



2021 Annual Report

Range-wide Oil and Gas Candidate Conservation Agreement with Assurances (CCAA) for the Lesser Prairie-Chicken

Permit #TE27289B-0
(2014-2044)



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on March 31, 2022
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Western Association of Fish and Wildlife Agencies
&
WAFWA Species Restoration Fund

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The Range-Wide Oil and Gas Candidate Conservation Agreement with Assurances for the Lesser Prairie-Chicken in Colorado, Kansas, New Mexico, Oklahoma, and Texas (CCAA) is a voluntary conservation strategy that establishes a mitigation framework by which is administered the Western Association of Fish and Wildlife Agencies (WAFWA) and permitted by the U.S. Fish and Wildlife Service (FWS). Established in 2014, the CCAA is in partnership with the states of New Mexico, Colorado, Kansas, Oklahoma and Texas, the oil and gas industry and private landowners.

RECOMMENDED CITATION

WAFWA, 2022. The 2021 Annual Report for the Range-wide Oil and Gas Candidate Conservation Agreement with Assurances for the Lesser Prairie-Chicken. Western Association of Fish and Wildlife Agencies. Boise, Idaho. pp.19.

Cover Photo Credit: Grant Beauprez, New Mexico Department of Game & Fish and New Mexico Representative on the WAFWA Lesser Prairie-Chicken Interstate Working Group.

INTRODUCTION AND BACKGROUND

Entities and Business Structure

The Western Association of Fish and Wildlife Agencies (WAFWA) is a 501(c)4 non-profit organization representing the state and provincial fish and wildlife agencies from 24 states and Canadian provinces - an area covering nearly 3.7 million square miles of western North America. WAFWA holds the Federal Fish and Wildlife permit (# TE27289B-0) issued on 02/28/2014 for the Range-Wide Oil and Gas Candidate Conservation Agreement with Assurances for the Lesser Prairie-Chicken in Colorado, Kansas, New Mexico, Oklahoma, and Texas (CCAA). WAFWA is the CCAA program administrator with responsibilities to ensure activities under the CCAA are in-compliance with the terms and conditions of this 30-year permit (expires on 02/28/2044).

The Species Restoration Foundation (SRF) is a 501(c)4 nonprofit organization created by WAFWA to manage the financial operations for the CCAA. WAFWA and SRF share a principal interest in the success and governance of the CCAA by having a mutual executive board. All financial operations within SRF are audited annually through an independent third-party accounting firm. The audit is performed according to *Government Auditing Standards* supported by sound accounting procedures. Both the audit results and the IRS form 990 are publicly disclosed and available on WAFWA's website (www.wafwa.org/about-us/). There have been no material findings identified in any financial audit since the organization was created in 2014.

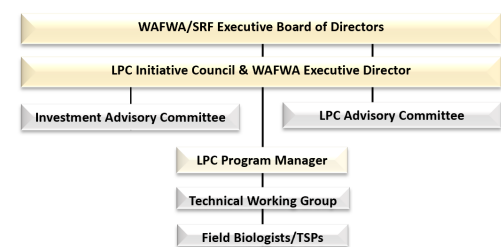
In a continued commitment toward improvement, WAFWA and SRF have invested in modernized, transparent, and streamlined financial operations under an updated CCAA business plan approved and implemented in 2021 (WAFWA, 2021). This plan, developed with the help of third-party consultants, identifies actionable improvements and designated benchmarks for continued success of the CCAA.

Executive Summary and Business Plan Updates for 2022

Since the inception of SRF and the associated LPC mitigation programs in 2014, SRF's total expenditures to protect and enhance lesser prairie-chicken habitat on private lands has totaled approximately \$30 million to benefit approximately 136,000 acres of quality habitat. Current conservation enrollment provides 135,036 acres distributed across the species range within important habitat areas, provided as 10-year term agreements (80% of total) and permanent easements (20% of total). As part of the 2021 Updated CCAA Business Plan, the program has made efforts to adjust or "right size" our conservation allocations by 1) reducing the amount of term agreements in favor of prioritizing permanent protections and to 2) strategically increase select enrollments that have the greatest conservation value to the species. See the Section on [Right-Sizing Conservation](#) for more details. These efforts were further supported by a mitigation fee adjustment in December of 2021 to ensure the program was recognizing increases to adaptive management costs and inflation (posted online at www.wafwa.org).

Our focus in 2021, was to deliver and implement the improved business plan and to broaden communications on SRF's operations to our participants and partners. As documented in the 2021-2022 financial audit and accompanying IRS form 990, the program is financially sustainable at its current rate of use (see consolidated financial statement, *note L*) with annual conservation payments averaging approximately 1.8 million in expenditures. WAFWA and SRF continue to focus on growing the endowed conservation funds, currently totaling 41.2 million, with the goal to achieve a long-term return of at least 5% or greater annually. This includes the conservation endowment and all associated sub-accounts used to specifically support permanent land easements, budgeted administrative cost, and maintain the liquidity required to secure annual conservation

Figure 1. CCAA Business Structure Diagram



credit acreages and monitor compliance as prescribed in the CCAA. Total reported assets for SRF in the 2021 audit are recorded at 53.9 million dollars. In addition, SRF set a cap on possible annual administrative expenses, institute budgeted overhead spending, and ensures all unused administrative funds are retained within the conservation endowment to grow future returns.

In addition to the annual financial audit mentioned prior, the program has incorporated an annual programmatic review (or program “audit”), conducted by an independent party, to evaluate conservation performance and to assess whether WAFWA is managing the program in compliance with the terms of the CCAA. The programmatic review comprises of evaluating 27 compliance points of the CCAA, as well as the CCAA’s annual report to assess if it fairly reflects the expenditures and achievements of the program. This review supports a predictable feedback loop for continued program adaptation and improvement. The programmatic review conducted in March of 2022, found that the 2021 Annual Report fairly reflects the expenditures and achievements of the program and revealed passing compliance in 26 of the 27 compliance points of the CCAA, with the only exception related to implementation of the committees described in the updated business plan (Dillon, 2021). See [Establishing CCAA Committee’s](#) section below for details. The audit can be found online at: www.wafwa.org.

Finally, to assist in future forecasting and reporting the entire accounting system for SRF is currently being modernized and integrated with innovative software and reporting tools so that WAFWA, industry, and the FWS can easily see reports and outputs to track use, credits, acreages, and compliance of gas and oil development contained within the CCAA.

Operational Planned Actions in 2022

Right-Sizing Conservation

As part of the 2021 Updated CCAA Business Plan, the program has made a commitment to adjust or “right size” the conservation allocations to reduce the amount of term agreements in favor of prioritizing permanent protections and to strategically increasing parcels that have the greatest conservation value to the species. This process was initiated in 2021 through an assessment of the program needs for offset units for the remaining duration of the permit (2022-2044) and re-evaluation of program’s conservation goals and objectives. This resulted in the development of a strategic plan for implementing the rightsizing effort of WAFWA/SRF’s investment of conservation properties. By the time of this report, in March of 2022, most of the rightsizing efforts have been implemented and all will be reflected in the 2022 Annual Report.

Establish CCAA Committees

The business plan has recommended the establishment of a CCAA dedicated Investment Advisory Committee, LPC Advisory Committee and Technical Working Group in addition to the LPC Initiative Council. The Investment Committee was established in 2021 as outlined in the Business Plan, and the LPC Advisory Committee and Technical Working Groups are planned for establishment in 2022. WAFWA has been using the RWP Advisory Committee and the RWP Interstate Working Group to inform needed technical guidance and policies. In 2022, WAFWA will finalize the restructuring of the CCAA committees as designated in the Business Plan.

Reporting Summary Table

Reporting Requirement	2021 Result	Section
Enrollment. Participants enrollment under the CCAA over the past year.	<p>IMPACTS</p> <ul style="list-style-type: none"> • 111 active industry participants, • 6,226,140 acres enrolled. <p>OFFSETS</p> <ul style="list-style-type: none"> • 22 conservation properties, • 115,414 acres unimpacted by development, • 20% permanent easement / 80% 10-year contracts. 	Participant Enrollment (Page 4-6)
Enrollment Habitat Condition. Habitat management and habitat conditions in the Covered Area (EOR+10) and on all enrolled property over the past year.	<p>OFFSETS</p> <ul style="list-style-type: none"> • Average HEG score of 0.70, • 17 of the 22 conservation properties have leks identified within a 3-miles. • 0 acres of restoration (17,602 acres since 2014) 	Habitat Management and Condition (Page 7-8)
Effectiveness. Summary of the effectiveness of the conservation activities implemented in previous years at meeting the intended conservation benefits.	<p>IMPACTS (since 2014)</p> <ul style="list-style-type: none"> • Impact primarily occurs in low-quality habitat: 74% occurrence in CHAT 3-4, and a mean HEG score of 0.29. • Industry impacts minimized by collocating developed areas: 58.5% collocation rate prevented impacts on 24,890 acres. <p>OFFSETS (since 2014)</p> <ul style="list-style-type: none"> • Conservation primarily occurs in high-quality habitat: 85% occurrence of in CHAT 1-2, and a mean HEG score of 0.70. 	Conservation Benefits (Page 9-13)
LPC Population Surveys. Population surveys and studies conducted.	<ul style="list-style-type: none"> • Population estimate of 30,461 (90% CI). • Lek abundance estimate of 3,152 (90% CI). <p><i>Tend:</i> statistically significant annual rate of increase of the total LPC population size from 2013 to 2021 with the average rate of increase being 2,616 LPC per year.</p>	Population Surveys (Page 14)
LPC Mortality/Injury through implementation of the CCAA. Incidental Take may not exceed 8,530 birds as measured by habitat impacts.	<ul style="list-style-type: none"> • No mortality or injuries reported or observed since the start of the CCAA in 2014. • The total habitat impacted (mitigated) through the CCAA is 17,634 acres. This represents 2.83% of the impacted acreage allowed by the CCAA permit in the first 10 years of the program and 0.94% of the total allowable impact over the 30-year life of the program. 	Mortality or Injury (Page 15) Incidental Take (Page 15)
Participant Compliance. Report of issues with implementation of the CCAA.	<ul style="list-style-type: none"> • Annual field review of randomly sampled mitigated projects resulted in a finding of no compliance issues. • Well permit review of 2018-2021 resulted in the identification of 11 wells that should have been mitigated prior to completion. Those wells were retroactively mitigated. • Any outstanding compliance issues were resolved. 	Participant Compliance (Page 15-16)
Conservation Funds. Funding for habitat conservation on private lands.	<ul style="list-style-type: none"> • \$1,731,750 paid to private landowners for annual conservation payments to provide 95,543 offset units. 	Conservation Funds (Page 17)

PARTICIPANT ENROLLMENT

An annual summary of participants enrollment under the CCAA. Participants include members of the oil and gas industry (industry participants) and non-Federal property owners (conservation participants) who choose to enroll property in the CCAA by completing and executing a Certificates of Inclusion (CI)¹.

Industry Participant Enrollment

As of December 31, 2021, there were 111 companies actively participating² in the CCAA ([Appendix A](#)); no change from the prior year. The program has not been open to new participation since March of 2019, by Executive Board decision. In 2021, there were two companies in a suspended status that were terminated, refer to the [Participant Compliance](#) section for more information.

Enrollment totaled 6,226,140 acres as of December 31, 2021 (Table 1, Figure 2), which was a reduction of 1,996 acres from the previous year. The reduction was resultant from companies updating their enrollment by terminating parcels no longer under their ownership/lease or control. Industry enrollment in the CCAA was closed, by decision of the Executive Board, from March 2019 to October 2021, at which time enrollment was re-opened to existing participants. In 2021, there were no new enrollments.

The majority of the lands enrolled are in low quality habitat, with 76% of enrollment occurring in CHAT 3-4 (mixed grass prairie the 72%, sand sagebrush prairie 72%, shinnery oak prairie 93%, shortgrass prairie 73%).

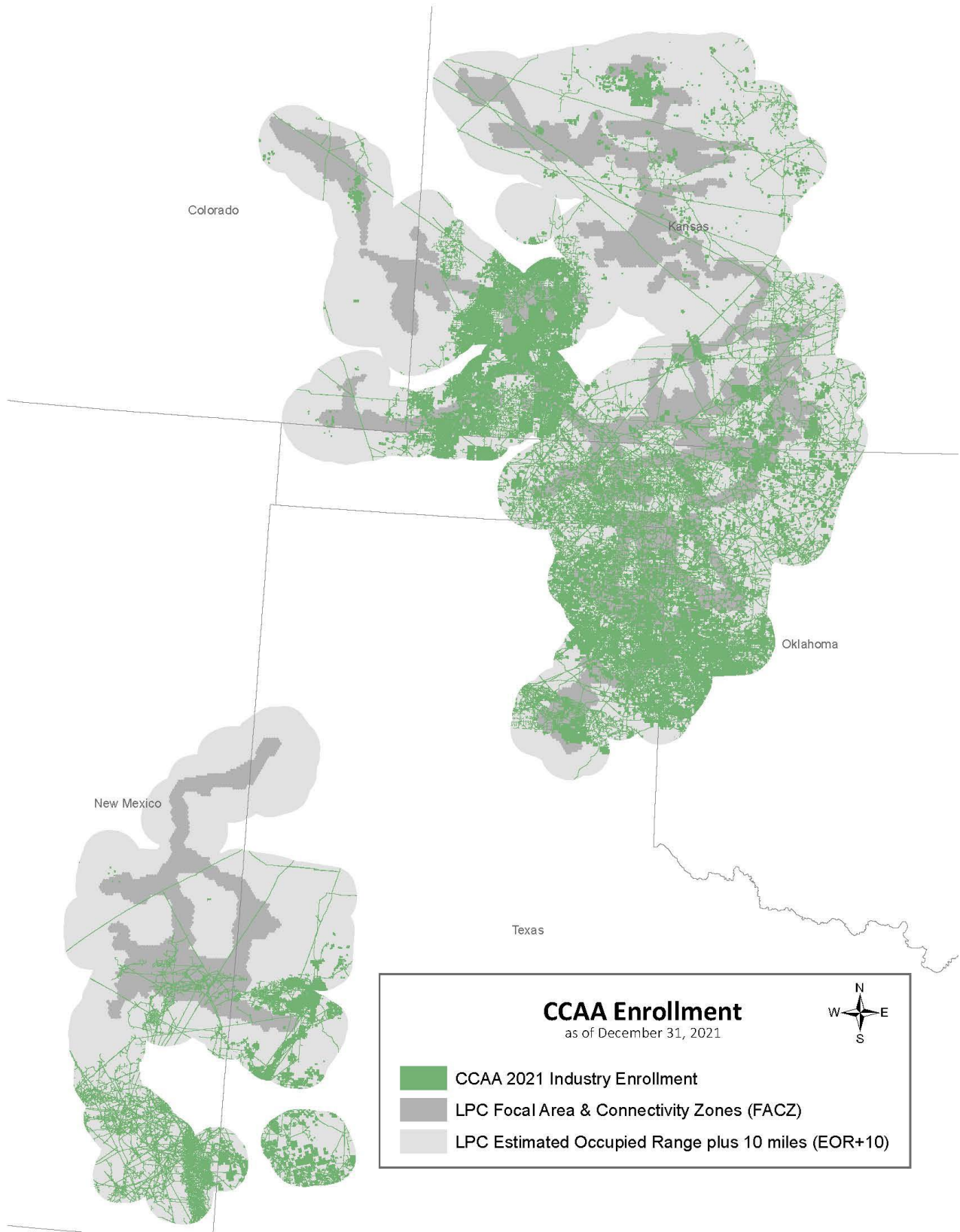
Table 1. CCAA active enrollment acreage by ecoregion and CHAT category, as of December 31, 2021.

Ecoregions	CHAT Category	Oil and Gas	Pipeline	Total Acres	% Total Area
Mixed Grass Prairie	CHAT1	523,412	73,209		4.7%
	CHAT2	237,664	48,201		2.3%
	CHAT3	1,564,643	192,224		13.9%
	CHAT4	476,714	114,135		4.7%
	Ecoregion Total:	2,802,433	427,769		26%
Sand Sagebrush Prairie	CHAT1	518,981	24,702		6.8%
	CHAT2	14,533	1,085		0.2%
	CHAT3	284,174	18,213		3.8%
	CHAT4	1,018,954	56,589		13.4%
	Ecoregion Total:	1,836,642	100,589		24%
Shinnery Oak Prairie	CHAT1	2,142	12,779		0.1%
	CHAT2	2,747	3,070		0.1%
	CHAT3	261,950	94,194		3.2%
	CHAT4	298,478	62,477		3.3%
	Ecoregion Total:	565,316	172,520		7%
Shortgrass Prairie	CHAT1	52,263	4,590		0.7%
	CHAT2	17,424	1,066		0.2%
	CHAT3	43,020	6,181		0.6%
	CHAT4	174,100	22,230		2.3%
	Ecoregion Total:	286,806	34,066		4%
Covered Area Total:		5,491,197	734,943		15%

¹ Certificate of Inclusion (CI) – A certificate documenting the Participant's voluntary agreement to enroll specified property in the CCAA under a master permit held by WAFWA.

² Active Participants/Contracts - have a current balance and no outstanding compliance notices.

Figure 2. Map of industry enrolled lands in the Range-wide Oil and Gas Candidate Conservation Agreement.



Conservation Participant Enrollment

Voluntary enrollment in the mitigation program by non-Federal property owners provides habitat conservation (mitigation) to the industry's CCAA development impacts. The CCAA allows for conservation enrollment based on a shifting habitat mosaic strategy which targets 25% of enrollments toward permanent easements and 75% toward iterative term (10-year) contracts.

As of December 31, 2021, there were 22 enrolled properties totaling 136,050 acres. Of the enrolled acreage, 115,414 acres are determined to be unimpacted by development (Unimpacted Acres³), this was no change from 2020. The enrollment includes fifteen (15) 10-year term contracts totaling 92,774 unimpacted acres (80% of the total) and seven (7) permanent easements totaling 22,641 unimpacted habitat acres (20% of the total).

Enrollment Changes in 2021

- As part of the 2021 CCAA Business Plan to separate the CCAA and WCA programs, the permanent enrollment CZ024 was separated to provide dedicated credits for the WCA mitigation program thereby reducing the enrollment acreage for the CCAA program by 13,570 unimpacted acres.
- By recommendation of the committees and as approved by the council, the program enrollment strategy is not promoting 5-year term agreements. They may be authorized only under special consideration. This promotes the strategy to prioritize restoration, which requires a 10-year term agreement, and the prioritization of increasing permanent restoration to 25% of the total enrollment.

Enrollment of conservation properties are targeted and prioritized to occur within high priority LPC habitat as determined by their CHAT category where CHAT 1 represents the focal areas for LPC conservation and CHAT 2 represents LPC conservation corridors/connectivity zones. Eighty-one percent (81.4%) of iterative term contracts are located within CHAT 1 and 2, and 99.2% of permanent easements are within CHAT 1 and 2 (Table 2).

Table 2. CCAA Conservation Sites: Permanent and 10-Year term contracts for 2021.

Ecoregion	No. of Properties	Enrolled Acres	Total	2021 Unimpacted Acres			
				CHAT1	CHAT2	CHAT3	CHAT4
CCAA Conservation Sites: 10-Year Term Contracts for 2021.							
Mixed Grass Prairie	7	73,917	62,456	46,264	374	677	15,140
Sand Sagebrush Prairie	1	12,575	8,806	8,806	0	0	0
Shinnery Oak Prairie	3	16,059	12,722	11,389	0	1,333	0
Shortgrass Prairie	4	9,501	8,791	4,886	3,808	97	0
	15	112,052	92,774	71,345	4,182	2,107	15,140
CCAA Conservation Sites: Permanent Easements for 2021.							
Mixed Grass Prairie	2	2,726	2,708	2,598	0	0	110
Sand Sagebrush Prairie*	1	16,023	15,810	15,794	0	16	0
Shinnery Oak Prairie	1	1,554	1,208	862	295	51	0
Shortgrass Prairie	3	3,696	2,915	2,915	0	0	0
Covered Area Total:	22	136,050	115,415	93,514	4,477	2,174	15,250

*In 2021, the CZ024 enrollment was split to provide credits for the WCA mitigation program. This is reflected as a reduction in acres from the 2020 report. NOTE: These numbers do not include acreage enrolled which is not producing off-set units (formerly identified as non-offset units).

³ Unimpacted acres are areas unimpacted by developments as defined in the RWP. A review of the conservation properties is conducted annually to determine if those impacts have changed.

HABITAT MANAGEMENT AND CONDITION

An annual summary of habitat management and conditions in the Covered Area⁴ and on Enrolled Property.

Conservation Plans and Practices. WAFWA works with participants to develop lesser prairie-chicken specific management plans for each enrolled conservation property, focused on addressing threats to the species and improving habitat quality. The program provides for two types of management plans:

Rangeland Management Plans address threats to the species on native rangelands. These plans require that participants restrict livestock grazing by reducing forage utilization to 33%. Participants also are required to manage for exotic and invasive plants/trees and to address any drowning and collision mortality threats. As of December 31, 2021, there were 134,804 acres enrolled in rangeland management plans (Table 4).

Planted Grass Management Plans are used in conjunction with restoration to restore habitat, generally from crop conversion to native grass. These management plans do not allow grazing but do promote periodic disturbance management to improve habitat quality. Participants also are required to manage for exotic and invasive plants/trees and to address collision mortality threats. As of December 31, 2021, there were 1,246 acres enrolled in grassland management plans (Table 4).

Monitoring Habitat Quality

Conservation properties are annually monitored during the growing season, using standardized habitat monitoring protocol, to assess habitat quality and to ensure compliance with the terms and conditions of the participant's certificate of inclusion.

Monitoring protocol includes the uses of an on-site rapid assessment, the WAFWA Habitat Evaluation Guide (HEG), which utilizes four consistent categorical variables to assess habitat quality:

1. Proportion of vegetation versus bare ground,
2. Percent cover of seven preferred species of vegetation for the LPC,
3. Density of trees per acre present, and
4. Percentage of suitable habitat expressed as grassland within one mile of the site.

These variables were specifically chosen because they can quickly and accurately describe LPC habitat quality and track trends through time. A HEG is completed for all areas with homogenous vegetation under similar management (called a management unit), and each HEG includes a component of vegetation monitoring using transect sampling. The HEG results in a score of 0.0 to 1.0, with 1.0 representing the highest habitat condition. It is important to recognize that not all conservation properties or management units have the characteristics to achieve a 1.0 score, often due to soil structure, slope or for other reasons. Therefore, each management unit is further assessed to identify its highest potential score, in order to manage the property to its highest potential. The monitoring protocol can be found online at: www.wafwa.org/initiative-programs/lesser-prairie-chicken/.

In 2021, the enrolled conservation properties had an average HEG score of 0.70 (Table 4), this was a drop of 0.01% from 2020 (Table 3). This HEG score represents a very high level of habitat quality (a score of 1.0 represents the highest quality). Monitoring was conducted on all enrolled management units by WAFWA certified Technical Service Providers trained in the protocols and in identifying potential compliance issues. No compliance issues were identified.

Table 3. Habitat Quality Score Trend

2015	2016	2017	2018	2019	2020	2021
.63	.63	.70	.68	.66	.71	.70

⁴ For purposes of this CCAA, the Covered Area is defined as the Estimated Occupied Range plus 10 miles (EOR+10), as identified in the 2013 Crucial Habitat Assessment Tool (CHAT) (www.sgpchat.org). The EOR+10 encompasses approximately 40.1 million acres. Figure 1.

LPC Occurrence

Lek occurrence is another measure of habitat quality and conservation success. Despite limited survey coverage, 17 of 22 conservation properties have one or more leks identified within a 3-miles buffer of the property (Table 4), indicating that these properties are providing lekking, nesting, brooding, and foraging habitat for LPCs. LPCs have been observed on the remaining 5 conservation properties, but no leks have been detected.

Table 4. Property information for conservation sites in 2021.

Ecoregions	WAFWA Site ID	Conservation Plan Type	Expiration Year	Primary CHAT	Total Acres	2021 Active Lek Observations within 3 mi.	2021 Habitat Evaluation Guide Score (0-1)
Mixed Grass Prairie							
Mixed Grass Prairie	CZ008	Rangeland	2024	1	625	1	0.36
Mixed Grass Prairie	CZ036	Rangeland	2024	1	27,646	0	0.76
Mixed Grass Prairie	CZ037	Rangeland	2024	4	10,255	0	0.82
Mixed Grass Prairie	CZ038	Rangeland	2024	1	21,256	0	0.71
Mixed Grass Prairie	CZ040	Rangeland	2026	1	1,222	3	0.66
Mixed Grass Prairie	CZ063	Rangeland	<i>permanent</i>	1	1,758	3	1.00
Mixed Grass Prairie	CZ065	Rangeland	<i>permanent</i>	1	968	3	0.90
Mixed Grass Prairie	CZ066	Rangeland	2026	1	172	3	0.90
Mixed Grass Prairie	CZ067	Rangeland	2026	1	12,739	0	0.80
Sand Sagebrush Prairie							
Sand Sagebrush Prairie	CZ016	Rangeland	2024	1	12,575	2	0.79
Sand Sagebrush Prairie	CZ024*	Rangeland	<i>permanent</i>	1	16,023	36	0.73
Shinnery Oak Prairie							
Shinnery Oak Prairie	CZ003	Rangeland	2024	1	15,433	40	0.41
Shinnery Oak Prairie	CZ013	Planted Grass	2024	1	316	28	0.85
Shinnery Oak Prairie	CZ014	Planted Grass	2023	1	310	0	0.90
Shinnery Oak Prairie	CZ026	Rangeland	<i>permanent</i>	1	1,554	6	0.58
Shortgrass Prairie							
Shortgrass Prairie	CZ033	Rangeland	2024	2	4,024	1	0.55
Shortgrass Prairie	CZ035	Rangeland	2024	1	1,109	6	0.51
Shortgrass Prairie	CZ061	Rangeland	2025	1	3,749	6	0.52
Shortgrass Prairie	CZ062	Planted Grass	2025	1	620	3	0.27
Shortgrass Prairie	CZ081	Rangeland	<i>permanent</i>	1	276	1	0.86
Shortgrass Prairie	CZ082	Rangeland	<i>permanent</i>	1	1,429	2	0.79
Shortgrass Prairie	CZ083	Rangeland	<i>permanent</i>	1	1,991	2	0.83
Covered Area Total:						146^a	0.70

*In 2021, the CZ024 enrollment was split to provide credits for the WCA mitigation program.

¹The WAFWA database indicates that 39% of the affected area has been surveyed within the last 5 years.

²Values are averaged across the evaluation units and weighted by the unimpacted acreage within each one.

³The total is less than the sum of the column because some lek sites occur within 3 miles of multiple enrolled properties.

Habitat Restoration. Both rangeland management and planted grass management plans qualify for restoration practices with a minimum 10-year contract.

In 2021, there were no new restoration acres completed. Since implementation of the CCAA, the program has implemented 17,602 acres of habitat restoration. There are 612 acres of restoration planned for 2022.

Table 5. Acreage of restoration and enhancement completed (2014-2021)

Ecoregions	Current Enhancement Acres	Restoration Acres					Total Acres
		Chemical Brush Mgmt	Heavy Brush Mgmt.	Light Brush Mgmt.	Moderate Brush Mgmt.	Range Planting	
Mixed Grass Prairie	62,290	0	1,011	728	778	0	2,516
Sand Sagebrush Prairie	24,615	0	0	0	0	0	0
Shinnery Oak Prairie	479	8,272	1,148	1	4,416	629	14,465
Shortgrass Prairie	11,147	0	0	0	0	620	620
Cumulative Total:	98,531	8,272	2,159	728	5,194	1,250	17,602

Enhancement – current unimpacted acres under a rangeland management plan, excluding areas that were restored. A deeper assessment would be needed to identify all acres enhanced since the inception of the program.

CONSERVATION BENEFITS

An annual summary of the effectiveness of the conservation activities implemented through the CCAA in previous years at meeting the intended conservation benefits (Section XIX of the CCAA).

Avoidance and Minimization of Industry Impacts

The conservation strategy of the CCAA provides incentives for oil and gas participants to avoid and minimize impacts to lesser prairie-chickens while providing assurances regarding the effect, if any, that listing would have on their operations and development. The incentive promotes: 1] location of new developments outside of high-quality habitat areas by assigning higher mitigation fees to these areas; 2] location of new oil and gas developments within areas already impacted by infrastructure (collocating) by allowing participants to reduce mitigation fees by siting development within the impacted area associated with existing infrastructure; and 3] implementation of conservation measures⁵ to minimize impacts of new development to LPC and their habitat when avoidance is not possible.

Avoidance: The location of new oil and gas developments outside of high-quality habitat areas will greatly reduce the impact to lesser prairie-chickens and their habitat. Under the RWP and this CCAA, high quality habitat areas are defined as having a CHAT ranking of 1 or 2 (focal areas & connectivity zones) and low-quality habitat areas are defined as having a CHAT ranking of 3 or 4.

In 2021, all new impact acres (100%) occurred in low/no quality habitat (CHAT 4), see Table 6. Since the start of the program, the percentage of new impacts occurring outside of high-quality habitat areas is 74% (Table 7). This demonstrates the effectiveness of the program's incentivization to avoid new industry impacts within high-quality habitat areas. It also demonstrates industry participants commitment to implementing the discretionary conservation measure of avoiding high-quality habitat areas.

Table 6. Summary of industry impacts by CHAT category relating habitat quality in 2021.

CHAT Category	# Projects	Potential Impact Acres	Impact Acres	Percent of Total
CHAT 1 - Focal Areas	0	0	0	0
CHAT 2 - Connectivity Zones	0	0	0	0
CHAT 3 - Modeled Habitat	1	31	0	0
CHAT 4 - Modeled Non-Habitat	8	242	51	100%

Table 7. Summary of industry impacts by CHAT category since the start of the program (2014-2021).

CHAT Category	# Projects	Potential Impact Acres	Impact Acres	Percent of Total
CHAT 1 - Focal Areas	161	5,065	3,182	18%
CHAT 2 - Connectivity Zones	86	2,722	1,423	8%
CHAT 3 - Modeled Habitat	371	11,578	7,131	40%
CHAT 4 - Modeled Non-Habitat	753	23,159	5,898	34%

This is further demonstrated using a Habitat Evaluation Guide (HEG) rapid assessment method to determine site condition or LPC habitat quality within a one (1) mile radius of the impact. The HEG assessment is based on four variables: vegetation cover, vegetative composition, presence of tall woody plants, and availability of potential habitat. The assessment provides a mean HEG Score (0 to 1.0 scale) where 0 represents low-quality habitat and

⁵ Conservation Measures – Measures that aim to conserve and enhance the survival of the LPC and its habitat (Section XII of the CCAA).

1.0 represents high-quality habitat. Since the start of the program, the quality of habitat impacted by new industry impacts had a mean HEG score of 0.29, representing low quality habitat on a scale of 0-1.0 (Table 8).

Table 8. Quality of habitat impacted (HEG score) since the start of the program (2014-2021).

Industry Impact	Mixedgrass Prairie	Sand Sagebrush Prairie	Shinnery Oak Prairie	Shortgrass Prairie	EOR+10
Mean HEG Score	0.38	0.09	0.30	0.20	0.29

Minimization (collocating). The location of new oil and gas developments within areas already impacted by infrastructure (collocating) will greatly reduce the impact to lesser prairie-chickens and their habitat. Collocation includes siting infrastructure with existing common rights-of-way, use of directional drilling techniques and clustering of facilities.

In 2021, projects mitigated under the program exhibited an 81.2% co-location rate with pre-existing development (Table 9) which decreased the habitat potentially impacted by 222 acres. Since the start of the program, the collocation rate has been 58.5%, which decreased the habitat potentially impacted by 24,890 acres (Table 10). This demonstrates the effectiveness of the program's incentivization to minimize industry impacts within areas not previously impacted. It also demonstrates industry participants commitment to implementing the discretionary conservation measure of minimizing impacts to habitat.

Table 9. Minimization of impacts by collocating in 2021.

Ecoregion	# of Projects	Potential Impact Acres	Impact Acres	Percent Overlap
Mixedgrass Prairie	2	62	7	89.2%
Sand Sagebrush Prairie	7	211	45	78.8%
Shinnery Oak Prairie	0	--	--	--
Shortgrass Prairie	0	--	--	--
Covered Area Total:	9	273	51	81.2%

Table 10. Minimization of impacts by collocating since the start of the program (2014-2021).

Ecoregion	# Projects	Potential Impact Acres	Impact Acres	Percent Overlap
Mixedgrass Prairie	161	17,854	10,296	42.3%
Sand Sagebrush Prairie	86	7,292	3,382	53.6%
Shinnery Oak Prairie	371	14,013	1,647	88.3%
Shortgrass Prairie	753	3,365	2,309	31.4%
Covered Area Total:				58.5%

Minimization (seasonal timing restrictions). In addition to minimization by collocating, as addressed above, other conservation measures are implemented that minimize impacts from development to the LPC when complete avoidance of impacts is not possible. For example, the CCAA includes a seasonal timing restriction limiting oil and gas construction and maintenance activities in areas within 1.25 miles of leks to avoid potential disturbance of LPCs and, where such activities cannot be avoided, the CCAA includes a daily timing restriction to benefit LPCs by reducing indirect disturbance during the lekking, nesting and brooding seasons. Additional measures, such as the burying of distribution lines, will further minimize indirect impacts of new oil and gas development to LEPC.

Mitigation of Industry Impacts

In situations when impacts occur which cannot be fully addressed through avoidance and minimization procedures, this CCAA employs a mitigation framework that is based on the Range-Wide Plan (RWP) and described in Appendix A of the CCAA. The RWP mitigation framework is a biologically based system that incorporates space, time, and habitat quality to quantify both the impacts to habitat (impact units) and improvements to habitat (offset units and remediation units); that is, the mitigation framework does not evaluate impacts based merely on the amount of surface disturbance that results from development.

Mitigation Ratio of 2:1. The mitigation framework provides an average 2:1 mitigation ratio to ensure that mitigation efforts are greater than impacts, resulting in a conservation benefit for the species. For every 1 habitat unit of impact, 2 habitat units are conserved. A CHAT multiplier establishes the mitigation ratio for the program, as well as provides the incentivization for the avoidance and minimization of industry impacts within important habitat areas (CHAT 1-2) by assigning higher mitigation fees to these areas. This 2:1 ratio is built into the final, “Annual Unit” (i.e., 1 Annual Impact Unit is offset by 1 Annual Credit Unit).

Impact Units Generated (Projects Mitigated)

In 2021, WAFWA processed nine (9) new mitigation projects under the CCAA totaling \$1,322 in mitigation payments by companies. The new projects were oil and gas wells that impacted a total of 51 acres of habitat (impact acres) and resulted in 1.69 annual impact units. Over the life of the program (2014-2021), a total of 1,371 projects have been mitigated totaling \$13,393,482 in mitigation costs. The mitigated projects impacted a total of 17,634 acres of habitat and resulted in 11,200 annual impact units. See Table 11.

Table 11. Summary of industry projects mitigated since the start of the program (2014-2021).

Ecoregion	Years	Number of Projects	Potential Impact Acres	Impact Acres	Annual Units	Mitigation Cost
Mixedgrass Prairie	2014	180	5,600	3,274	2,599	\$3,416,061
	2015	299	9,346	5,655	4,684	\$6,079,395
	2016	10	371	105	69	\$92,955
	2017	53	1,656	908	941	\$1,296,426
	2018	19	632	268	219	\$315,055
	2019	6	186	80	109	\$156,195
	2020	0	--	--	--	--
	2021	2	62	7	1	\$632
	Total:	569	17,854	10,297	8,622	\$11,356,720
Sand Sagebrush Prairie	2014	45	1,367	629	7	\$4,441
	2015	72	2,236	1,345	515	\$271,212
	2016	22	683	338	53	\$28,993
	2017	33	1,024	534	21	\$11,444
	2018	16	497	136	12	\$7,238
	2019	30	902	285	30	\$17,759
	2020	12	372	71	6	\$3,494
	2021	7	211	45	1	\$690
	Total:	237	7,292	3,382	645	\$345,271
Shinnery Oak Prairie	2014	47	1,453	162	162	\$146,512
	2015	124	3,844	752	632	\$549,689
	2016	71	2,203	222	112	\$98,322
	2017	78	2,403	242	200	\$181,925
	2018	77	2,372	169	119	\$112,836

	2019	46	1,427	99	90	\$85,986
	2020	9	310	0	0	\$0
	2021	0	0	0	0	\$0
	Total:	452	14,013	1,647	1,315	\$1,175,271
Shortgrass Prairie	2014	31	950	783	209	\$166,374
	2015	71	2,074	1,350	344	\$293,655
	2016	5	155	83	15	\$12,344
	2017	3	93	56	16	\$13,615
	2018	2	62	34	34	\$30,154
	2019	1	31	2	0	\$78
	2020	0	--	--	--	--
	2021	0	--	--	--	--
	Total:	113	3,365	2,309	618	\$516,221
Covered Area Total:		1,371	42,524	17,634	11,200	\$13,393,482

Offset Units Generated

In 2021, conservation properties generated 96,110 units to offset the 11,200 units generated by industry impacts (Table 13), resulting in an unused balance of 84,908 units (Table 12).

Table 12. Summary of offset units (credits) generated since the start of the program (2014-2021).

Ecoregion	Years	Number of Properties	Enrollment Acres	Unimpacted Acres	Annual Units
Mixedgrass Prairie	2014	2			4,542
	2015	5			28,820
	2016	6			40,042
	2017	9			56,409
	2018	9			55,380
	2019	9			54,325
	2020	9			57,782
	2021	9	76,642	65,163	56,658
	Total:	--			--
Sand Sagebrush Prairie	2014	0			0
	2015	1			8,488
	2016	2			8,385
	2017	2			32,805
	2018	2			30,765
	2019	2			32,795
	2020	2			34,045
	2021*	2	28,598	24,615	23,747*
	Total:	--			--
Shinnery Oak Prairie	2014	2			288
	2015	4			10,060
	2016	4			7,649
	2017	4			8,881
	2018	4			7,637
	2019	4			8,238
	2020	4			8,744
	2021	4	17,613	13,930	7,512
	Total:	--			--

Shortgrass Prairie	2014	1			147
	2015	2			1,994
	2016	4			3,928
	2017	7			7,847
	2018	7			7,377
	2019	7			7,331
	2020	7			8,521
	2021	7	13,198	11,706	8,193
	Total:	--			--
Covered Area Current Total:	22	136,050	115,415	96,110	

*In 2021, the CZ024 enrollment was split to provide credits for the WCA mitigation program.

Remediation Units

The industry participants may remediate impacts and generate remediation units (“Remediation Units”) for the remediated impacts. Remediation Units can be generated by performing remediation activities throughout the Covered Area of the CCAA (EOR + 10). Remediation Units are credited to the Participant’s Habitat Conservation Fund Account; however, Remediation Units may only be applied in the ecoregion in which the remediation occurred. Remediation Units will be reserved for the Participant that performed the remediation; however, the Participant may elect to transfer the Remediation Units. The process for quantifying units is described in the CCAA, Appendix B.

In 2021, there were no remediation activities. Over the life of the program (2014-2021), there have been no remediation credits generated.

Mitigation Tracking of Annual Units

Transactions through the mitigation program are tracked with a secure, data management system designed specifically for this program to safeguard confidentiality and ensure appropriate tracking and accountability of the annual impact units (debits) and offset units (credits) by the ecoregion in which they occur. This tracking ledger ensures impact units are debited from the same ecoregion in which they occurred and credited in an equal or higher CHAT category. Credits are generated and applied to the ledger on August 01 of each year. Any unused credits prior to this date expire.

Table 13. Ledger Summary

Ecoregion	2020 Credit Expired	2021 Credits	2021 Debits (08/01/21 to 12/31/21)	2021 Expected Debits (01/01/22 to 07/31/22)	Expected Balance to Expire in 2022
Mixedgrass Prairie	-40,932	56,658	-4,998	-3,624	48,036
Sand Sagebrush Prairie	-33,259	23,747	-423	-223	23,101
Shinnery Oak Prairie	-6,907	7,512	-902	-414	6,196
Shortgrass Prairie	-7,854	8,193	-469	-149	7,575
Covered Area Total:					

POPULATION SURVEYS

An annual summary of the lesser prairie-chicken population surveys and studies conducted over the past year.

Range-wide Population Size of the Lesser Prairie-Chicken

In 2021, range-wide aerial surveys were conducted for the ninth year (2012-2018 and 2020-2021) to estimate the annual range-wide population size of LPC and evaluate trends in time of the range-wide population size. It was determined that there was a statistically significant (p-value less than 0.01) annual rate of increase of the total LPC population size from 2013 to 2021 with the average rate of increase being 2,616 LPC per year (standard error = 522).

Provided below is an excerpted summary of the 2021 report (Nasman et al., 2021):

- From 2012 to 2021, 1,284 prairie-chicken clusters were detected; 58.2% of the observations were in short-grass grassland, 22.4% were in cropland, 10.5% were in tallgrass grassland including Conservation Reserve Program (CRP) grassland (with little or no shrubs), 5.6% were in sand-sage prairie, 2.7% were in shinnery oak (including other shrub dominated land), and 0.5% were on bare ground.
- For the study of trends, we estimated the total population sizes of lesser prairie-chicken to be:
 - 29,382 (90% CI: 20,381, 39,934) lesser prairie-chicken in 2012
 - 15,913 (90% CI: 9,723, 23,527) in 2013
 - 18,987 (90% CI: 12,608, 25,997) in 2014
 - 23,540 (90% CI: 16,559, 31,623) in 2015
 - 20,739 (90% CI: 14,878, 27,375) in 2016
 - 26,916 (90% CI: 19,003, 36,316) in 2017
 - 34,825 (90% CI: 25,448, 46,932) in 2018
 - 30,976 (90% Prediction Interval: 23,302, 38,651)
 - 34,568 (90% CI: 24,081, 45,431) in 2020
 - 30,461 (90% CI: 20,137, 41,923) in 2021
- We estimated a total population decrease of 4,107 lesser prairie-chicken from 2020 to 2021 (11.9% decrease); however, the decrease was not statistically significant at the 80% confidence level. The 90% CI around the estimated increase ranged from negative (-19,325) to positive (10,314), indicating there was not a statistically significant decrease in lesser-prairie chicken between 2020 and 2021. In addition, there was not a statistically significant decrease in lesser-prairie chicken between 2020 and 2021 when the 80% CI was evaluated. Refer to the full report for a breakdown by ecoregion.
- The abundances of lesser prairie-chicken leks in the total population were estimated to be:
 - 2,823 (90% CI: 1,712, 4,153) lesser prairie-chicken leks in 2012
 - 1,801 (90% CI: 1,043, 2,752) in 2013
 - 2,253 (90% CI: 1,415, 3,227) in 2014
 - 1,425 (90% CI: 838, 2,034) in 2015
 - 1,723 (90% CI: 908, 2,607) in 2016
 - 2,588 (90% CI: 1,721, 3,513) in 2017
 - 2,600 (90% CI: 1,738, 3,688) in 2018
 - 4,737 (90% CI: 3,141, 6,388) in 2020
 - 3,152 (90% CI: 2,035, 4,333) in 2021
- We observed an increase in LPC leks from 2018 to 2020 and a decrease in LPC leks from 2020 to 2021.

MORTALITY OR INJURY REPORT

An annual summary of any lesser prairie-chicken mortality or injuries that are observed through this program.

There has been no mortalities or injuries observed or reported since the start of the program in 2014.

INCIDENTAL TAKE

An annual summary of the habitat impacts related to incidental take of the lesser prairie-chicken.

The permit issued to WAFWA by the USFWS (Permit # TE27289B-0) stipulates that incidental take of lesser prairie chicken may not exceed 8,530 birds, as measured by habitat impacts:

- a) At 10 years from the effective date of this permit, more than 622,272 acres of habitat are developed by oil and gas activities within the Covered Area (EOR+10),
- b) At 20 years from the effective date of this permit, more than 1,244,545 acres of habitat are developed by oil and gas activities within the Covered Area (EOR+10),
- c) At 30 years from the effective date of this permit, more than 1,866,855 acres of habitat are developed by oil and gas activities within the Covered Area (EOR+10),

The CCAA is in its eighth year (2014-2021) from the effective date of the permit. As of December 31, 2021, the acres impacted through the CCAA total 17,634 acres. This represents 2.83% of the impacted acreage allowed by the CCAA permit in the first 10 years of the program (622,272 acres) and 0.94% of the total allowable impact over the 30-year life of the program (1,866,855 acres).

PARTICIPANT COMPLIANCE MONITORING AND REPORTING

An annual summary of participant compliance issues as provided in Section XXIX (Participant Compliance) of the CCAA or any other issues with implementation of the CCAA.

Unpaid Enrollment Fees

If an industry participant fails to remit the Enrollment Fee in accordance with the terms of Section XIII (Enrollment and Mitigation Fees) of the CCAA, WAFWA may suspend the participant's Certificate of Inclusion until paid. In 2021, there were no compliance issues with outstanding payments.

Industry Compliance Monitoring of Mandatory Conservation Measures

This CCAA incorporates the conservation strategy in the RWP, which includes a series of conservation measures (CMs) intended to 'avoid' and 'minimize' impacts on LPCs and their habitat, as well as mitigate for any remaining habitat impacts. Some of the avoidance and minimization measures are required and some may be applied at the discretion of the industry Participant. See Section XII of the CCAA (Conservation Measures). If a Participant chooses not to implement a discretionary conservation measure, such as the avoidance of an impact, then the Participant will need to mitigate for the resulting impacts (as reported in the [Conservation Benefits](#) section). If a Participant fails to implement a mandatory conservation measure, and the issue cannot be resolved to the terms of the CI, then the Participant may be subject to the provisions of Section XXX of the CCAA for termination.

WAFWA evaluates industry participant's compliance annually based on two methods:

1] Annual Field Review of Randomly Sampled Mitigated Projects

Industry projects to be reviewed include those associated with active Participants (those not terminated, suspended, or cancelled), that have been in part or wholly constructed, and that were not previously reviewed within the last three (3) years. Of these eligible projects, a random selection of 50 projects per ecoregion are selected. However, there is a limitation of reviewing no more than 10 sites, per company, in any given year. The review consists of a trained, WAFWA staff or representative

meeting with industry participants at the project site (a field review). A standardized reporting form is completed, along with photo documentation and a spatial review to confirm the site's location.

In 2021, the random sample resulted in 20 projects to be reviewed. Please note, that the goal of sampling 50 projects per ecoregion was not feasible due to the limitation of reviewing a maximum of 10 sites per company. All other potentially eligible projects had been reviewed within the last 3 years. Of the projects sampled, seven were not constructed and were deferred to the 2022 monitoring season. Of the resulting 13 projects reviewed, all were found to be in-compliance. See results in [Appendix B](#).

2] Review of Project Submittals

As part of WAFWA's annual compliance monitoring, WAFWA also voluntarily reviews state well permitting data for active participant companies to help ensure their activities on enrolled lands comply with the requirements of the CCAA and their Certificate of Inclusion. This review was initiated by WAFWA in 2017 with the acquisition of membership to the welldatabase.com, at which time a review was conducted for the years 2014-2016. The reviews continued in 2018 but were discontinued in 2019.

In 2021, WAFWA resumed the review process to cover the missing years of 2018-2021 and now conducts this review on an annual basis. The 2021 review involved 28 industry participants and reviewed 139 wells with the potential to impact 1,547.21 habitat acres. The well review was conducted with the participants, and it was determined that most of the wells were either not completed or not owned/operated by the participant companies. This prompted several of the participants to review their land enrollments to ensure divested leases were terminated from the program. Of the 139 wells under review, there were 11 wells that should have been reported for inclusion into the program. Those projects were processed for mitigation with a back-date to when they were installed to ensure they were retroactively mitigated.

Industry Emergency and Non-Emergency Operations

There are several avoidance and minimization measures related to emergency and non-emergency operations. Emergency operations are defined as those activities unexpectedly and urgently required to prevent or address immediate threats to human health, safety, or property; the environment; or national defense or security. Non-emergency operations are defined as construction and maintenance activities that occurred on undisturbed areas in rangeland or planted grass cover (e.g., outside of a well pad, road, or facility) during the LPC breeding season (March 1 and July 15) that are within 1.25 miles of leks active within the previous 5 years.

Participants are required to report to WAFWA within 30 days of an emergency operation, and to annually report (by February 15) any non-emergency operations. The WCT data management solution for the CCAA provides an online portal for Participants to report emergency or non-emergency incidents. WAFWA sends participants an annual reminder to report emergency and non-emergency operations.

In 2021, there were no instances of emergency or non-emergency operations reported by participating companies. Since the start of the program, there have been six (6) reports of emergency operations and 26 non-emergency operations occurring. All occurrences occurred within the first 5 years of the program.

Conservation Participant Compliance

Compliance monitoring of conservation properties occurs during annual field monitoring by WAFWA's certified Technical Service Providers (TSPs) and through subsequent post-grazing season review of their grazing systems. Refer to Section [Habitat Monitoring and Condition](#). No compliance issues were identified in 2021.

Resolution of Past Compliance Issues

In 2020, the annual report identified that two companies, with enrollment totaling 243,624 acres, were suspended for non-compliance of activities that occurred from 2014-2017. Efforts to provide resolution were unsuccessful and those companies were terminated in 2021 for non-compliance.

FINANCIAL SUMMARY

An annual summary of the funds used for habitat conservation on private/state lands.

In 2021, annual maintenance payments were made on 115,414 unimpacted acres (i.e., acres not impacted by development) in the amount of \$1,731,750 to provide 99,110 conservation offset units (Table 3, 14, 12). Payments were reduced from 2020 by \$335,428 (14.5%) as the result of implementing actions set forth in the 2021 CCAA Business Plan (WAFWA, 2021) to separate-out conservation properties for the WCA mitigation program and for the waivers to future payments on two properties.

Table 14. Summary of conservation offset payments by ecoregion for the CCAA.

Ecoregion	Years	Sign-up Incentives	Restoration Payments	Mgmt. Payments (Permanent)	Mgmt. Payments (10-Yr Term)	Total
Mixedgrass Prairie	2014	\$0	\$0	\$0	\$0	\$0
	2015	\$199,084	\$37,208	\$0	\$737,699	\$973,991
	2016	\$5,262	\$28,227	\$0	\$848,388	\$881,877
	2017	\$69,414	\$342,769	\$66,530	\$1,309,999	\$1,788,712
	2018	\$5,634	\$23,573	\$64,323	\$1,289,461	\$1,382,990
	2019	\$0	\$0	\$61,673	\$1,266,287	\$1,327,960
	2020	\$0	\$46,773	\$78,099	\$1,332,904	\$1,457,776
	2021	\$0	\$0	\$78,099	\$1,307,117	\$1,385,216
	Total:	\$279,393	\$478,549	\$348,724	\$8,091,855	\$9,198,522
Sand Sagebrush Prairie	2014	\$0	\$0	\$0	\$0	\$0
	2015	\$49,988	\$0	\$0	\$121,021	\$171,009
	2016	\$148,733	\$0	\$0	\$120,405	\$269,138
	2017	\$0	\$0	\$351,466	\$125,016	\$476,482
	2018	\$0	\$0	\$329,189	\$126,741	\$455,930
	2019	\$0	\$0	\$361,859	\$124,166	\$486,025
	2020	\$0	\$0	\$370,701	\$133,853	\$504,554
	2021*	\$0	\$0	\$0	\$128,669	\$128,669
	Total:	\$198,720	\$0	\$1,413,215	\$879,871	\$2,491,806
Shinnery Oak Prairie	2014	\$0	\$0	\$0	\$0	\$0
	2015	\$60,797	\$433,074	\$9,007	\$89,839	\$592,717
	2016	\$5,843	\$41,908	\$9,627	\$65,448	\$122,826
	2017	\$0	\$915,154	\$10,655	\$91,429	\$1,017,238
	2018	\$0	\$183,426	\$11,988	\$78,878	\$274,292
	2019	\$0	\$0	\$11,369	\$82,483	\$93,852
	2020	\$0	\$110,831	\$6,568	\$91,092	\$208,491
	2021	\$0	\$0	\$0	\$80,996	\$80,996
	Total:	\$66,640	\$1,684,392	\$59,214	\$580,165	\$2,390,411
Shortgrass Prairie	2014	\$0	\$0	\$0	\$0	\$0
	2015	\$17,624	\$0	\$0	\$32,328	\$49,952
	2016	\$19,478	\$0	\$0	\$59,934	\$79,412
	2017	\$0	\$40,727	\$44,603	\$80,319	\$165,649
	2018	\$14,518	\$55,668	\$42,414	\$78,171	\$190,770
	2019	\$0	\$0	\$37,086	\$86,056	\$123,142
	2020	\$0	\$0	\$47,190	\$95,117	\$142,307
	2021	\$0	\$0	\$47,282	\$89,587	\$136,869
	Total:	\$51,619	\$96,395	\$218,575	\$521,512	\$888,101
Covered Area 2021 Total:	\$0	\$0	\$125,381	\$1,601,369	\$1,731,750	
Covered Area Total:	\$596,373	\$2,259,337	\$2,039,728	\$10,073,403	\$14,968,840	

SUMMARY

The implementation of this CCAA results in a variety of conservation benefits to the lesser prairie-chicken (LPC) in the form of avoidance, minimization and mitigation of impacts and provides enhancement and restoration of habitat intended to contribute to establishing, augmenting, and maintaining populations. Conservation measures that minimize new surface disturbance also minimize habitat fragmentation and preserve contiguous expanses of LPC habitat. LPC reproductive behavior is promoted by conservation measures that limit activities and operations during lekking, nesting, and brooding seasons. Furthermore, the conservation offsets implemented with funds contributed by Participants are expected to further enhance LPC habitat through the removal of infrastructure and remediation of impacts to restore LPC habitat. When considered together, the provisions of the CCAA are expected to preserve, enhance, and restore LPC habitat and remove threats to the LPC, and are expected to yield increases to LPC populations.

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Please visit WAFWA’s Lesser Prairie-Chicken webpage for more information:

<https://wafwa.org/initiative-programs/lesser-prairie-chicken/>

APPENDICES

Appendix A. Enrolled Companies

#	Company Name	#	Company Name	#	Company Name
1	Anadarko Minerals, Inc	38	Energy Alliance Company, Inc	75	Pintail Petroleum, Ltd
2	Apache Corporation	39	Energy Transfer Partners, LP	76	Pioneer Natural Resources USA, Inc
3	Apache Corporation (Permian)	40	EnerVest Operating, LLC	77	Plains All American Pipeline, LP
4	Beren Corporation	41	EOG Resources, Inc	78	QEP Energy Company
5	Berexco, LLC	42	Fasken Oil and Ranch, Ltd	79	Questa Energy, Corporation
6	BP America Production Company	43	Griffin Management, LLC	80	Range Production Company, LLC
7	Casillas Petroleum Corporation	44	Imperial American Oil, Inc	81	Red Oak Energy, Inc
8	Castelli Exploration, Inc	45	Jayhawk Pipeline, LLC	82	Rio Petroleum, Inc
9	Central Operating, Inc	46	JMA Energy Company, LLC	83	Samuel Gary Jr. & Associates, Inc
10	Centurion Pipeline, LP	47	Jolen Operating Company	84	SandRidge Exploration and Production, LLC
11	Cimarex Energy Company	48	Kenneth W. Cory, Ltd	85	SemGroup Corporation
12	Cimarex Energy Company (West Texas)	49	Kinder Morgan, Inc	86	Strand Energy, LC
13	CMX, Inc	50	Kirkpatrick Oil Company, Inc	87	Strat Land Exploration Company
14	Coats Energy, Inc	51	Laddex, Ltd	88	Superior Pipeline Company, LLC
15	COG Operating, LLC	52	Landmark Resources, Inc	89	Tabula Rasa Partners, LLC
16	ConocoPhillips Company	53	Legacy Reserves Operating, LP	90	Tandem Energy Corporation
17	Continental Resources, Inc	54	M&M Exploration, Inc	91	Tapstone Energy, LLC
18	Corlena Oil Company	55	Magellan Midstream Partners, LP	92	Tengasco, Inc
19	Crawley Petroleum Corporation	56	MarkWest Oklahoma Gas Company, LLC	93	Texakoma Exploration Production, LLC
20	Culbreath Oil and Gas Company, Inc	57	Maverick Brothers Resources, LLC	94	Texland Petroleum, LP
21	Cynosure Energy, LLC	58	McGinness Oil Company of Kansas, Inc	95	Thomason Petroleum, Inc
22	DaMar Resources, Inc	59	Meridian Energy, Inc	96	Toto Energy, LLC
23	Daystar Petroleum, Inc	60	Merit Energy Company, LLC	97	Triad Energy, Inc
24	DCP Midstream, LLC	61	Mewbourne Oil Company	98	Unit Petroleum Company
25	Devon Energy Corporation (Kansas)	62	MIDCO Exploration, Inc	99	Versado Gas Processors, LLC
26	Devon Energy Corporation (Oklahoma)	63	Midcoast Operating, LP	100	Viking Resources, Inc
27	Devon Energy Corporation (Permian Basin)	64	Mid-Con Energy Operating, LLC	101	Vincent Oil Corporation
28	Devon Energy Corporation (Rockies)	65	Midnight Hour, LLC	102	W.R. Williams, Inc
29	Devon Energy Corporation (Texas Panhandle)	66	Murfin Drilling Company, Inc	103	Ward Petroleum Corporation
30	Diehl Oil, Inc	67	O`Benco IV, LP - O`Brien Resources, LLC	104	Western Operating Company
31	Dorchester Minerals Operating, LP (Oklahoma)	68	ONEOK Partners, LP	105	White Exploration, Inc
32	Duncan Oil Properties, Inc	69	Oolite Energy Corporation	106	Younger Energy Company
33	Edison Operating Company, LLC	70	Osage Investors, LLC	107	Zinszer Oil Company, Inc
34	Edmiston Oil Company, Inc	71	Osage Oil, LLC	108	RG Exploration, LLC
35	Elevation Resources, LLC	72	Oxy Oil and Gas	109	Williams Midstream
36	Empire Energy E&P, LLC	73	Panhandle Topeka, LLC	110	Riviera Operating, LLC
37	Enable Midstream Partners, LP	74	Pickerell Drilling Company, Inc	111	ONE Gas, Inc

Appendix B. Compliance Summary



WAFWA LPC-RWP Compliance Summary for 2021

	Yes	No	Sold	Dry		
Were efforts to reach the company successful?	20	0	0	0		
Is the project constructed?			Yes 13	No 7		
Is the location of the project mapped accurately within CCAA standards?			Yes 13	No 0		
If this is a transmission project, are all poles in CHAT 1-3 monopole?		Yes 0	No 0	N/A 13		
If the site is within 1.25 miles of a lek and in CHAT 1-3, are there any impacts under the control of the participant company that were not mitigated for in this project that are not represented in the impact buffer map, including new above ground distribution lines?			Yes 0	No 13		
If the site is within 1.25 miles of a lek and in CHAT 1-3, are there escape ramps in all associated human-made water containment sources?	Yes 0	No 0		N/A 13		
If the site is within 1.25 miles of a lek and in CHAT 1-3, is there evidence of broadcast herbicide use outside the facility boundary that is attributed to the participant?			Yes 0	No 13		
If the site is within 1.25 miles of a lek and in CHAT 1-3, is the project compliant with respect to noise levels recorded at 30 feet from the facility boundary?	Yes 9	No 0		N/A 4		
Estimated wind speed using the Beaufort Scale (miles/hour)	0-4 8	5-7 5	8-11 0	12-18 0	19-24 0	25+ 0
Maximum recorded decibels				<=75dB 13	>75dB 0	
Are all fences associated with this project, and under the control of the participant, marked as needed (Necessary if not surveyed or within 0.25 miles of known leks)?			Yes 13	No 0		
Is there evidence of off-road travel during the breeding season?		Yes 0	No 12	N/A 1		
Is there evidence of violations of breeding season timing restrictions?		Yes 0	No 13	N/A 0		
Were there any compliance issues found?			Yes 0	No 13		