

Lesser Prairie-chicken Management Update

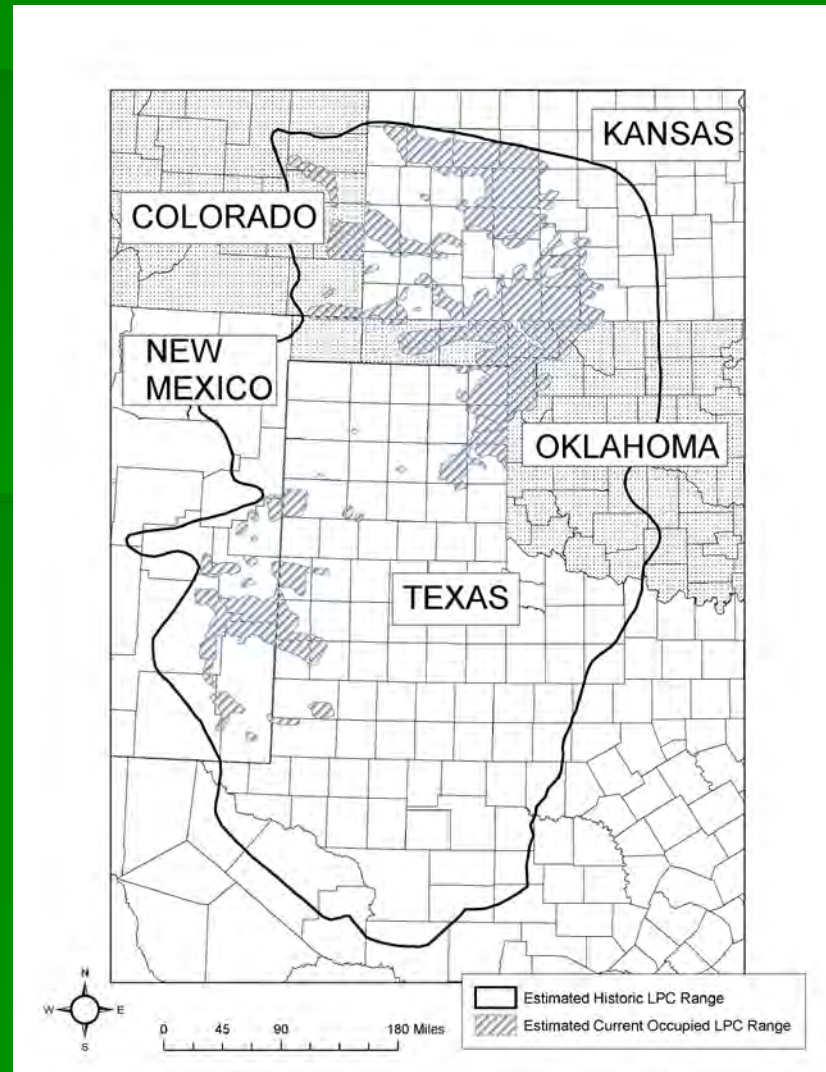


December 9, 2010

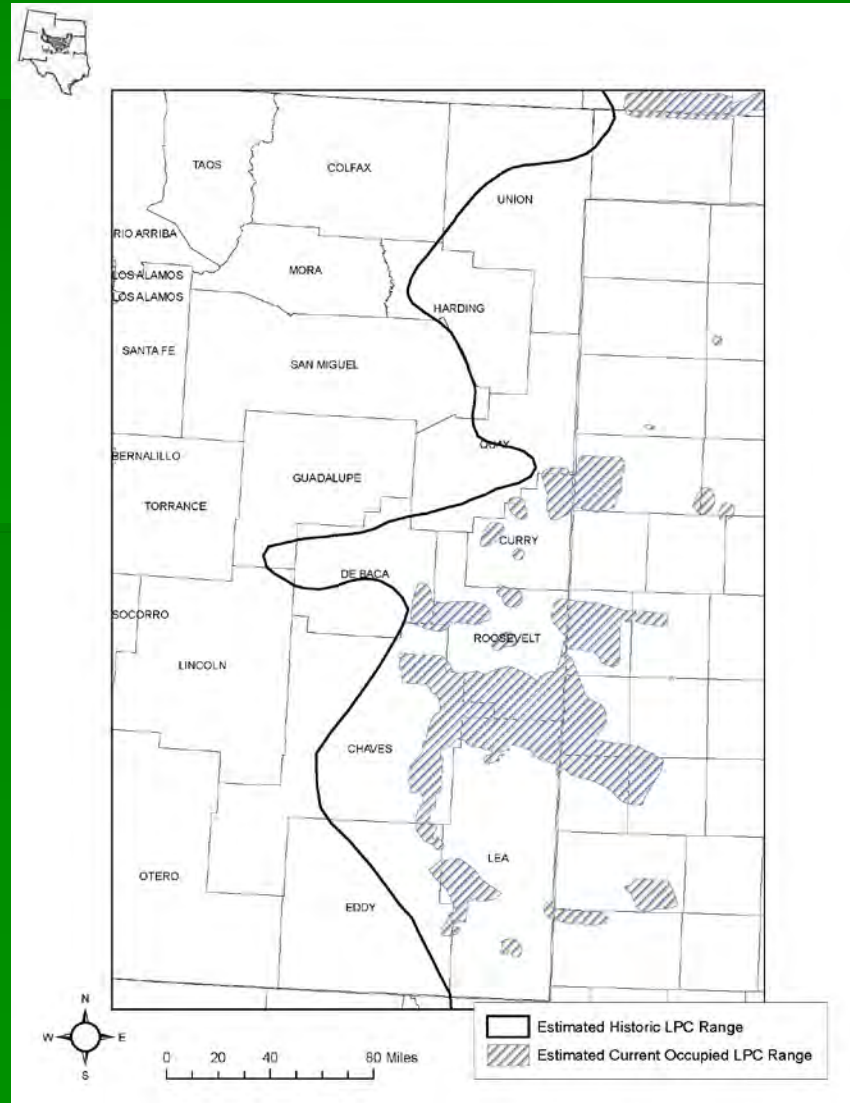
NM State Game Commission Meeting

Clovis, NM

LEPC Range



LEPC Range in NM



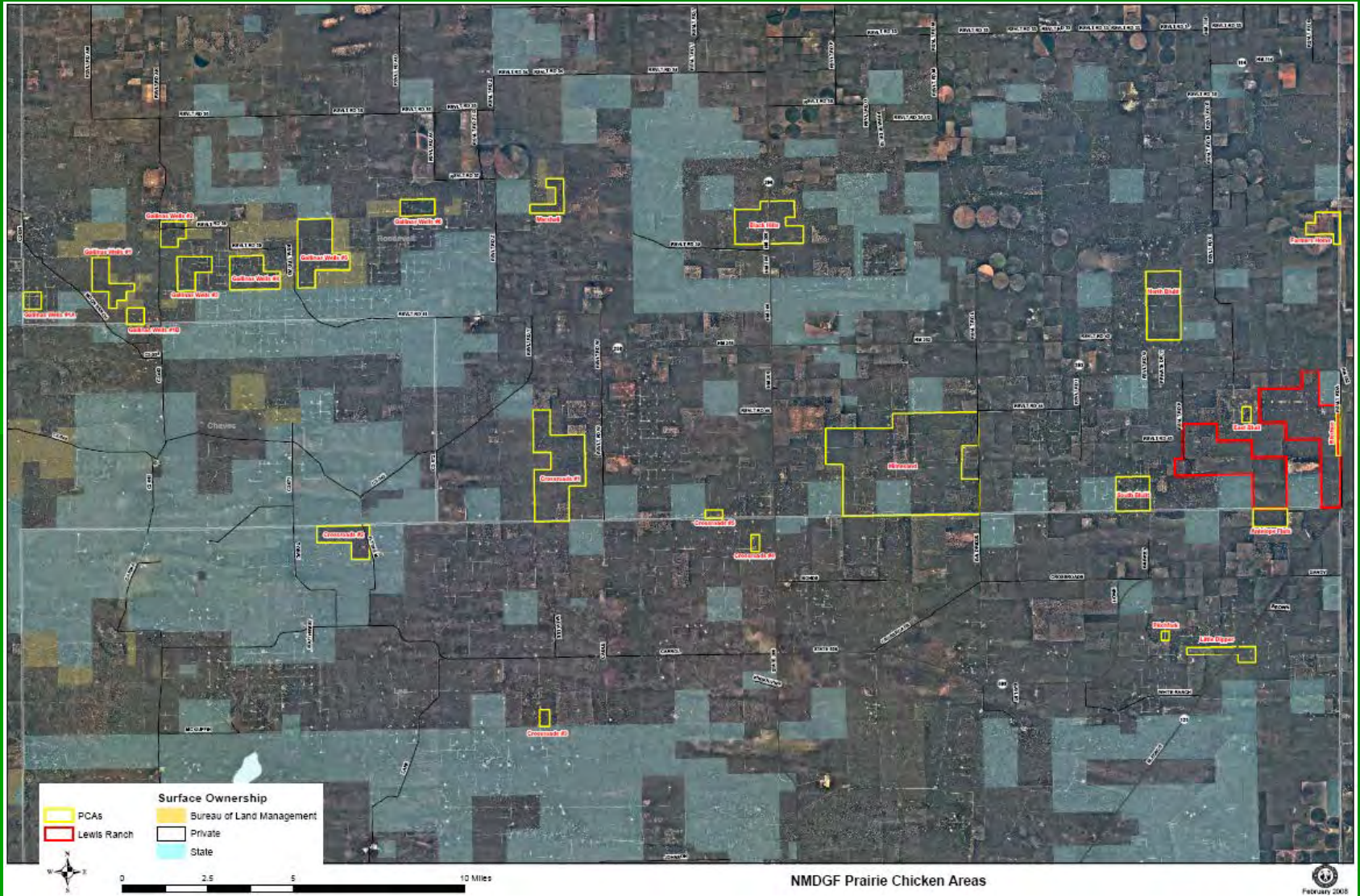
LEPC Status

- Currently a candidate species under the ESA and is considered “warranted but precluded” by other higher priority species
- USFWS raised the Listing Priority Number from an 8 to a 2 in 2008 for the following reasons:
 - Increased agricultural activity
 - Increasing energy development (oil and gas and wind)
 - Tree invasion
 - Collision mortality from fences and powerlines
 - Increased fragmentation
 - Increased habitat degradation
 - Changes in CRP enrollments
 - Increasingly isolated populations

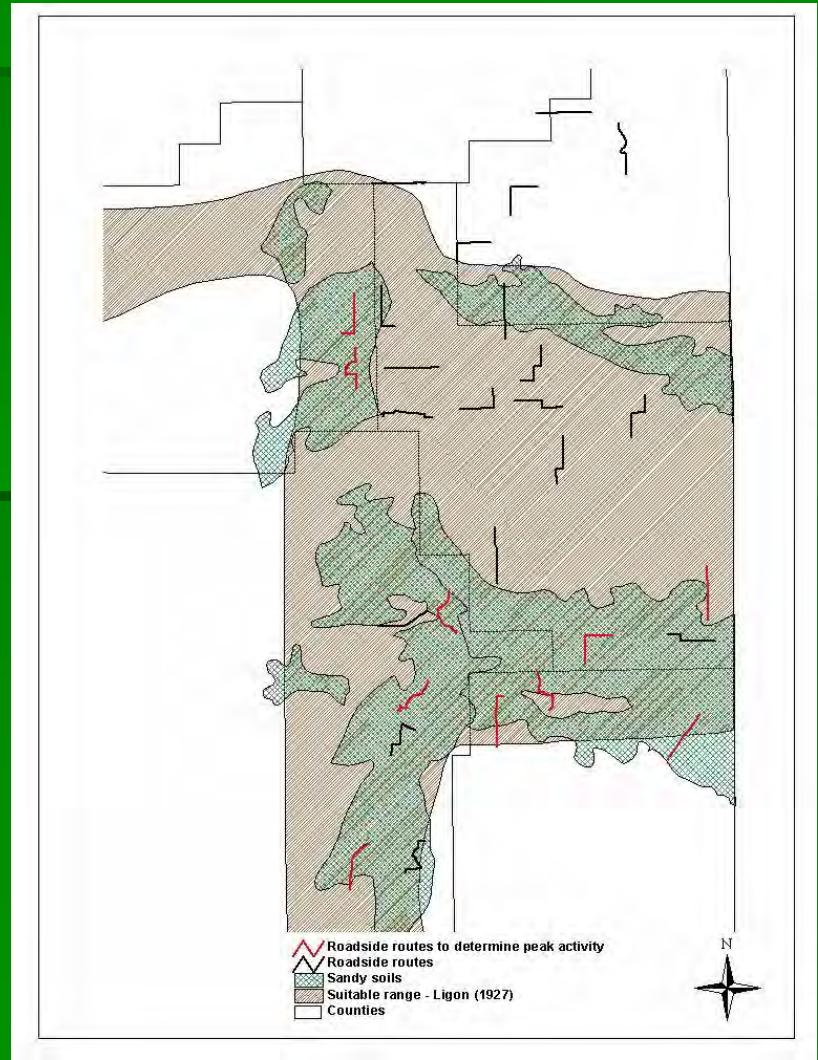
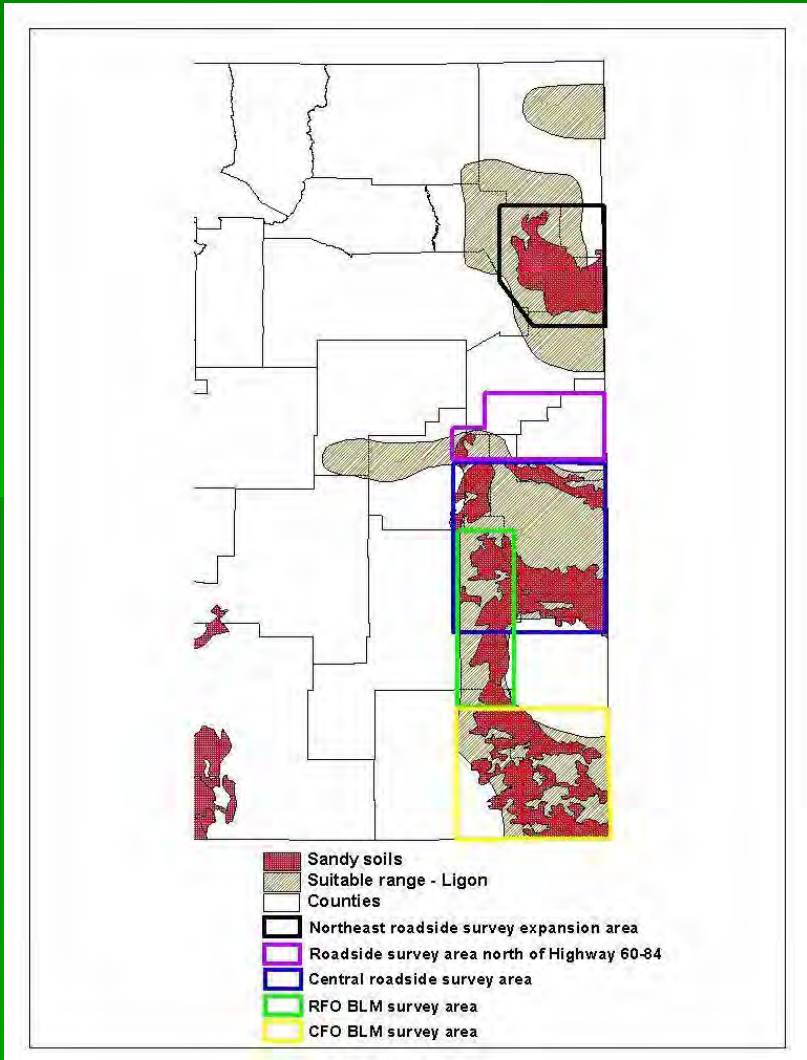
Local Management Efforts

- Population Surveys
- Road and well-pad reclamation on PCA's
- NRCS LEPC Initiative
- NM Wind and Wildlife Coalition
- Candidate Conservation Agreement (CCA) and Candidate Conservation Agreement with Assurances (CCAA) development
- Research on Weaver Ranch and North Bluit PCA
- Translocation
- LEPC Festival
- Prairie Grouse Technical Council

Prairie Chicken Areas



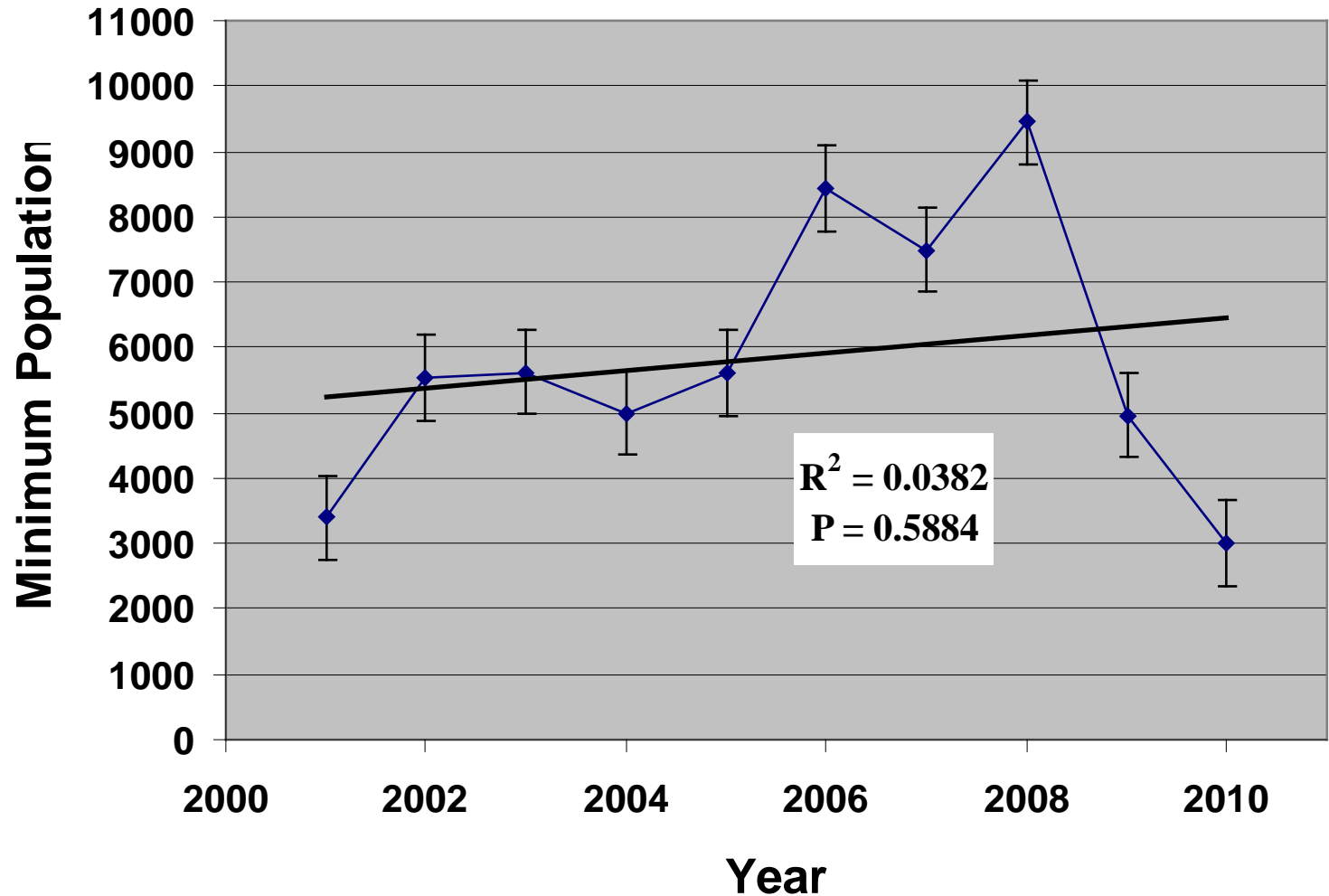
Roadside Route Surveys



LEPC Population Estimate

	Year									
Parameter	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
NMDGF										
# leks detected	121	172	150	170	189	270	256	297	216	148
# leks counted	49	64	65	69	88	111	99	92	85	59
# birds counted	389	652	684	621	825	1274	857	935	666	458
Mean birds/lek	7.94	10.19	10.52	9.00	9.38	11.48	8.66	10.16	7.84	7.76
BLM										
# leks detected	27	34	37	48	64	94	79	46	38	49
# leks counted	27	34	37	48	64	94	68	46	38	49
# birds counted	213	365	438	415	559	1099	692	523	247	253
Mean birds/lek	7.89	10.74	11.84	8.65	8.73	11.69	10.18	11.37	6.50	5.16
Private Lands										
# leks detected										31
# leks counted	35	46	59	57	56		71	85	74	27
# birds counted	429	566	718	547	506		646	1002	579	181
Mean birds/lek	12.26	12.30	12.17	9.60	9.04		9.10	11.79	7.82	6.70
Totals										
# leks detected	183	252	246	275	309	364	406	428	328	228
# leks counted	111	144	161	174	208	205	238	223	197	135
# birds counted	1031	1583	1840	1583	1890	2373	2195	2460	1492	892
Mean birds/lek	9.29	10.99	11.43	9.10	9.09	11.58	9.22	11.03	7.57	6.61
Population Estimate	3400	5541	5623	5004	5615	8427	7489	9443	4968	3013

LEPC Minimum Population



Road and Well-pad Reclamation

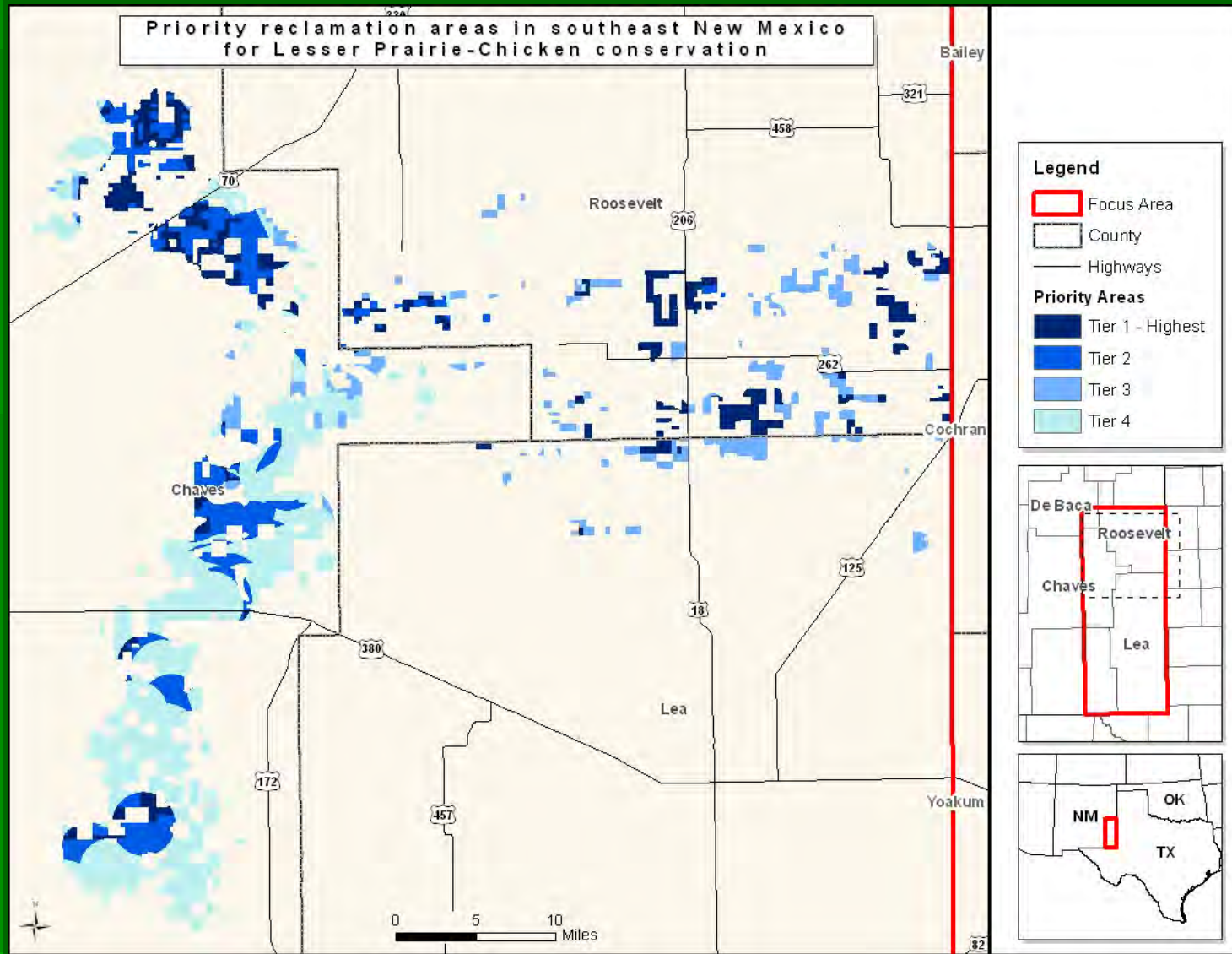
- Target areas in southeast New Mexico for oil and gas well infrastructure reclamation so that Lesser Prairie-Chicken will benefit the most in the least amount of time.
- Accepted grant included funds for stakeholders concerned with LEPC to meet and jointly develop priorities

Factors for Prioritizing Reclamation Areas

GIS Process:

- Habitat Suitability (Core Patches)
- Disturbance Level
- Proximity to Leks
- Mineral Rights
- Mineral Lease Status
- Conservation Areas

Reclamation Priority Areas





Reclamation Accomplishments

- 41 acres of roads and pads taken up and reseeded to native grasses
- Almost \$180,000 in work completed
- Approx. \$350,000 slated for work in 2011-2012
- Additional money from PLJV proposal has funded lek surveys on NM SLO lands and discovered 20 new leks. Survey work will continue into the future.

NRCS LEPC Initiative

- \$300,000 allotted to NM in 2010
- Practices include brush management, obstruction removal, grazing management, native grass plantings
- NMDGF involved with recommending best management practices and identifying areas for management
- Possible funding for hiring a private lands biologist to place in NRCS offices

NM Wind and Wildlife Collaborative

- Develop Best Management Practices (BMP's) for renewable energy development that consider the conservation of wildlife resources in New Mexico, with a current focus on wind energy in eastern NM
- BMPs are intended to be useful to prospective developers of wind energy projects, non-governmental stakeholders, landowners, government resource agencies and others.

Renewable Energy Planning Tool

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INTRODUCTION

Playa Lakes Joint Venture worked with partners in states through the Southern Great Plains to develop a science-based site selection and mitigation framework that describes avoidance, minimization, and/or mitigation actions appropriate to a range of environmental impacts that have a nexus with renewable energy development. The collaborative organization working in each state reached consensus on a set of species and ecosystems/habitats that may be impacted by wind development and drafted best conservation practices for them. Final determinations on species and habitats to include in the framework was made based on the scientific merits of the nexus between renewable energy and the species or ecosystems of concern.

Directions

Select the state where the renewable energy development will be located to display a list of priority resource concerns. Then select one or more concerns that may affect the potential site. When finished, hit the Continue button to download the GIS Shapefiles and the Best Management Practices PDFs.

State:

Learn about the [New Mexico Wind & Wildlife Collaborative](#) and how this tool was developed.

Priority Resource Concerns

Select one or more of the priority resources below. Click image to enlarge map.

LESSER PRAIRIE-CHICKEN

Counties Affected: Union, Harding, San Miguel, Guadalupe, Curry, Curry, Lincoln, De Baca, Roosevelt, Chaves, Eddy, Lea

Download Size: 15MB

PLAYAS

Counties Affected: Colfax, Union, Mora, Harding, San Miguel, Guadalupe, Quay, Curry, De Baca, Roosevelt, Chaves, Eddy, Lea

Download Size: 13MB

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NEW MEXICO WIND & WILDLIFE COLLABORATIVE

The New Mexico Wind & Wildlife Collaborative (NM WWC) is an informal collaborative effort between the renewable energy industry and the conservation community to constructively and proactively address wildlife resource concerns related to renewable energy development in New Mexico. We would like to state that we believe that renewable energy development is appropriate and desired in New Mexico. However we also acknowledge that with any development there may be issues related to wildlife and the conservation of our natural resources. The NM WWC believes that we can develop reasonable guidelines (Best Management Practices) to help guide the placement of renewable energy development facilities and the transmission of that energy so that wildlife resource concerns may be avoided, minimized or mitigated. Use the [Wind Energy Planning Tool](#) to find the priority issues that may impact a wind farm location and download applicable shapefiles and Best Management Practices (BMPs).

NM WWC Participants

Renewables Industry & Utilities

- [enXco](#)
- [First Wind](#)
- [Horizon Wind Energy](#)
- [Iberdrola Renewables](#)
- [NextEra Energy](#)
- [Third Planet Windpower](#)
- [Tri-State Generation & Transmission Association](#)
- [Xcel Energy](#)

Agencies

- [New Mexico Dept. of Agriculture](#)
- [New Mexico Dept. of Game & Fish](#)
- [New Mexico Energy, Minerals & Natural Resources Dept.](#)
- [New Mexico State Land Office](#)
- [US Fish & Wildlife Service](#)
- [Bureau of Land Management](#)
- [US Forest Service](#)
- [Xcel Energy](#)

Conservation Community

- [Audubon New Mexico](#)
- [Hawks Aloft](#)
- [Natural Resources Defense Council](#)
- [Playa Lakes Joint Venture](#)
- [Rio Grande Bird Research](#)
- [The Nature Conservancy](#)

Landowners & Associations

- [Coalition of Renewable Energy Landowners \(CRELA\)](#)
- [FREDA](#)
- [Tramplers Wind Energy Assoc.](#)

Other organizations supporting the effort and providing important contributions include ACS Consulting, Bird's Eye View, New Mexico Electric Cooperatives, INM Resources, and Congressman Ben Lujan.

Best Management Practices

The Best Management Practices (BMPs) presented through this tool were developed to cover wildlife conservation resource concerns that may have a nexus with renewable energy development and/or the transmission of that energy to population centers. These BMPs support the groups objectives of: 1) assisting the renewable energy industry in New Mexico to reach its project development and transmission goals and 2) enabling the conservation community to meet its goals.

These BMPs are intended to be useful to prospective developers of wind energy projects, non-governmental stakeholders, landowners, government resource agencies and others. This document is intended to be applied to utility-scale energy projects using current commercial technologies. The BMPs are intended to be scientifically sound while having wide applicability to diverse projects in various settings. They are intended to be flexible and should not necessarily be rigidly applied in every situation.

These BMPs were developed voluntarily. In their current form, they are not binding and are not regulatory in nature. The BMPs reflect the best available science at the time of drafting and will be periodically updated as new science or technology emerges. These BMPs apply to new projects and should not necessarily apply to operational energy generation projects or those in advanced development. However, this does not mean that companies with operational facilities or those in advanced development should not review these BMPs for potential applicability to their current projects.

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DOWNLOADS

On this page you will find a list of recommended files to download for further study and analysis. Download a zip file with GIS shapefiles and Best Management Practices PDFs for each priority resource concern you selected. You can also download any or all of the the BMPs for the state you selected. The BMPs include a map (JPG) showing the areas of the state that are affected by the priority resource.

Selected Priority Resource Concerns

Click on the following links to download the zip file for each priority resource you selected. The zip file contains GIS shapefiles and Best Management Practices PDFs.

- [Playas \(16.3MB\)](#)
- [Lesser Prairie-Chicken \(15.1MB\)](#)
- [Raptors \(18.4MB\)](#)
- [Riparian Areas \(15MB\)](#)
- [Sandhill Crane \(17.8MB\)](#)

Best Management Practices

The following is a list of all BMPs for the state you selected. Click on the following links to download a PDF.

- [BMP User Guide \(254K\)](#)

PRIORITY 1 RESOURCE CONCERNS

- [Playas \(1.2MB\)](#)
- [Lesser Prairie-Chicken \(1.2MB\)](#)
- [Reptiles & Amphibians \(1.2MB\)](#)
- [Bats \(1.2MB\)](#)
- [T&E and Sensitive Plants \(1.2MB\)](#)
- [Mountain Plover \(1.2MB\)](#)
- [Raptors \(1.2MB\)](#)
- [Riparian Areas \(1.2MB\)](#)
- [Conservation Lands \(1.2MB\)](#)
- [Large Intact Grasslands \(1.2MB\)](#)
- [All New Mexico Priority 1 BMPs \(11MB\)](#)

PRIORITY 2 RESOURCE CONCERNS

- [Ciprock Escarpments \(1.2MB\)](#)
- [Sandhill Crane \(1.2MB\)](#)

CCA and CCAA Development

- CCA developed for oil & gas industry in SE NM
- CCAA developed for private landowners in LEPC habitat in SE NM
- CCAA may be developed for FREDA (Frio Ridge Energy Development Association) in Curry County

Research on Weaver Ranch and North Bluit PCA

- 10 year study concluding this year investigating prescriptive brush control and grazing management and their effects on LEPC
-

Other NM Efforts

- Translocation
 - Investigating translocation of LEPC to suitable, unoccupied habitat in eastern NM
- Habitat monitoring and management on PCAs
 - Investigating use of different management tools to improve habitat for LEPC on PCAs
- LEPC Festival
 - 2011 will be the 10th year of the festival in Milnesand.
 - Attracts people from all over North America and Europe
 - NMDGF personnel are heavily involved
- Prairie Grouse Technical Council
 - 28th meeting was held at ENMU in Portales in October 2009
 - National meeting for presentation of current prairie grouse research and management

Multi-state Management

- **Development of a Spatial modeling tool and Decision Support System (DSS) for identifying and prioritizing LEPC habitat**
 - Will inform decision-makers how their actions will impact LEPC, SGCN, and their habitat
 - Identifies where best habitat is now, priority areas for on-the-ground work
 - Identifies native and unfragmented habitat
 - Identifies where industry, development, etc can go with little or no impact
 - Identifies cost of recovery (i.e. cost of on-the-ground habitat restoration work)
 - Identifies mitigation strategies if habitat cannot be avoided by development or industry (will likely be different for each state)
 - Assesses connectivity or linkage for movement among metapopulations of LEPC.

Multi-state Management

- Development of an HCP for LEPC
 - Intent is to predict future “take” of LEPC with wind energy development so mitigation measures can be taken
-

Multi-state Management

- Lesser Prairie-chicken Interstate Working Group
 - Working as part of the technical team for the DSS and GIS tool
 - Developing a range-wide population estimate for LEPC
 - Developing an up to date range map for LEPC
 - Standardization of survey data between states



Questions?