetation including dense shrub or scrub areas including brushy fields, riverine scrub, coastal chaparral, scrub oak, mottes of shrubs and trees in prairies, saltcedar ( <i>Tamarisk</i> spp.) stands, and mesquite ( <i>Prosopis</i> spp.) bosques. Tend to live in low vegetation (All About Birds 2023).
Least Tern <sup>2, 4</sup> <i>Sternula antillarum</i>	DE	SE – KS	Summer residents of Kansas. Nests have been recorded in central and western counties. Requires barren areas near water such as saline flats in salt marshes, sand bars in river beds, and shores of large impoundments (KDWP 2024b). This species does not occur in similar habitat as the LEPC, herbaceous or hay/pasture, and therefore is unlikely to be impacted by the issuance of an amended ITP for LEPC.
Piping Plover <sup>2, 5</sup> <i>Charadrius melodus</i>	FT	ST – CO, ST – KS	Shorelines around small alkaline lakes, river islands and adjacent sand pits, reservoir beaches, beaches surrounding large lakes, and pond shorelines (NatureServe 2024b). This species does not occur in similar habitat as the LEPC, herbaceous or hay/pasture, and therefore is unlikely to be impacted by the issuance of an amended ITP for LEPC.
Snowy Plover <sup>2</sup> <i>Anarhynchus nivosus</i>	NL	ST – KS	Prefers open salt flats, beaches, and bars of rivers and wetlands. In Kansas, is a regular but uncommon migrant and summer resident. Nesting occurs in scattered locations in Kansas where open salt flats or sandy areas near water occur (KDWP 2024c). This species does not occur in similar habitat as the LEPC, herbaceous or hay/pasture, and therefore is unlikely to be impacted by the issuance of an amended ITP for LEPC.
Whooping Crane <sup>2</sup> <i>Grus americana</i>	FE <sup>1</sup>	SE – KS	Coastal marshes and estuaries, inland marshes, lakes, ponds, riparian areas, wet meadows and rivers, and agricultural fields (NatureServe 2024f). This species does not occur in similar habitat as the LEPC, herbaceous or hay/pasture, and therefore is unlikely to be impacted by the issuance of an amended ITP for LEPC.

**Table B-1. State-listed Wildlife Species with the Potential to Occur within the Plan Expansion Area for the 2024 Renewable (Wind and Solar) Energy, Power Line and Communication Tower Habitat Conservation Plan and Amended Incidental Take Permit for the Lesser Prairie-chicken.**

Species Name	Federal Status	State Status	Habitat/Notes
<b>Fish</b>			
Arkansas Darter <sup>2</sup> <i>Etheostoma cragini</i>	NL	ST – CO	Prefers habitat in spring-fed headwaters and creeks with cool, clear, shallow water and a slow current. Herbaceous aquatic vegetation such as growths of watercress or other aquatic plants is often found. Often in pools with sand, fine gravel, or organic detritus substrate, sometimes found in turbid water away from springs (NatureServe 2024d). This species does not occur in similar habitat as the LEPC, and therefore is unlikely to be impacted by the issuance of an amended ITP for LEPC.
Arkansas River Shiner <sup>2</sup> <i>Notropis girardi</i>	FT <sup>1</sup>	SE – NM	Prefers turbid waters in broad, shallow, unshaded channels of creeks or small/large rivers, usually with silt and shifting sand bottoms. Spawning occurs in main stream channels. Congregates on the downstream side of large transverse sand ridges (NatureServe 2024h). This species does not occur in similar habitat as the LEPC, and therefore is unlikely to be impacted by the issuance of an amended ITP for LEPC.
Bigscale Logperch <sup>2</sup> <i>Percina macrolepida</i>	NL	ST – NM	Prefers gravel and sand runs or pools in small to medium rivers. Avoids rubble riffles but prefers gravel raceway conditions of moderate to swift currents. Can be abundant in impounded waters in rivers with low flow (NatureServe 2024j). This species does not occur in similar habitat as the LEPC, and therefore is unlikely to be impacted by the issuance of an amended ITP for LEPC.
Mexican Tetra <sup>2</sup> <i>Astyanax mexicanus</i>	NL	ST – NM	Occurs in various stream and river habitats; it is most abundant in pools or backwaters with rocky or sandy bottoms. Occurs primarily in habitats with stenothermal flows like springs. Young have been observed in shallow water near overhanging bank vegetation (NatureServe 2024a). This species does not occur in similar habitat as the LEPC, and therefore is unlikely to be impacted by the issuance of an amended ITP for LEPC.
Pallid Sturgeon <sup>2</sup> <i>Scaphirhynchus albus</i>	FE	SE – KS <sup>3</sup>	Turbid riverine waters, strong currents with gravel or sand substrate. Sometimes occurs in reservoirs. (NatureServe 2024l). This species does not occur in similar habitat as the LEPC, and therefore is unlikely to be impacted by the issuance of an amended ITP for LEPC.
Pecos Bluntnose Shiner <sup>2</sup> <i>Notropis simus pecosensis</i>	FT	SE – NM	Main river channels with large flows and sand, gravel, or silt substrate (NatureServe 2024i). This species does not occur in similar habitat as the LEPC, and therefore is unlikely to be impacted by the issuance of an amended ITP for LEPC.
Pecos Gambusia <sup>2</sup> <i>Gambusia nobilis</i>	FE <sup>1</sup>	SE – NM	Clear spring waters high in calcium carbonate, waters with fairly constant temperature and vegetation (NatureServe 2024e). This species does not occur in similar habitat as the LEPC, and therefore is unlikely to be impacted by the issuance of an amended ITP for LEPC.
Pecos Pupfish <sup>2</sup> <i>Cyprinodon pecosensis</i>	UR	ST – NM	Prefers saline springs, gypsum sinkholes, and desert streams. Occasionally occurs in low salinity waters, but is more typical in highly saline habitats and support relatively few species. Survives in water among gravel where there is no surface water. Males use rocky outcrops, mats of submerged vegetation, or scattered rocks and silt for breeding territories, while females prefer rock outcrops for spawning (NatureServe 2024c). This species does not occur in similar habitat as the LEPC, and therefore is unlikely to be impacted by the issuance of an amended ITP for LEPC.

RENEWABLE ENERGY, POWER LINE, AND COMMUNICATION TOWER  
 PROPOSED AMENDMENT TO THE HCP AND ITP FOR LESSER PRAIRIE-CHICKEN

**Table B-1. State-listed Wildlife Species with the Potential to Occur within the Plan Expansion Area for the 2024 Renewable (Wind and Solar) Energy, Power Line and Communication Tower Habitat Conservation Plan and Amended Incidental Take Permit for the Lesser Prairie-chicken.**

Species Name	Federal Status	State Status	Habitat/Notes
Rio Grande Silvery Minnow <sup>2</sup> <i>Hybognathus amarus</i>	EXPN <sup>1</sup>	SE – NM	Pools and backwaters of creeks and small to large rivers with slow to moderate flowing waters associated with the Rio Grande River. Typically occurs in shallow water with silt substrate. (NatureServe 2024g). This species does not occur in similar habitat as the LEPC, and therefore is unlikely to be impacted by the issuance of an amended ITP for LEPC.
Suckermouth Minnow <sup>2</sup> <i>Phenacobius mirabilis</i>	NL	ST – NM	Tolerant of moderate turbidity, prefers the runs and riffles of creeks and small to medium rivers with substrates ranging from sand and gravel to large boulders. Spawns over gravelly riffles (NatureServe 2024k). This species does not occur in similar habitat as the LEPC, and therefore is unlikely to be impacted by the issuance of an amended ITP for LEPC.

Listing status:

DE = delisted; EXPN = population is experimental non-essential in survival of the overall species, FE = federally endangered, FT = federally threatened, NL = not listed, PE = proposed endangered for federal listing, PT = proposed threatened for federal listing, SE = state endangered, ST = state threatened; UR = under review for federal listing

Other abbreviations:

ITP = Incidental Take Permit

KDWP – Kansas Department of Wildlife and Parks

LEPC = Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*)

Service = U.S. Fish and Wildlife Service

- <sup>1</sup> Identified through our state-level threatened and endangered species analysis as potentially occurring within the Plan Expansion Area but not identified through the Information for Planning and Consultation (IPaC) resource list (Service 2024).
- <sup>2</sup> State-listed species with the potential to occur within the Plan Expansion Area but not expected to occur in similar habitat as the LEPC, shrub-scrub habitat, or cultivated croplands are unlikely to be impacted by the issuance of an ITP for LEPC and have been dismissed from detailed analysis.
- <sup>3</sup> State-listed species, but not included in the county list(s) for state-level threatened and endangered species as potentially occurring within the Plan Expansion Area.
- <sup>4</sup> The interior least tern is listed as “least tern (*Sterna antillarum*)” by the Kansas Department of Wildlife and Parks. The interior subspecies is the only subspecies found in the Plan Expansion Area for these states (see Service 1985), so interior least tern is synonymous with least tern in the context of this document.
- <sup>5</sup> The Colorado Parks and Wildlife Department (CPWD) lists the subspecies of the piping plover (*Charadrius melodus circumcinctus*) as a state-listed threatened species. For the purposes of this analysis, the parent species and subspecies will be considered to be the same.

FINAL ENVIRONMENTAL ASSESSMENT AMENDMENT

RENEWABLE ENERGY, POWER LINE, AND COMMUNICATION TOWER  
PROPOSED AMENDMENT TO THE HCP AND ITP FOR LESSER PRAIRIE-CHICKEN

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Status and range sources:

- CO Colorado Natural Heritage Program. No date. CNHP Conservation Status Handbook (Tracking Lists). Accessed October 2024. Available online: <https://cnhp.colostate.edu/ourdata/trackinglist/>
- KS Kansas Department of Wildlife and Parks. 2024. Threatened and Endangered Wildlife: List of All Kansas Counties. Accessed November 2024. Available online: <https://ksoutdoors.com/Services/Threatened-and-Endangered-Wildlife/List-of-all-Kansas-Counties>
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- \_\_\_\_\_. 2024b. *Charadrius melodus* ssp. *melodus* Piping Plover (Atlantic subspecies). NatureServe Network Biodiversity Location Data accessed through NatureServe Explorer [web application]. NatureServe, Arlington, Virginia. Updated November 1, 2024. Accessed November 2024. Available online: [https://explorer.natureserve.org/Taxon/ELEMENT\\_GLOBAL.2.104698/Charadrius\\_melodus\\_melodus](https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.104698/Charadrius_melodus_melodus) | NatureServe Explorer
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**Table B-1. State-listed Wildlife Species with the Potential to Occur within the Plan Expansion Area for the 2024 Renewable (Wind and Solar) Energy, Power Line and Communication Tower Habitat Conservation Plan and Amended Incidental Take Permit for the Lesser Prairie-chicken.**

Species Name	Federal Status	State Status	Habitat/Notes
_____			. 2024g. <i>Hybognathus amarus</i> Rio Grande Silvery Minnow. NatureServe Network Biodiversity Location Data accessed through NatureServe Explorer [web application]. NatureServe, Arlington, Virginia. Updated November 1, 2024. Accessed November 2024. Available online: <a href="https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.101946/Hybognathus_amarus">https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.101946/Hybognathus_amarus</a>
_____			. 2024h. <i>Notropis girardi</i> Arkansas River Shiner. NatureServe Network Biodiversity Location Data accessed through NatureServe Explorer [web application]. NatureServe, Arlington, Virginia. Accessed November 2024. Available online: <a href="https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.104520/Notropis_girardi">https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.104520/Notropis_girardi</a>
_____			. 2024i. <i>Notropis simus</i> Bluntnose Shiner. NatureServe Network Biodiversity Location Data accessed through NatureServe Explorer [web application]. NatureServe, Arlington, Virginia. Updated November 1, 2024. Accessed November 2024. Available online: <a href="https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.102490/Notropis_simus">https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.102490/Notropis_simus</a>
_____			. 2024j. <i>Percina macrolepida</i> Bigscale Logperch. NatureServe Network Biodiversity Location Data accessed through NatureServe Explorer [web application]. NatureServe, Arlington, Virginia. Updated November 1, 2024. Accessed November 2024. Available online: <a href="https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.104191/Percina_macrolepida">https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.104191/Percina_macrolepida</a>
_____			. 2024k. <i>Phenacobius mirabilis</i> Suckermouth Minnow. NatureServe Network Biodiversity Location Data accessed through NatureServe Explorer [web application]. NatureServe, Arlington, Virginia. Updated November 1, 2024. Accessed November 2024. Available online: <a href="https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.104716/Phenacobius_mirabilis">https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.104716/Phenacobius_mirabilis</a>
_____			. 2024l. <i>Scaphirhynchus albus</i> Pallid Sturgeon. NatureServe Network Biodiversity Location Data accessed through NatureServe Explorer [web application]. NatureServe, Arlington, Virginia. Updated November 1, 2024. Accessed November 2024. Available online: <a href="https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.103033/Scaphirhynchus_albus">https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.103033/Scaphirhynchus_albus</a>
Service			(U.S. Fish and Wildlife Service). 2019. Species Status Assessment Report for the Black-footed Ferret ( <i>Mustela nigripes</i> ). Version 1.0. Accessed November 2024. Available online: <a href="https://ecos.fws.gov/ServCat/DownloadFile/169265?Reference=114857">https://ecos.fws.gov/ServCat/DownloadFile/169265?Reference=114857</a>

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**Attachment D. References Cited**

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**Attachment E. Response to Comments Received on the Draft Environmental Assessment for the Renewable Energy, Power Line, and Communication Tower Proposed Amendment to the Habitat Conservation Plan and Incidental Take Permit for the Lesser Prairie Chicken**

**Response to Comments Received on Proposed Amendments to the Oil and Gas and Renewable (Wind and Solar) Energy, Powerline, and Communication Tower Habitat Conservation Plans for the Lesser Prairie-Chicken (FWS-R2-ES-2024-0185)**

<b>Commenter/ Organization</b>	<b>Comment Number</b>	<b>Applicable to Environmental Assessment (EA)/Habitat Conservation Plan (HCP)/or General</b>
Anonymous	1	General
<p><b>Comment:</b> Please do your best to protect the Lesser Prairie-Chickens from destruction. They are such beautiful and magnificent animals.</p> <p><b>Response:</b> Comment noted, no response needed.</p>		
Anonymous	2a	EA
<p><b>Comment:</b> I recommend that the term "stakeholder" be defined as wildlife and environment affected by proposed action. Industry is not a stakeholder. Industry is the problem. Wildlife and the environment is the primary victim.</p> <p><b>Response:</b> Comment noted. The Habitat Conservation Plan (HCP) fully considers the effects on wildlife and the term "stakeholder" is used in a specific way in the proposed action and original HCP.</p>		
Anonymous	2b	General
<p><b>Comment:</b> We don't need Artificial Intelligence (AI) and the energy demand it requires. Demolish the data banks, servers, collections, and relieve the American consumer from privacy and information theft. Eliminating the demand from AI data centers that don't provide food, water, heat, or cooling will do tremendous good. These data centers and AI are being used against the people to make the rich richer.</p> <p><b>Response:</b> Comment noted, beyond scope of this action, no response needed.</p>		
Nicholas Brians	3a	HCP
<p><b>Comment Summary:</b> The commentor expressed concerns that the HCP appears to focus exclusively on the number of acres and that this approach failed to consider all of the different effects that the covered activities would have. The comment focused on the effects of noise pollution on the lesser prairie-chicken and the disruptions that it would cause to communication, mating, and reproduction.</p> <p><b>Response:</b> This comment is beyond the scope of the Proposed Action which was noticed (see Section 2.2), but when the U.S. Fish and Wildlife Service (Service) evaluated the proposed HCPs prior to approval in 2021 and 2022 the effects of noise were fully considered. More specifically, the avoidance behavior (quantified in acres) is a result of all activities (including noise) associated with the covered activities, meaning the effects of noise were incorporated into the impact radii defined for each covered activity. For a full discussion of the best available scientific information (which was considered prior to approving these HCPs) of the impacts of noise and impacts of the various covered activities please see the Species Status Assessment report for the lesser prairie-chicken (Service, 2022. Available online: <a href="https://www.fws.gov/sites/default/files/documents/LPC_SSA_Report_v2.3_March2022%20%282%29.pdf">https://www.fws.gov/sites/default/files/documents/LPC_SSA_Report_v2.3_March2022%20%282%29.pdf</a>).</p>		
Nicholas Brians	3b	General
<p><b>Comment:</b> The commenter further cites Section 10(a)2(A) of the Endangered Species Act (ESA) and states "Because the code says practicable and not practical, the burden for an ITP to be approved is that the applicant must submit a plan that demonstrates that they will go to great lengths to eliminate almost all of the effects of their operations on the Lesser Prairie Chickens. Does the application include any such plan? Does your office properly hold applicants to the standard prescribed in the code? Could a different rule change be made that more clearly states this requirement for mitigation?"</p>		

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**Response:** The original HCPs, which are the plans presented by the Applicant, demonstrate that projects will be minimized and mitigated to the maximum extent practicable. Prior to HCP approval and prior to approval of these amendments, the Service fully evaluated the proposed actions against all applicable statutes and regulations. While other interested parties may propose additional HCPs, the HCPs which are the subject of the proposed amendments explicitly detail the required mitigation for all covered activities. The quantification of impacts and required mitigation included in the HCPs were established using the Service's most up-to-date lesser prairie-chicken guidance.

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Nicholas Brians

3c

General

**Comment:** I strongly urge the Service to deny this proposed rule change using the power that the ESA grants them, as summed up in this quote from the Congressional Research Service: "If jeopardy to a species is anticipated due to the action's effect on a species, an ITP may not be awarded. Further, an ITP may be revoked if jeopardy to a species cannot be avoided." (CRS Report, p. 43) Due to the very nature of a migratory species that lives in one of the driest and most barren areas of the United States, a destruction of a small part of the species' habitat has a far greater negative impact on the species than is proportional to the amount of habitat destroyed. In addition, it is quite plausible that the proposed energy facilities will damage their surrounding ecosystems in other ways that decrease the amount of food available to the Lesser Prairie Chickens. Since their migration patterns are based on where food is available in various seasons, this damage to an ecosystem could mean that they are unable to eat for a chunk of the year, which would decimate their populations.

**Response:** While the lesser prairie-chicken is not a migratory species as stated in the comment, the Service is concerned about the implications that loss of habitat may have on the species viability. To address the concerns of habitat loss and fragmentation on the lesser prairie-chicken, the HCPs incorporated the mitigation recommendations outlined in the Service's most up-to-date guidance for the lesser prairie-chicken. These mitigation recommendations were designed to fully offset the effects to the species and include requirements for restoration to offset the loss of habitat (for additional discussion related to this topic please review the documents supporting the approval of the HCP which are available at <https://www.fws.gov/lpc/partners-lpc-conservation>). Lastly, as stated before, the lesser prairie-chicken is not a migratory species and thus there is no concern about "migration patterns" being driven by food availability. The Service has fully evaluated the proposed actions and has determined that they would not result in jeopardizing the continued existence of the species (for further information related to this analysis please see the documents supporting the approval of the proposed actions available at <https://www.fws.gov/lpc/partners-lpc-conservation>).

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Nicholas Brians

3d

General

**Comment:** Further, I implore the Service to consult leading environmental scientists to create a new protocol for creating an accurate picture of the effects of constructing things in habitats and to create a new rule using this quantified effect that more accurately reflects the habitat loss resulting from such constructions.

**Response:** The Service has fully evaluated the best available scientific information related to the effects of various activities on the lesser prairie-chicken, which is summarized in the lesser prairie-chicken species status assessment report. This report was developed by U.S. Fish and Wildlife Service scientists who have expertise in the lesser prairie-chicken and grassland management. Additionally, experts from the state fish and wildlife agencies and other federal agencies assisted with various portions of the report. Finally, the report also underwent independent peer review by scientific experts. The information analyzed in the SSA report was utilized to fully inform the evaluation of these proposed actions.

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Colorado Parks and  
Wildlife Department

4a

General

**Comment:** Commenter is supportive of the Service approving this amendment and believes it will be good for the long-term, regional conservation of the species.

**Response:** Comment noted, no response needed.

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Colorado Parks and  
Wildlife Department

4b

HCP

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**Comment:** Commenter discussed the updates needed to the Crucial Habitat Assessment Tool (CHAT) categories and note that they would encourage the utilization of an updated lesser prairie chicken CHAT map when an updated map becomes available.

**Response:** The Service is supportive of utilizing an updated CHAT map within the HCP once an updated map becomes available. Under the changed circumstances of the HCPs, changes to the CHAT maps were contemplated and the process for making changes was outlined.

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