

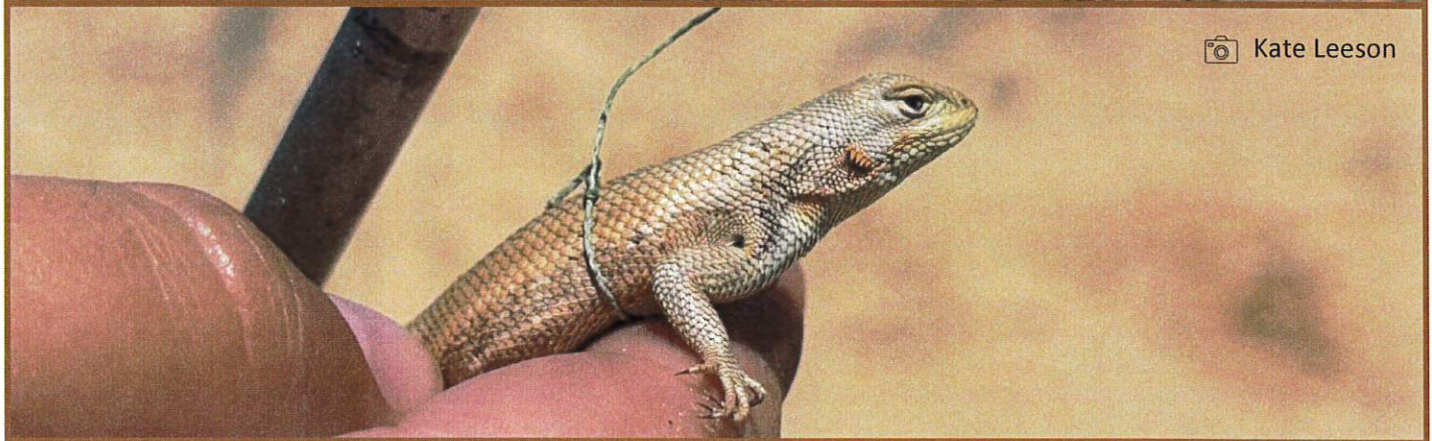
QUARTERLY REPORT

2025

July 1, 2025 - September 30, 2025



📷 Maxie Fish



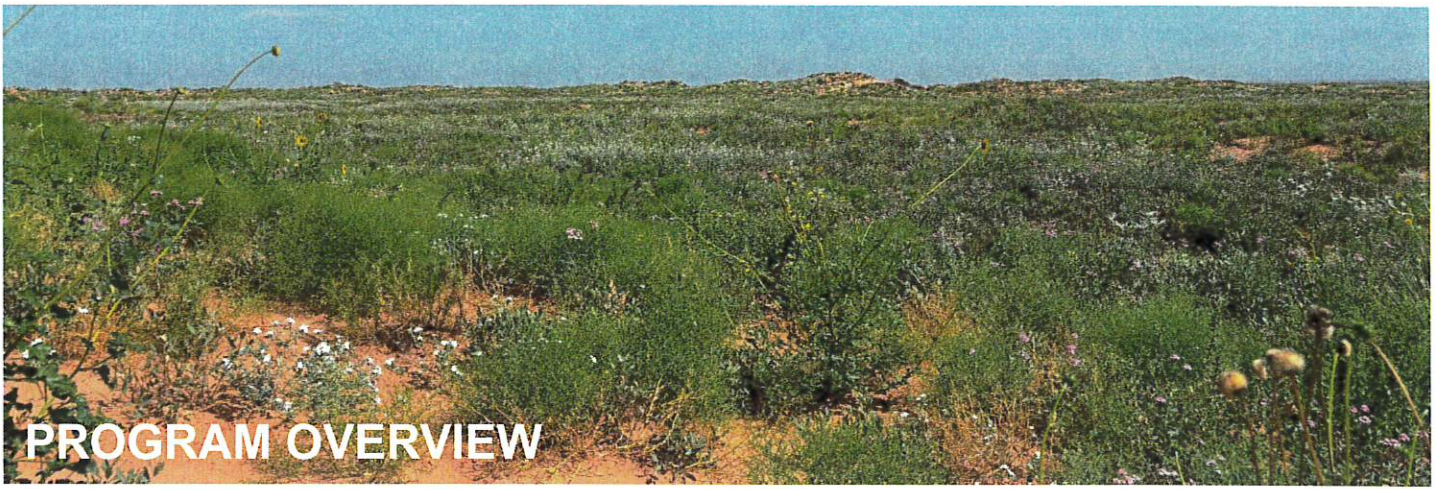
📷 Kate Leeson

Candidate Conservation Agreements
for the Lesser Prairie-Chicken and the
Dunes Sagebrush Lizard in New Mexico

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PROGRAM OVERVIEW

The Candidate Conservation Agreements

This report describes the activities conducted in the third quarter of 2025 for the Candidate Conservation Agreement (CCA) and Candidate Conservation Agreement with Assurances (CCAA) for the Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*; hereafter LPC) and Dunes Sagebrush Lizard (*Sceloporus arenicolus*; hereafter DSL). The Center for Environmental Health Monitoring and Management (CEHMM) administers a CCA for federal lands and minerals and a CCAA for non-federal lands and minerals. The two agreements, collectively referred to as the CCA/A, allow the U.S. Fish and Wildlife Service (FWS), the Bureau of Land Management (BLM), and CEHMM to work in cooperation and in consultation with landowners and industry to support conservation measures for the LPC and the DSL. The purpose of the CCA/A is to:

- Develop, coordinate, and implement conservation actions to reduce and/or eliminate known threats to the LPC and the DSL in New Mexico on federal, state, and private surfaces and minerals
- Support ongoing efforts to re-establish and maintain viable populations of LPC and DSL in currently occupied and suitable habitats
- Encourage the development and protection of suitable LPC and DSL habitats by giving incentives to Participating Cooperators to implement specific conservation measures

Under the CCA, federal lessees, operators, or permittees, who join by voluntarily signing a Certificate of Participation (CP), receive a high degree of certainty that additional restrictions are not to be placed on their otherwise legal activities with a federal listing of either species. The companion CCAA provides incentives for voluntary conservation of the LPC and the DSL on non-federal lands. By signing a Certificate of Inclusion (CI) under the CCAA, the lessee, owner, operator, or permittee voluntarily committed to implement specific conservation measures for the species on non-federal lands. Under the CCAA, private landowners receive assurances that additional restrictions cannot be placed on their otherwise legal activities on enrolled lands. In both cases, enrollment in the CCA or CCAA is voluntary. CEHMM is the federal permit holder for these agreements and is responsible for implementing, monitoring, and

reporting on projects completed with CCA/A funds.

CEHMM is a 501(c)(3) not-for-profit organization based in Carlsbad and Milnesand, New Mexico. CEHMM's participation allows for a federally approved, independently audited financial management system to provide funding for management and administration.

The following quarterly report details projects funded and completed with CCA/A funds. The report also details the daily implementation of the agreements including activities such as relocating industry development out of DSL habitat, conducting presence/absence surveys to monitor the species, and evaluating participant conservation commitment. For more details on the CCA/A programs, visit our website at www.cehmm.org.

Benefits of Candidate Conservation Agreement Programs

- Voluntary enrollment
- Measurable on-the-ground conservation
- Landscape-based approach
- Allow landowners and industry to continue work on the ground

Species Status Updates

On May 20, 2024, the FWS published its final ruling for the listing of the DSL as federally endangered under the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531, et seq.). On June 20, 2024, the ruling went into effect, and the DSL is now considered endangered throughout its entire range of west Texas and southeast New Mexico.

On August 12, 2025, a Texas federal court granted a motion to vacate the proposed rule listing the LPC under the Endangered Species Act and remand it to the FWS for further consideration. Under this finding it was determined that the distinction of the LPC into northern and southern distinct population segments was invalid. As a result, the LPC is currently delisted and subject to re-evaluation. CEHMM is in close communication with our regulatory partners and does not anticipate any changes to the current participants' operations. We will keep participants informed on all future updates. **This decision has effectively reopened enrollment into the CCA/A programs for LPC coverage.** Although LPC coverage can be pursued through the reopened CCA/A enrollment, DSL CCA/A enrollment remains closed due to the species' current endangered species listing status.

Habitat Conservation Plan Updates in Q3 of 2025

While the CCA/As have been successful, they are approaching their 20-year expiration date in 2028. With guidance from our partners at USFWS and BLM, CEHMM is currently exploring the development and implementation of a Habitat Conservation Plan (HCP) with associated

Incidental Take Permit. This type of program is more appropriate for working with listed species and will allow for updates to elements that have changed in the past 20 years (e.g., the addition of covered activities). These updates may include expanded coverage for renewable energy and transmission and allow for the purchase and management of conservation lands to offset take. To development the plan, the USFWS has offered to extend coverage of our current CCA/A agreements until 2031.

Enrollment Numbers

The total number of enrollees in the LPC and DSL CCA/A programs can be found in Figure 1. Currently, there are 2,345,125.21 acres enrolled by ranching participants in the programs (Figure 2). To date, oil and gas participants have enrolled 4,965,343.28 acres in the CCA/A programs (Figure 2). In Q3 of 2025, there were no changes to the number of enrollees or acreage enrolled in the programs. CEHMM is continuously updating enrolled acreage through the All-Activities method of enrollment, as participants can add or remove their covered acres at any time.

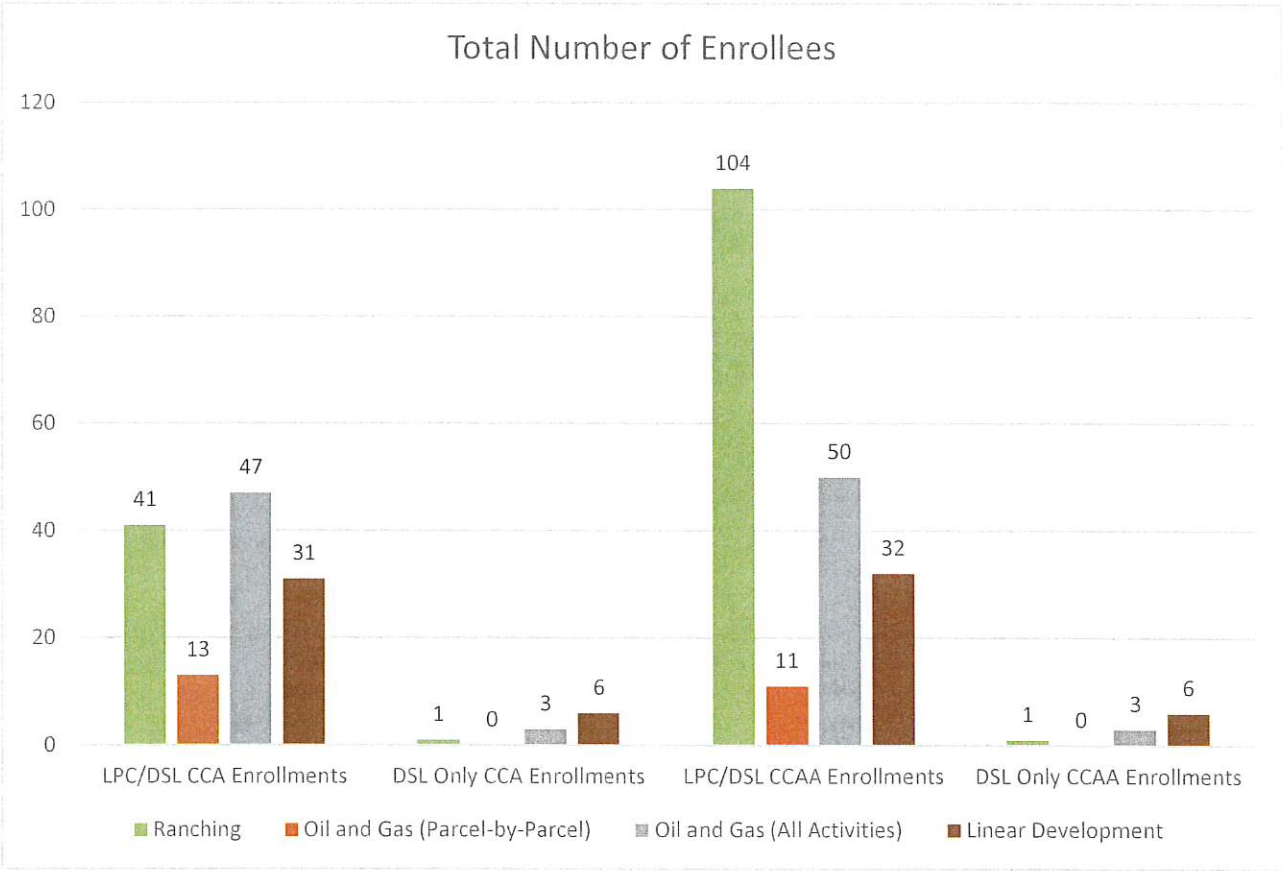


Figure 1. Current program enrollment totals for LPC/DSL and DSL-only CCAs, and LPC/DSL and DSL-only CCAAs for ranching, oil and gas, and linear development. Oil and Gas enrollment is divided by parcel-by-parcel and All-Activities enrollment types.

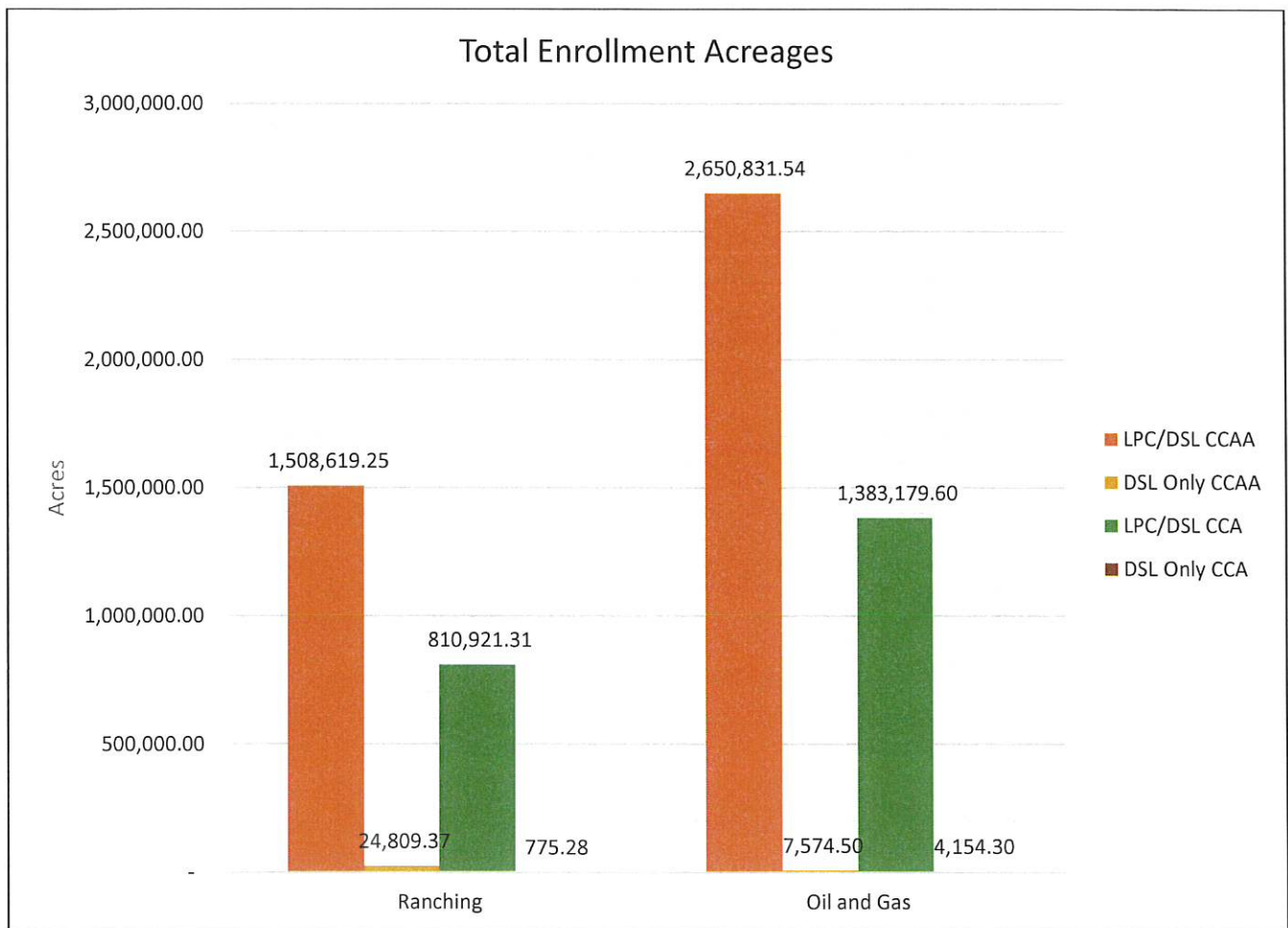
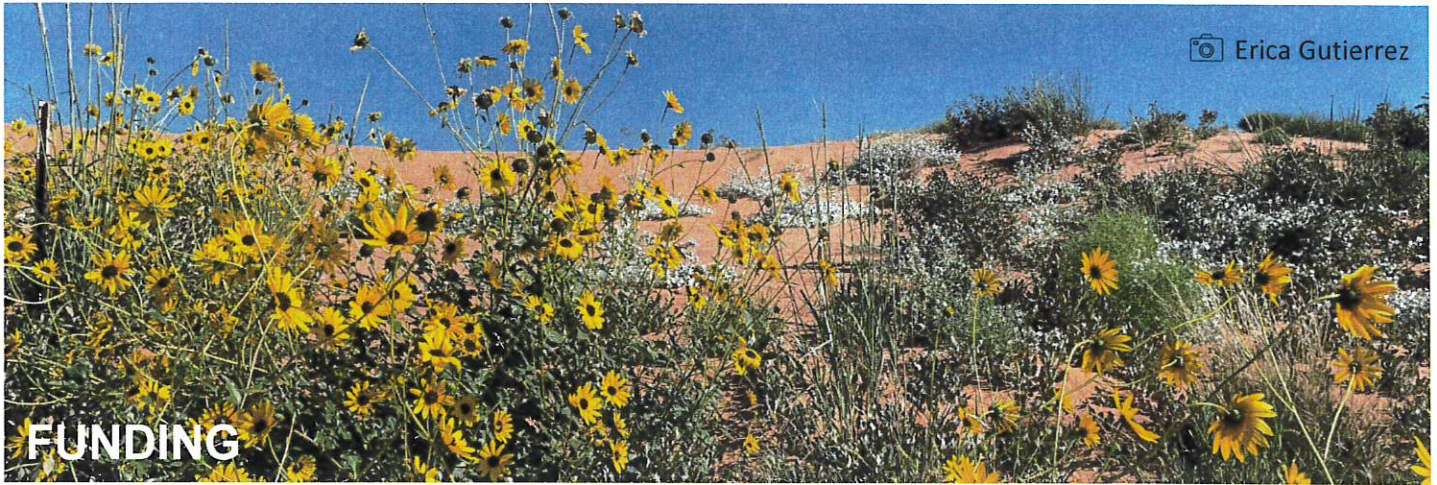


Figure 2. Current enrollment acreages for LPC/DSL and DSL-only CCAs and CCAAs for ranching and oil and gas enrollment types.



Habitat Conservation Fund

CEHMM establishes a Habitat Conservation Fund (HCF) for each oil and gas and linear development operator that has an executed CP or CI agreement. The contribution amount is determined by the number of acres enrolled within their CP or CI agreements. Once land-disturbing activities are identified and permitted in the operator's certificate, conservation fees are debited from their HCF. Approximately 29% of the funds received are allocated for overhead expenses. The remaining balance is used exclusively in support of the CCA/A programs. Supported activities include, but are not limited to, planning and implementation, on-sites, grazing programs, projects authorized by the ranking team, research, enrollments and amendments, project monitoring, education and outreach, and support services (e.g., vehicle and equipment procurement and maintenance).



Ranking Team Meeting

The Ranking Team met on August 14, 2025, at the BLM Roswell Field Office. During this meeting, representatives from the BLM, New Mexico State Land Office (NMSLO), New Mexico Department of Game and Fish (NMDGF), FWS, ranching, oil and gas, and CEHMM discussed and reviewed funding proposals concerning habitat restoration and future research. Once all of the projects were presented and reviewed, the Ranking Team selected 11 projects for funding. All the newly funded projects details have been added to the appropriate sections below.

Habitat Restoration Projects Completed in Q3 of 2025

Derrick Fence

Completed: July 2025

Units: 11.6 miles of fence

Description: Removed approximately 11.6 miles of dilapidated boundary fencing and replaced it with wildlife-friendly fencing.

McCloy Fence

Completed: July 2025

Units: 3 miles of boundary fence; 2.75 miles of interior fence

Description: Removed approximately 5.75 miles of dilapidated fencing and replaced it with wildlife-friendly fencing.

Bogle Mesquite

Completed: August 2025

Units: 9,896 acres

Description: Aerially treated approximately 9,896 acres of mesquite.

Kerby Mesquite

Completed: August 2025

Units: 2,262 acres

Description: Aerially treated approximately 2,262 acres of mesquite.

Kerby Water

Completed: August 2025

Units: 3 tanks; 5.5 miles of water pipeline

Description: Removed 3 non-functional water troughs and replaced them with 20-foot fiberglass tanks. Removed and replaced 5.5 miles of water pipeline.

Marley Water

Completed: August 2025

Units: 3 water troughs

Description: Removed three non-functional water troughs and replaced them with 20-foot fiberglass tanks.

Robert Jolley Fencing Improvement

Completed: August 2025

Units: 5.75 miles of fence

Description: Removed approximately 5.75 miles of dilapidated boundary fencing and replaced it with wildlife-friendly fencing.

Taylor Peak Mesquite Treatment

Completed: August 2025

Units: 1,026 acres

Description: Aerially treated approximately 1,026 acres of mesquite.

Pembers DSM

Completed: September 2025

Budget: \$45,784.55

Units: 1,600 acres

Description: Removed approximately 1,600 acres of dead, standing mesquite (DSM).

Habitat Restoration Projects Funded and Awaiting Completion

Running N DSM

Approved & Funded: March 2022

Budget: \$148,777.39

Units: 5,800 acres

Description: Remove approximately 5,800 acres of DSM.

Bogle Fence Proposal

Approved and Funded: August 2023

Budget: \$375,410.28

Units: 9 miles of fence

Description: Remove approximately 5.5 miles of dilapidated interior fencing and 3.5 miles of dilapidated boundary fencing and replace it with wildlife-friendly fencing.

Berry Hand Mesquite Treatment

Approved and Funded: September 2024

Budget: \$24,047.94

Units: 55 acres

Description: Hand treat approximately 55 acres of mesquite.

D2 Shop

Approved and Funded: September 2024

Budget: \$140,000.00

Units: 1 shop

Description: Install a shop on the Milnesand property to house all the equipment and tools needed for daily operations in District 2.

Coombes Rogers Water

Approved and Funded: August 2025

Budget: \$146,735.09

Units: 2 troughs; 3 water storage tanks; 5.25 miles of water pipeline

Description: Add 2 water troughs, 3 water storage tanks, and 5.25 miles of water pipeline.

Derrick Water

Approved and Funded: August 2025

Budget: \$106,873.01

Units: 2.7 miles of pipeline; 1 water tank

Description: Install 2.7 miles of pipeline and 1 water tank.

Running N Kenna Fence

Approved and Funded: August 2025

Budget: \$263,274.58

Units: 6.9 miles of fence

Description: Remove approximately 6.9 miles of dilapidated boundary fencing and replace it with wildlife friendly fencing.

TNC Fence

Approved and Funded: August 2025

Budget: \$623,199.25

Units: 19.2 miles of fence

Description: Remove approximately 19.2 miles of dilapidated boundary fencing and replace it with wildlife-friendly fencing.

Watts Fence

Approved and Funded: August 2025

Budget: \$70,936.83

Units: 1.5 miles of fence

Description: Remove approximately 1.5 miles of dilapidated boundary fencing and replace it with wildlife-friendly fencing.

Weaver DSM

Approved and Funded: August 2025

Budget: \$124,206.10

Units: 2,370 acres

Description: Remove approximately 2,370 acres of DSM.

Stockton Fence

Approved and Funded: August 2025

Budget: \$119,886.80

Units: 5 miles of fence

Description: Remove approximately 1.5 miles of boundary fence and 3.5 miles of interior fence and replace it with wildlife-friendly fencing.

Research Project Updates in Q3 of 2025

Dunes Sagebrush Lizard Population Monitoring

Approved & Funded: June 2018; October 2023

Budget: \$60,434.01

Description: The objective of this project is to implement a long-term monitoring study to assess DSL population dynamics across their range in New Mexico. Population monitoring began in 2018 and has continued through additional funding to track population parameters across multiple DSL populations. Additionally, research linking weather and microclimate to model population persistence of DSL will be conducted at established monitoring sites. This information will be used to create dynamic models by combining these data with habitat, microhabitat, and climate data to predict thermal microclimates throughout the entire range of the DSL.

Use of Unmanned Aerial Vehicles to Quantify and Evaluate Dunes Sagebrush Lizard Habitat

Approved & Funded: August 2025

Budget: \$24,068.00

Description: The ecological processes that maintain the dune systems that the DSL depend on are complex, dynamic, and easily disrupted. Therefore, habitat restoration objectives within these systems are challenging (Sias and Snell, 1998; Smolensky and Fitzgerald, 2011; USWFS, 2024). A plethora of knowledge exists regarding DSL habitat needs, but information on their thermal ecology is lacking (Hibbitts et al., 2013; Hibbitts et al., 2017; Jacobson, 2016; Ryberg et al., 2012; Sias and Snell, 1998; Smolensky and Fitzgerald, 2011; Walkup et al., 2022; USWFS, 2024). As a sand-dwelling lizard, they are adapted to environments that can experience drastic temperature fluctuations and may be susceptible to thermoregulatory consequences when environmental temperatures regularly exceed the critical thermal maximum of most lizards (Gaudenti et al., 2021; Hibbitts et al., 2013; Livingston et al., 2024). Using unmanned aerial vehicles UAVs to collect and quantify Lidar and thermal imagery data, this project will provide a better understanding of DSL habitat tolerances and needs. These data have the potential to better define the quality of DSL habitats on the landscape, predict future population declines, and evaluate areas for future restoration or translocation efforts.

Orphan Well Reclamation Protocol

Approved & Funded: August 2025

Budget: \$100,000

Description: This research aims to 1) develop a methodological avenue for selecting viable remediation/reclamation sites based on localized and landscape-level factors, 2) perform reclamation and species-specific habitat improvement at selected sites post-remediation, and

3) evaluate the success of reclamation by establishing a post-reclamation monitoring program that utilizes tracking metrics designed to measure the responses of site rehabilitation for each species at different spatial and temporal scales. This method will provide a definitive protocol for well reclamation/restoration initiatives and will help with determining the success rate.

Passive Acoustic Monitoring of Lesser Prairie-Chickens

Approved & Funded: August 2025

Budget: \$177,667.01

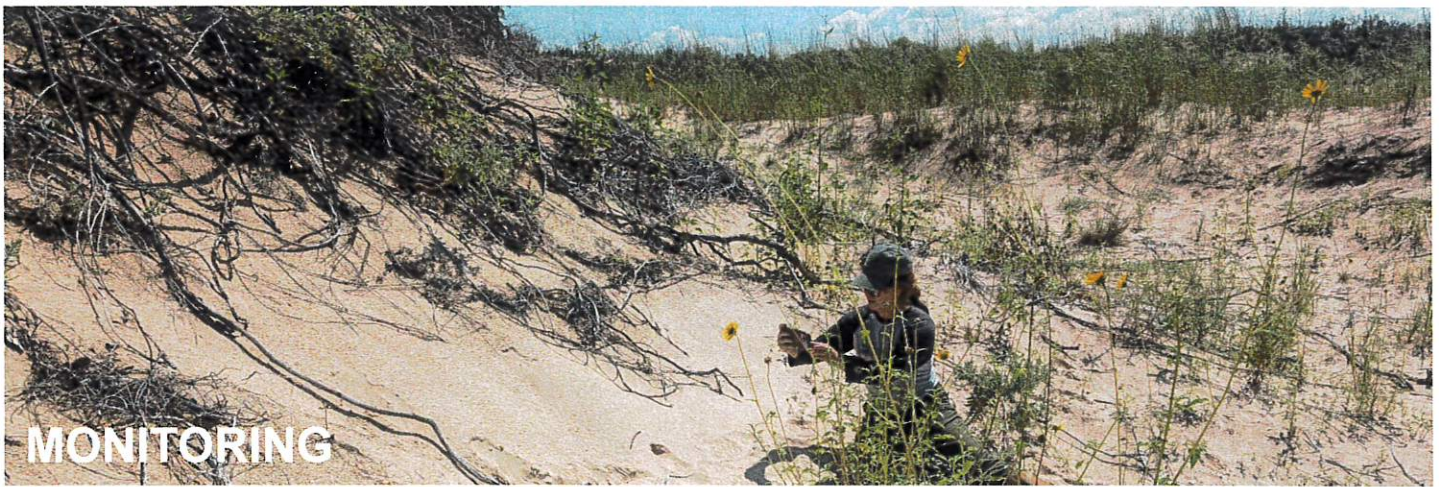
Description: The objective of this study is to assess the utility of acoustic recording units (ARUs) as a novel method for monitoring LPC populations and quantifying parameters that can be used to evaluate LPC habitat restoration efforts. This proposal aims to develop protocols for using ARUs as a method to survey for LPC; investigate the cost-effectiveness of LPC survey methodologies by comparing detectability metrics of ARUs and standardized ground-based survey methodologies; and explore the potential of ARUs to target future restoration efforts. We propose a multi-faceted experiment that includes: 1) the deployment of up to 40 ARUs as well as simultaneous ground-based surveys, across ~70,948 acres of historic and currently occupied LPC habitat, and 2) analyses of LPC detection probabilities and density estimates collected from passive acoustic monitoring and ground-based surveys (i.e., count data). Our primary goal is to advance methodological strategies for monitoring LPC populations on state, federal, and private lands in New Mexico (BLM 2008). Our secondary goal is to develop a noninvasive, cost-effective framework for targeting future restoration efforts.

Linking Weather and Microclimate to Model Population Persistence of the Dunes Sagebrush Lizard

Approved & Funded: August 2025

Budget: \$163,621.50

Description: The goal of this project is to describe the thermal environment experienced by the DSL across both space and time. We propose a series of data collection and modeling approaches to describe small-scale variation in thermal environments experienced by the DSL, which we can extrapolate to the entire range via remote sensing and satellite imagery. Further, this project will represent the first step towards predictive models that will aid in future efforts to preserve and restore dunes that maximize fitness of the DSL and understand how this species will respond to climate change. In future work, we will combine the outcome of this project with physiological measurements to fully describe the energy budget of this species. We propose two specific objectives for the current work: 1) quantify microclimates at four sites with high spatial and temporal resolution, and 2) create dynamic models to combine these data with habitat, microhabitat, and climate data to predict thermal microclimates throughout the entire range of the DSL.



Vegetation Monitoring

Vegetation monitoring surveys were conducted across 17 ranches from June to September 2025. This monitoring employs the combined use of three different survey methodologies (i.e., Robel, Daubenmire square, and point-intercept) to determine basal (ground) cover, canopy cover, and plant density on CCA/A enrolled ranches. This data is then evaluated to determine grazing pressures and ensure that enrolled ranches are following the conservation measures outlined in their CCA/A agreements. During this third quarter, CEHMM staff completed vegetation monitoring surveys at 85 sites. In Q4 of 2025, CEHMM staff will conclude vegetation monitoring efforts for the year, by completing forage utilization surveys, to evaluate the grazing management of each ranch.

DSL Monitoring

During the third quarter of 2025, CEHMM staff assisted herpetologist Mike Hill with his ongoing DSL pitfall trap surveys. Mr. Hill has eight grids within ranches enrolled in the CCA/A programs. However, in 2025 Mr. Hill was only able to survey seven grids. Each grid was surveyed once, each for a five-day period. This resulted in a total of 35 trapping days.

During pitfall trap surveys, the surveyors check 36 traps arranged in a 6x6 grid, with each trap approximately 15 meters apart. Each trap consists of a five-gallon bucket filled with approximately 1.5 inches of sand, buried flush with the ground. Each bucket contains a square plywood lid propped up with sticks approximately 0.5 inches above the lip of the bucket. This setup provides shade which entices lizards to the buckets, where they fall in and cannot escape until surveyors check the buckets the next day. During each survey day, all buckets are checked, and any trapped lizards are recorded. Also, all insects are removed and released back into a shaded area. All captured lizards are checked for species, sex, and if they are marked with a toe clip from a previous capture, and then this data is recorded. If an unmarked DSL is captured, surveyors process those individuals more thoroughly prior to release. Processing includes: 1) snout-vent (nose to base of tail) length measurement (mm), 2) tail length measurement (mm), and 3) total body weight (g). After measurements are recorded, unmarked DSL individuals are

given a toe clipping by Mike Hill to help identify them for future captures. These toe clippings are sent off for research at the University of New Mexico (UNM). Once all lizard data is recorded and the lizards have been released back into the wild, the plywood lid is replaced, and the trap is ready for the next survey day. When bucket traps are not in use, they are sealed and buried to prevent incidental mortality. These same bucket traps will then be unburied and re-set for the next trapping session.



Mitigation of Impacts to Habitat

Oil and gas development and associated infrastructure can pose a serious threat to the DSL, LPC and many other species. Due to the severe loss of these habitats in the wake of development, enrollees have agreed to implement certain conservation measures to offset further decline. This includes no surface occupancy within 30 meters of suitable or occupied DSL habitat, as well as no new powerlines within one mile of a historic LPC lek, and two miles from an active LPC lek (where LPC have been found within the past 5 years). There are four types of evaluations (i.e., field consultations, desktop block reviews, linear development desktop consultations, and pad desktop consultations) conducted by CEHMM staff to ensure infrastructure does not fall within these buffers. Field consultations include on-site visits with participating enrolled companies to appropriately relocate proposed developments that occur in or near suitable or occupied habitat to help ensure that DSL dune habitats, and LPC leks are avoided. The remaining three assessment types are conducted via desktop analysis in which CEHMM staff utilize a variety of spatial data (e.g., aerial imagery, soil layers, species distribution models, habitat suitability models) to 1) delineate suitable habitat, 2) reroute linear infrastructure, and/or 3) relocate pads or similar surface disturbances. The number of wells and rights-of-way (ROW) moved out of DSL habitat in Q3 of 2025 can be found in Table 1. It is important to note that not all the consultations depicted within the table below were located within suitable DSL habitat.

Table 1. Initial development reviews and relocated developments in Q3 of 2025 across evaluation type categories including desktop block reviews, linear development consultations, and pad/other surface consultations. Also included is the total number of initial development reviews and developments relocated out of habitat that were field evaluated by CEHMM biologists as part of the review process. Note that desktop block reviews often may require additional evaluation including desktop consultations and/or field consultations.

	Desktop Block Reviews	Linear Development Consultations	Pad / Other Surface Consultations	Field Evaluated	TOTAL
Initial Development Reviews	8	34	26	27	68
Developments Relocated Out of Habitat	2	16	15	24	33



Southwest Partners in Amphibian and Reptile Conservation 2025

CEHMM staff attended the Southwest Partners in Amphibian and Reptile Conservation (SWPARC) annual meeting held in Albuquerque, NM in August 2025. CEHMM staff presented preliminary results from trench monitoring efforts in DSL habitat and assisted in the scheduled field trips, trapping turtles with herpetologist Mike Hill.

Ecological Immersion: Teaching High School Students Through Lesser Prairie Chicken Habitat Improvement

CEHMM staff conducted classroom visits and a productive field day with the Dora High School agriculture students. The students gained hands-on experience conducting bird surveys, grazing monitoring, pitfall trapping, and invertebrate/vertebrate species identification. The students had a unique opportunity to broaden their understanding of ecology within lesser prairie-chicken (LPC) habitat and learn how CEHMM works to preserve and improve this critical ecosystem. CEHMM would like to thank the New Mexico Department of Game and Fish, their Share with Wildlife program, and the Land of Enchantment Legacy Fund for funding CEHMM's Ecological Immersion: Teaching High School Students Through Lesser Prairie-Chicken Habitat Improvement project and their contributions to the curriculum development.

Inspired by Science Biology Workshop

On September 29, 2025, CEHMM staff participated in the Inspired by Science Biology Workshop by setting up multiple booths for young scientists ages 7-12 to perform experiments. Booths included banana DNA extraction, rock samples, dissecting owl pellets, and a dichotomous key activity.

Executive Director Signature

Signed: Emily K. Wirth
Emily K. Wirth, Executive Director

Date: 10/31/2025

If you have any questions, please contact Connor Adams at (575) 885-3700 or Kyle Dillard at (575) 675-2324.