

Calculating Compensatory Mitigation Requirements for the Lesser Prairie-chicken HCP

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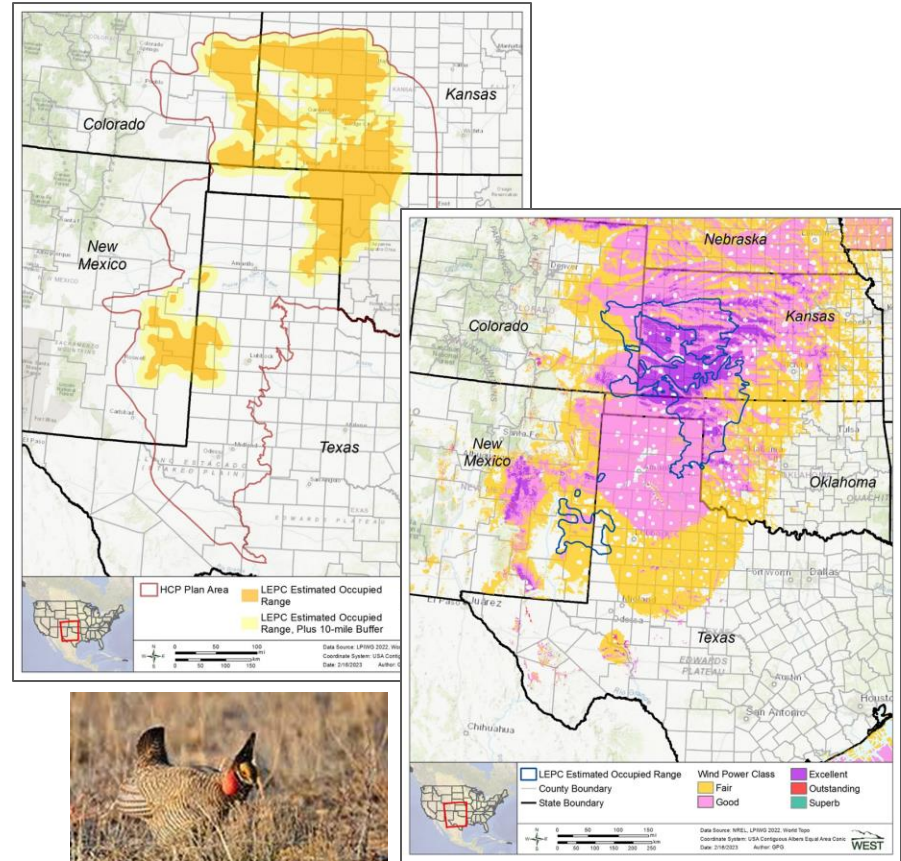


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Renewable (Wind and Solar) Energy, Power Line, and Communication Tower Habitat Conservation Plan for the Lesser Prairie-chicken

- Compliance
 - Section 10(a)(1)(B) ESA permit
 - Regulatory assurances and streamlined the permitting process
- Permit/Plan Area
 - Same outer boundary
 - Exclusion areas
 - Permit area will depend on location of enrolled Projects
- Programmatic structure
 - Single permit holder
 - Projects enroll through a CI
- Permit Duration = 30 years



URL

LEPC Natural History & Mitigation Strategy

Highly habitat-dependent

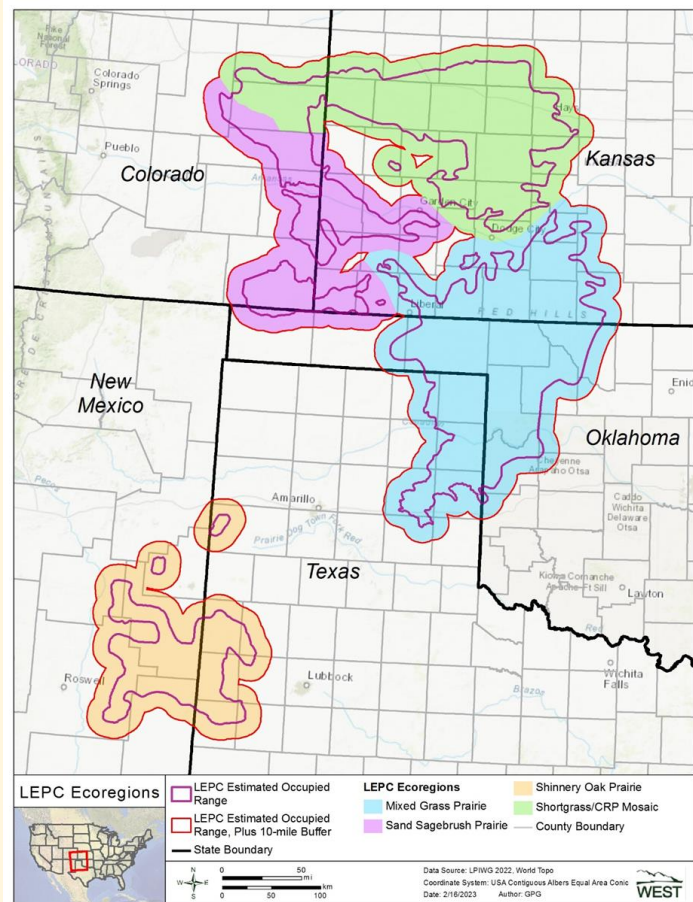
Native short- and mixed-grass prairies with a shrub component dominated by sand sagebrush or shinnery oak.

Primary threats

Habitat loss, fragmentation, degradation (development, climate change).

Impacts to Habitat as a Proxy for Take

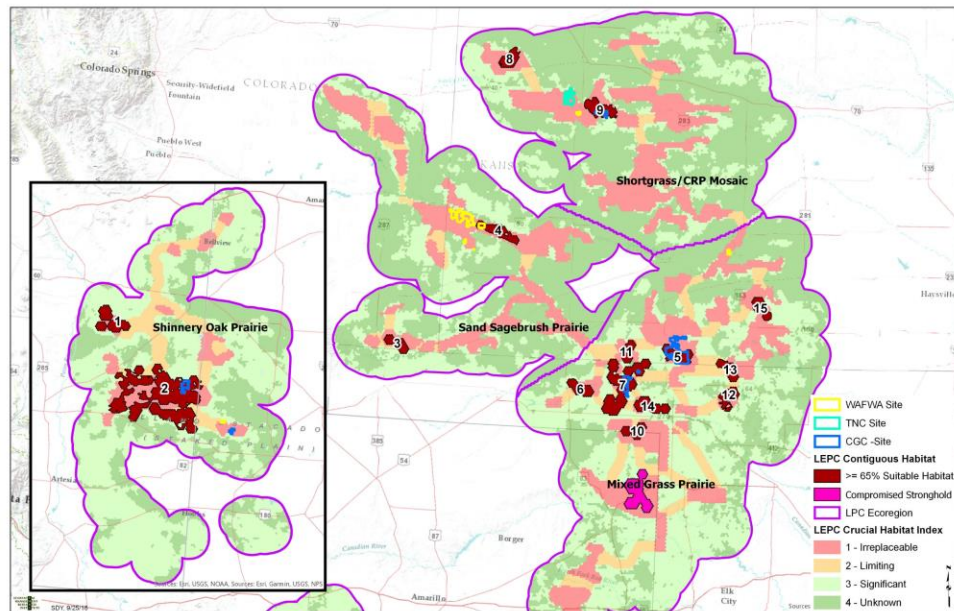
Both the impacts of activities and the mitigation of those impacts are measured in acres of habitat.



Conservation Program

HCP Biological Goals and Objectives are based on USFWS *Conservation Needs of the Lesser Prairie-Chicken* (USFWS 2012, [URL](#))

1. Establish strongholds to secure remaining populations, decrease fragmentation
2. Build/restore connectivity between strongholds
3. Expand strongholds
4. Provide long-term certainty to achieve these goals and sustain strongholds



Project-specific Impact Assessment/Take prediction

Follows USFWS recommendations (URL)

Step 1: Deconstruct project into component activities

Step 2: Desktop review and mapping

- Direct and indirect impacts of project activities;
- Known LEPC occurrence within/near the project;
- LEPC potential habitat suitability within the project

Steps 3 & 4: Field assessment verification / reassessment

Step 5: Quantify project habitat-based impacts to LEPC habitat, minimization measures and offsetting mitigation

Step 6: Prepare/submit impact documentation and CI application

Avoid, minimize, mitigate Project impacts

- Avoid – Project design and planning
- Minimize
 - Site Project in low-impacts areas
 - Apply conservation measures during breeding season
- Mitigate
 - Offset ratios – CHAT categories
 - Preservation and restoration
 - Static and dynamic mitigation

CHAT Category	Impact Acre	Mitigation Acre
CHAT 1 - Focal Areas	1	2.50
CHAT 2 - Connectivity Zones	1	2.25
CHAT 3 - Modeled Habitat	1	2.00
CHAT 4 – EOR +10 mi	1	1.25

Adjustments to Mitigation Strategy

Adaptive Management

- Monitoring → adjustments to the minimization/mitigation measures, conformant with the assurances of the HCP
- Change in the amount of available LEPC habitat, and therefore the percentage of habitat affected by the proposed buildout
- Project density
- Effectiveness of incentives for reducing fragmentation

Changed Circumstances



Photo by Noppadol Paothong

Current Challenges to Mitigation Under the LEPC HCP

- Available mitigation lands
- Restore, don't just protect (takes time)
- Cost to provider and project proponent



Thank You!

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