FINAL

RANGE-WIDE OIL AND GAS CANDIDATE CONSERVATION AGREEMENT WITH ASSURANCES

REALIGNMENT PHASE 1 FINDINGS AND RECOMMENDATIONS

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Abbreviations

Business Plan	Western Association of Fish and Wildlife Agencies and Foundation for Western Fish and Wildlife Lesser Prairie Chicken Conservation Delivery Business Plan
CCAA	Range-Wide Oil and Gas Candidate Conservation Agreement with Assurances for the Lesser Prairie-Chicken
CHAT	Crucial Habitat Assessment Tool
CI	Certificate of Inclusion
ESA	Endangered Species Act
HCP	habitat conservation plan
HEG	Habitat Evaluation Guide
LPC	lesser prairie-chicken
LPCIC	Lesser Prairie-Chicken Initiative Council
NRCS	U.S. Department of Agriculture—Natural Resource Conservation Service
SRF	Species Restoration Fund
TPWD	Texas Parks and Wildlife Department
USFWS	U.S. Fish and Wildlife Service
WAFWA	Western Association of Fish and Wildlife Agencies

Chapter 1
Introduction

Chapter Summary

- WAFWA has been implementing the CCAA program since 2014.
- The CCAA has had significant conservation achievements to date, including extensive enrollment and participation by industry, substantial conservation, and a strong monitoring program.
- In 2019, WAFWA commissioned an independent audit of the program.
- The audit identified several issues with the CCAA program, including financial management, operational structure, and performance of the conservation framework.
- To further define and address many of those issues, WAFWA initiated the CCAA realignment process. This process explores options for changing CCAA program administration and, if necessary, revising the CCAA.
- The CCAA is closely tied to the Range-wide Plan. The CCAA uses the same mitigation framework and governance structure as the Range-wide Plan, but the CCAA is associated with a federal permit, whereas the Range-wide Plan is not.
- These options for changing the CCAA are available to WAFWA: (1) internal changes, (2) administrative changes, (3) CCAA amendment, (4) replacing the CCAA with a new CCAA or an HCP.

The *Range-Wide Oil and Gas Candidate Conservation Agreement with Assurances for the Lesser Prairie-Chicken* (CCAA) was approved by the U.S. Fish and Wildlife Service (USFWS) on February 28, 2014. The CCAA is an agreement between the Western Association of Fish and Wildlife Agencies (WAFWA) and USFWS intended to offset the effects of oil and gas activities on the lesser prairie-chicken (*Tympanuchus pallidicinctus*; LPC) and its habitat throughout LPC's range in five states: Colorado, Kansas, New Mexico, Oklahoma, and Texas. Oil and gas companies may voluntarily enroll in the CCAA program by executing a Certificate of Inclusion (CI) and implementing conservation measures on their project sites to minimize impacts on LPC. Enrolled companies also pay fees to the WAFWA Species Restoration Fund (SRF)[1] to implement conservation activities to offset impacts that cannot be avoided. The CCAA provides enrolled companies take[2] authorization (through the Enhancement of Survival Permit) for covered activities if LPC is listed as threatened or endangered by USFWS. The CCAA also provides regulatory assurances that, so long as participants comply with the terms of the CCAA and the CI, additional conservation measures above and beyond those contained in the agreement will not be required by USFWS and that additional land, water, or

[1] SRF is a 501(c)4 nonprofit organization created by WAFWA to manage the finances of the CCAA. When referring to the implementing entity of the CCAA, this report uses *WAFWA* rather than *SRF* because WAFWA is named on the Enhancement of Survival Permit as the permittee.

[2] As defined by the federal Endangered Species Act, *take* means to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any endangered and most threatened species. *Harm* may include significant habitat modification resulting in injury to or mortality of a listed species through impairment of essential behavior (e.g., nesting or reproduction).

resource use limitations will not be imposed upon participants should the LPC become listed in the future.

WAFWA conducted an audit of the CCAA in 2019 (Guillon 2019). The audit identified several findings for WAFWA to address to improve its financial management, operational structure, and the performance of the conservation framework. Following this audit as well as discussions with industry participants and USFWS, WAFWA concluded that the CCAA program needed to be adjusted to address the issues identified. WAFWA termed this process *realignment* and established the following goals for the process.

1. Ensure adequate regulatory assurances for industry participants and landowners.
2. Ensure the long-term financial sustainability of the conservation program.

Because multiple options exist for realignment, WAFWA contracted ICF in December 2019 to facilitate the CCAA realignment process and recommend actions to realign the CCAA program.

This report concludes Phase 1 of the process by identifying the CCAA realignment strategy, which is presented as a list of recommendations for WAFWA to undertake in Phase 2 of the process. This report is organized as follows.

- Chapter 1, *Introduction*, discusses the background and context for the CCAA realignment, provides an overview of the CCAA, and outlines the options available to change the CCAA.
- Chapter 2, *Phase 1 Realignment Process*, details Phase 1 activities, including stakeholder engagement efforts, concept proposal development, and outreach and communications efforts.
- Chapter 3, *Phase 1 Findings*, summarizes the most important outcomes and conclusions of Phase 1 that underpin the recommendations for Phase 2.
- Chapter 4, *Recommendations for Phase 2*, outlines recommended actions for WAFWA to take in order to design and implement the preferred CCAA realignment strategy.

1.1 Background and Context

The CCAA was born out of *The Lesser Prairie-Chicken Range-wide Conservation Plan* (Range-wide Plan; Van Pelt et al. 2013). Completed in September 2013, the Range-wide Plan was a collaborative effort of WAFWA and the state wildlife agencies of Colorado, Kansas, New Mexico, Oklahoma, and Texas. It was developed to ensure the conservation of LPC through voluntary cooperation of landowners and a wide range of industries that operate in LPC's range, including renewable energy, utility, pipeline, telecommunication, and oil and gas companies. Voluntary enrollment in the Range-wide Plan by eligible oil and gas companies, combined with prescribed enrollment and mitigation fees that provide funding, support conservation actions implemented by participating private landowners. While LPC was listed as threatened between 2014 and 2016,[3] participation in the Range-wide Plan could be used as the basis for a broad exemption from take prohibition provided by USFWS under Section 4(d) of the federal Endangered Species Act (ESA).

[3] The listing of the species as threatened took effect May 12, 2014. In September 2015 a federal court in Texas overturned the listing decision. USFWS officially removed the species from the list of threatened species in July 2016. USFWS has since conducted a status review of the species in response to a petition received September 8, 2016, to list the species.

Although oil and gas companies participated in the development of the Range-wide Plan, some companies sought the regulatory certainty that a CCAA provides (in 2013 the ESA Section 4(d) rule was being considered but it was not final). These companies wanted stronger regulatory certainty that, if LPC were to be listed in 2014, they would not be obligated to commit additional resources (land, water, or money) to conservation for the species. By completing the CCAA prior to the species listing, companies that enrolled in the CCAA before a listing became effective received take authorization and "No Surprises" assurances once LPC was listed.

The CCAA relies heavily on implementation of the mitigation framework within the Range-wide Plan. The CCAA describes the conservation measures participants voluntarily agree to implement as part of the mitigation framework[4] that allows them to continue oil and gas operations. These conservation measures in conjunction with WAFWA's conservation activities are designed to provide conservation benefits to LPC and its habitat. An overview of this mitigation framework is provided below.

The Range-wide Plan and CCAA have had numerous successes in delivering conservation for LPC across its range. Important among these is that the Range-wide Plan provides the first comprehensive conservation strategy for the species and commits all five states within its range to provide substantial conservation on the ground to increase LPC's population to 67,000 birds distributed in four ecoregions within 10 years (by 2024). In addition, the Range-wide Plan and CCAA have also provided habitat enhancement and restoration for the species, a rigorous monitoring program for habitat quality, and annual population estimates from aerial sampling that reveal range-wide trends. The benefits and accomplishments of the CCAA specifically are discussed further in Section 1.2.7 below.

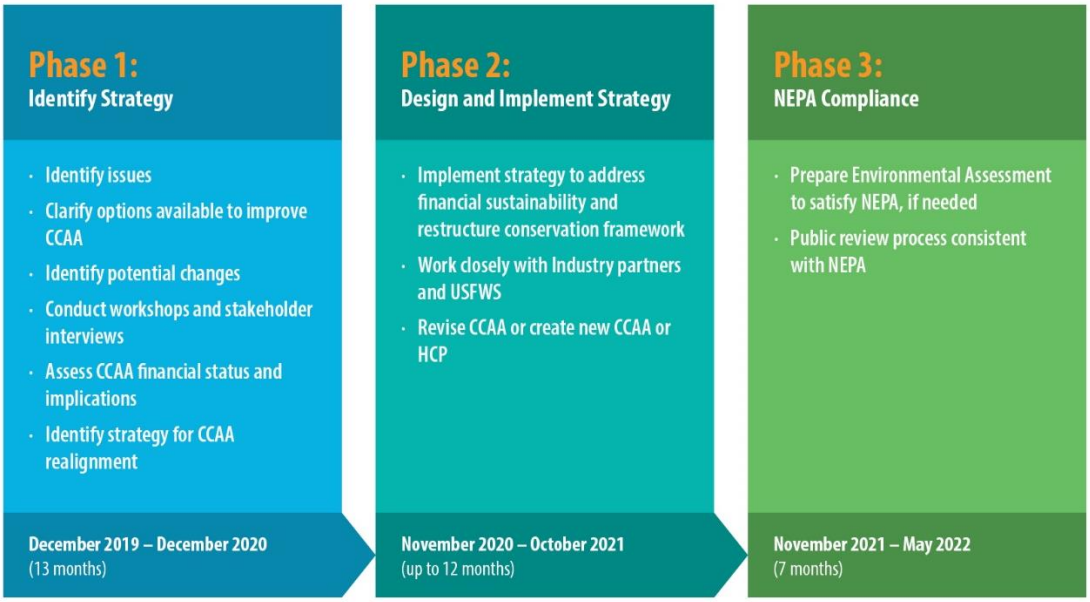
In 2019, after 5 years of implementation, WAFWA began a review of the Range-wide Plan and CCAA programs to assess finances, regulatory compliance, biological effectiveness, and administrative efficiency. As part of this review, WAFWA commissioned an independent financial specialist in species mitigation programs, Conservation Investment Management, to conduct an audit of the CCAA program. The audit made several recommendations for WAFWA to address to improve its administration of the CCAA, including the program's financial status and WAFWA's operational structure. The auditor also made findings with respect to the performance of the conservation program and compliance with some of the terms of the CCAA.

To address findings and recommendations identified in the audit, WAFWA initiated a CCAA realignment process—in coordination with USFWS—to assess options for changing program administration and, if necessary, revising the CCAA. USFWS staff identified two preliminary priorities for the CCAA realignment process: (1) ensuring compliance with the requirements of the CCAA and (2) ensuring defensibility and durability of the existing assurances should the CCAA and Enhancement of Survival Permit be legally challenged should LPC be listed (USFWS N.D.).

WAFWA contracted ICF in December 2019 to lead and facilitate the CCAA realignment process. This report marks the conclusion of Phase 1 of that process (Figure 1).

[4] The CCAA uses the term *mitigation framework* to describe its conservation strategy even though it is designed to conserve the species, not just mitigate for impacts of covered oil and gas activities. This report uses the terms *mitigation framework* and *conservation framework* interchangeably.

Figure 1. Phases of the CCAA Realignment Process



1.2 Overview of the CCAA

The CCAA was approved on February 28, 2014, with a term through February 28, 2044 (30 years). It is a formal agreement between WAFWA and USFWS to address the conservation needs of LPC before the species becomes listed. Should LPC be listed, the Enhancement of Survival Permit associated with the CCAA would become active and authorize incidental take of the species by participants undertaking covered activities.

The following sections provide an overview of the CCAA, focusing on those components most important for understanding the issues considered by the CCAA realignment process.

1.2.1 Relationship to Range-wide Plan

From a conservation perspective, the CCAA and Range-wide Plan are closely related; however, from a regulatory perspective, they are distinct.

Shortly after the Range-wide Plan was completed in 2013, WAFWA collaborated with oil and gas industry participants and USFWS to develop the CCAA in order to meet industry's desire for greater regulatory certainty than that provided by the Range-wide Plan. The CCAA relies on the conservation strategy of the Range-wide Plan and uses the same mitigation framework; therefore, the CCAA is closely tied to the Range-wide Plan in how it functions. Because the CCAA was so closely tied to the Range-wide Plan, USFWS partially based its ESA findings for the CCAA on full implementation of the Range-wide Plan.[5] Because these programs share the same mitigation framework, WAFWA implements the Range-wide Plan and the CCAA jointly.

[5] For example, the ESA findings for the CCAA state that "The Range-wide Oil and Gas CCAA tiers to, and incorporates, *The Lesser Prairie Chicken Range-wide Conservation Plan"* (USFWS 2014a: 2).

From a regulatory perspective, the CCAA should be viewed as distinct from the Range-wide Plan, even though it shares many of its components. In other words, the requirements of the CCAA are the terms and conditions of the Enhancement of Survival Permit, which are separate from the Range-wide Plan. Therefore, the CCAA must comply with these terms and conditions irrespective of the Range-wide Plan.

1.2.2 Mitigation Framework

As noted above, the CCAA uses the same mitigation framework as the Range-wide Plan. The mitigation framework uses impact units and offset units as debits and credits.

- *Impact units* are a measurement of impacts on LPC habitat resulting from oil and gas activities and are a function of the following: number of acres based on an impact buffer assigned to the activity type, the quality of the impacted habitat as determined by the Habitat Evaluation Guide (HEG)[6] score, and the Crucial Habitat Assessment Tool (CHAT)[7] category. Impact units are a continuous variable calculated from a formula described in the CCAA and the Range-wide Plan. Impact units are measured prior to impacts.
- *Offset units* are generated by enrolling properties with LPC habitat into iterative term contracts or permanent conservation easements in which landowners commit to implement management and restoration actions to benefit LPC. Management actions often include livestock grazing reductions and other measures to maintain and enhance habitat for the species. Restoration actions often include the removal of unsuitable vegetation (e.g., mesquite trees) to re-establish suitable habitat. The mitigation framework also accounts for habitat quality by assigning a HEG score to offset units. The number of offset units produced by a given property is a function of the number of acres conserved, the habitat quality of those acres as measured by the HEG, and the CHAT category. Offset units are measured annually on all conservation properties.

Habitat quality, an important consideration for LPC conservation, is accounted for in the mitigation framework at the landscape and site-specific scales at impact sites and mitigation sites. At the landscape scale, offset multipliers within each CHAT category prioritize habitat across the LPC's estimated occupied range plus a 10-mile buffer (Van Pelt et al. 2013:100). At the site-specific scale, the HEG score is an index of habitat quality based on field measurements including vegetation cover and composition. The mitigation and conservation framework accounts for impacts and offsets in terms of acres multiplied by these habitat quality factors (and other factors).

1.2.3 Enrolling Property

Oil and gas companies enroll eligible land[8] and become participants in the CCAA by executing a CI with WAFWA for their properties. The CI documents a participant's agreement to enroll property in the CCAA and to commit to implement conservation measures and/or fund specific conservation

[6] The HEG score is a quantitative metric of habitat quality from 0 to 1 calculated from several field measurements including vegetation cover, vegetation composition, presence of tall woody plants, and the availability of potential habitat for LPC.

[7] The CHAT is a geospatial tool specifically designed for LPC conservation that prioritizes and categorizes habitat to focus conservation activities. The CHAT divides LPC's estimated occupied range with a 10-mile buffer into CHAT categories 1–4, where CHAT 1 is the highest priority for conservation and CHAT 4 is the lowest.

[8] Land must be located within the Covered Area of the CCAA, which is the LPC Estimated Occupied Range plus a 10-mile buffer.

actions in compliance with the CCAA and the Enhancement of Survival Permit. Modifications or amendments to the CCAA can only be applied to existing CIs upon the participant's written consent to amend its CI.

Within 30 days of CI execution, the participant must pay enrollment fees of $2.25 per acre enrolled[9] and each year for the first 3 years the CI is in effect. WAFWA uses enrollment fees as partial prepayment of mitigation fees—i.e., enrollment fees are used to implement conservation activities and generate offset units in advance of participants generating impact units from their project impacts. The CCAA allows for enrollment fees to increase annually to account for inflation and other cost increases.

1.2.4 Project Mitigation Fees

The CCAA requires mitigation fees for projects that result in new impacts[10] on LPC habitat, including construction of oil and gas pads, compressor stations, private roads, distribution lines, and industrial buildings (collectively referred to as *Impact Activities* in the CCAA). Before impacts occur, mitigation fees must be paid and WAFWA must secure the necessary offset units. As noted above, enrollment fees serve as prepayment of mitigation fees, and participants are also encouraged to maintain a prepayment balance of mitigation fees based on an estimate of future impacts.[11] If their account balances lack sufficient funds for future impacts, participants are required to submit mitigation fees based on anticipated development for the following calendar year before October 1 of each year to ensure sufficient offset units are available to mitigate for anticipated development. Prepaid mitigation fees are maintained in a Habitat Conservation Fund Account for each participant until they are needed.

Mitigation fees are a product of four factors:

Mitigation fees = Base Impact Unit Cost x Impact Units x Impact Multiplier x Endowment Multiplier.

- The *base impact unit cost* is a product of the habitat management cost per acre (which is based on the U.S. Department of Agriculture's Natural Resource Conservation Service (NRCS)/Farm Service Agency practice costs by ecoregion) and the administration cost (which was initially 12.5% but was changed to 16.5% in 2018).
- *Impact units* are described above under Section 1.2.2, *Mitigation Framework,* and are based on the HEG and the New Impact Area[12] of the impact activity. The *impact multiplier* varies by CHAT category, with CHAT 1 (highest value habitat) having the highest multiplier and CHAT 4 (lowest value habitat) having the lowest multiplier.

[9] If the participant had previously enrolled in the Range-wide Plan and paid enrollment fees, then that enrollment can be converted to a CI and any enrollment fees paid would be credited to the CCAA enrollment.

[10] Impacts are measured by established distance buffers around new Impact Activities. Impacts only occur where these buffers do not overlap buffers from previous Impact Activities—hence the term *new impacts*.

[11] Participants are encouraged to confer with WAFWA to estimate the mitigation fees necessary for the upcoming year.

[12] As described in the CCAA, "New Impact Acres are the difference between the number of acres within the area of impact associated with the new Impact Activity ("New Impact Area") and the number of acres within Impact Buffers associated with pre-existing infrastructure that overlap with the New Impact Area" (USFWS and WAFWA 2014).

- The *endowment multiplier* is fixed at 25 to scale the mitigation fee to fund the conservation endowment intended to provide conservation in perpetuity.

Mitigation fees may be increased based on inflation (up to a maximum of 3% over the previous year) or adaptive management (up to a maximum of 4% over the previous year). WAFWA increased management unit costs once or twice by approximately 1% to 3% each time (depending on the ecoregion) to account for inflation (Kyle pers. comm. [a]). WAFWA increased the base impact unit cost by 4% in 2018 by increasing the administration cost from 12.5% to 16.5%. No other mitigation fee increases have occurred.

1.2.5 Conservation Properties

WAFWA secures offset units by conserving LPC habitat through two mechanisms: short-term agreements (iterative term contracts of 5–10 years) and long-term agreements (permanent easements). The current conservation framework requires at least 25% of all offset units to come from long-term agreements, leaving a balance of 75% of all offset units to come from short-term agreements. The Range-wide Plan explains that permanent conservation is intended to support population strongholds and short-term agreements are intended to allow flexibility for conserved areas to shift on the landscape in response to changing environmental conditions. The 25/75 requirement is a component of the Range-wide Plan's and CCAA's conservation framework but is not described in the CCAA or the Enhancement of Survival Permit. The Range-wide Plan notes that the ratio of long-term and short-term offset units will be evaluated through the adaptive management process (Van Pelt et al. 2013:91). WAFWA serves as the offset unit service provider for these conservation properties—i.e., WAFWA enters the short-term or long-term contracts with landowners, oversees management, and monitors properties to measure the associated offset units.

Term Contracts

Iterative term contracts (called *short-term agreements* in the Range-wide Plan) are contracts of 5 or 10 years with landowners and agricultural lease holders to implement practices on their lands to provide LPC conservation benefits. Iterative term contracts are voluntary and renewable, and WAFWA compensates the contracted landowners for the management practices implemented based on established practice costs from the U.S. Department of Agriculture's NRCS/Farm Service Agency. WAFWA also provides incentive payments to landowners for entering these contracts. Iterative term contracts must always be renewed or replaced to provide sufficient offset units in perpetuity.

Permanent Easements

Permanent easements are one option for what the Range-wide Plan terms *long-term conservation* that includes conservation easements, fee simple acquisitions, and mitigation bank credits purchased from willing landowners. In WAFWA's implementation of the conservation framework, all long-term conservation to date has been achieved through five permanent conservation easements, including two properties that WAFWA purchased in fee title. WAFWA also compensates owners of long-term conservation contracts for implementing management practices to benefit LPC but does not provide incentive payments for long-term agreements.

1.2.6 CCAA Governance

The CCAA does not clearly describe its governance framework distinct from the Range-wide Plan beyond that WAFWA will serve as the CCAA administrator and will hold the Enhancement of Survival Permit. Therefore, the *Western Association of Fish and Wildlife Agencies and Foundation for Western Fish and Wildlife Lesser Prairie Chicken Conservation Delivery Business Plan* (Business Plan; Van Pelt et al. 2013:Appendix I) serves to describe the existing governance structure of the Range-wide Plan and the CCAA. This structure is summarized below as detailed in the Business Plan (Van Pelt et al. 2013: Appendix I:27–33).

WAFWA's Lesser Prairie-Chicken Initiative Council (LPCIC) is the primary oversight body for the CCAA. The LPCIC comprises the directors of the five state wildlife agencies within LPC's range (Colorado, Kansas, New Mexico, Oklahoma, Texas) plus a member of WAFWA's Executive Committee[13] appointed by WAFWA's President. Various committees and subcommittees serve in an advisory role to provide recommendations to the LPCIC.

- **Interstate Working Group**: One representative from each of the five state wildlife agencies within LPC's range.
- **Advisory Committee**: Coordinated by the WAFWA LPC Program Manager[14] as an ex officio member and composed of 16 representatives from state wildlife agencies (3 members), USFWS and NRCS (1 member each), industry (oil and gas, wind, transmission; 1 member each), agriculture and landowners organizations (3 members), conservation organizations (3 members), and local government (3 members).
- **Fee Structure Subcommittee**: Coordinated by the WAFWA LPC Program Manager as an ex officio member and composed of 16 representatives from state wildlife agencies (3 members), NRCS (5 members), Farm Service Agency (5 members), and USFWS (3 members).
- **Science Subcommittee**: Coordinated by the WAFWA LPC Program Manager as an ex officio member and composed of up to 15 additional representatives, including one from each of the five state wildlife agencies and up to 10 additional members with scientific expertise in LPC biology.

Each subcommittee has responsibility for overseeing components of the Range-wide Plan and providing an annual report to the Advisory Committee. The Advisory Committee holds responsibility for broad oversight of the Range-wide Plan and providing an annual report to the LPCIC. The LPCIC, as part of the Western Grassland Initiative, reports to the WAFWA Executive Committee, which makes recommendations to the WAFWA Board of Directors. The Board of Directors is composed of the chief executive officers of the fish and game departments, or their equivalents, from each of the 24 states and Canadian provinces comprising WAFWA and has ultimate decision-making authority over the Range-wide Plan. This governance structure exists de-facto for the CCAA and the associated Enhancement of Survival Permit, given that the CCAA does not

[13] WAFWA's Executive Committee is one of five committees established in WAFWA's Constitution and Bylaws. It comprises directors of state wildlife agencies and its purpose is to "*Make interim decisions for the Association as defined in the Constitution and Bylaws; consider petitions for technical committees, workshops and other regional coordination efforts within the domain of the Association; set registration fee for next year's conference; review and approve ideas, recommendations and decisions of other committees as appropriate; and oversee all contracts.*"

[14] The LPC Program Manager position is vacant as of this writing, with WAFWA's Executive Director performing these duties.

have its own governance structure. Because WAFWA is the entity named on the CCAA Enhancement of Survival Permit, the 24-member WAFWA Board of Directors is also WAFWA's ultimate decision-making body regarding the permit as well.

1.2.7 Summary of CCAA Achievements

As discussed above, the purpose of the realignment process is to identify and refine issues or challenges of the CCAA that need to be addressed, building on the initial findings of the 2019 audit. It is important to note that the purpose of the realignment process is not to conduct a comprehensive assessment of the achievements of the Range-wide Plan or the CCAA.[15] Therefore, because of the nature of this report, the findings may appear overly critical or harsh to some readers. The findings of this report are not intended to overshadow or undermine the CCAA's accomplishments. Instead, the report findings are intended to identify ways that the CCAA can be improved and strengthened to ensure that those accomplishments can be sustained into the future as originally intended.

To provide additional context for the report findings, we have provided below a brief overview of the CCAA's accomplishments through 2019 based on the last annual report (WAFWA and SRF 2020), discussions with WAFWA staff, and interviews with stakeholders. The CCAA is part of the first range-wide conservation strategy for the species, a landmark effort of collaboration involving five states, industry, and USFWS. The CCAA—

- Addresses the primary threats to the species of habitat fragmentation and loss by incentivizing enrolled oil and gas companies to avoid impacting high-quality habitat at the landscape and site-specific scales, enhancing and restoring LPC habitat to mitigate impacts, and conserving and enhancing existing habitat through grazing or grassland management plans.
- As of the end of 2019, has provided mitigation for over 1,324 oil and gas projects, which has resulted in 17,348 acres of impacts and approximately 43,500 acres of conservation to offset these impacts (WAFWA and SRF 2020:9-10)).[16]
- Requires enrolled companies to implement conservation measures that reduce the effects of oil and gas projects, including measures to avoid and minimize habitat loss and fragmentation, direct and indirect sources of mortality, and disturbance of breeding, nesting, and brooding activity.
- Provides a rigorous monitoring program for habitat quality through use of the HEG to determine impact units and conservation units.
- Has contributed to annual range-wide LPC population estimates from aerial sampling that reveal critical range-wide trends.
- Enrolled over 7.8 million acres within the first 2 years of its approval, and the combined CCAA/Range-wide Plan conservation program collected $65 million by the end of 2016.
- Succeeded in securing more conservation acreage than the required average 1 acre of impact to 2 acres of conservation ratio to offset oil and gas impacts.

[15] This type of assessment would best be conducted as part of an extensive review of the program by a panel of independent scientists who are experts in LPC and its habitat.

[16] The 43,500 acres of conservation to offset impacts occurring under the CCAA is an estimate based on the proportion of conservation units used to mitigate impacts under the Range-wide Plan and CCAA (52%) and the proportion of these units used specifically to mitigate impacts under the CCAA (56%):
(149,653 acres*0.52)*0.56=43,579 acres.

1.3 Options Available for CCAA Realignment

Four options are available to WAFWA as ways that the CCAA could be revised or replaced as an outcome of the realignment process.

- The first option is to make **internal changes** consistent with the existing CCAA terms and conditions. WAFWA could make certain internal changes without having to gain concurrence from USFWS or industry participants. Such changes could be used to improve the implementation of the CCAA and its financial viability. Some internal changes may be considered **adaptive management changes** already anticipated in the CCAA (see CCAA Table 1 [USFWS and WAFWA 2014:24–27]).
- The second option is to make **administrative changes**. Administrative changes can usually be conducted through an exchange of letters with USFWS and/or an addendum to the CCAA. The scale and scope of these changes can vary greatly, from making minor clarifications in the CCAA to resolve ambiguities or errors, to more significant changes affecting the implementation of the agreement, just short of what would require a permit amendment. Depending on the nature of these changes, they may also necessitate concurrence of participants through modification of CIs.
- The third option is to **amend the CCAA**. An amendment would be needed to change key aspects of the CCAA such as the take limit, effects analysis, or mitigation framework. If the changes are relatively small, this could be done with a simple CCAA and permit amendment, and no NEPA compliance would be needed. If the changes are more substantial, such as a substantial increase in take limits or fundamental changes to the mitigation framework, the amendment would likely require additional NEPA evaluation through an Environmental Assessment. An amendment is a flexible tool that can address one or many aspects of the CCAA at once.

  The process for modifying or amending the CCAA is described in Section 12 of the CCAA (USFWS and WAFWA 2014:47–48). USFWS or WAFWA may propose modifications or amendments to the CCAA by providing written notice to the other party and all participants. If WAFWA is the recipient of the notice, it must notify participants within 10 days of receipt. If WAFWA is notifying USFWS, it must provide notice to all participants at the same time. The party proposing the modification must hold a meeting or conference call to discuss the proposed modification, and proposed modifications or changes become effective with written concurrence of the other party within 60 days of the receipt of notice.

  If the amendment is substantial enough, USFWS may need to publish a notice in the Federal Register announcing the proposed amendment and requesting public comment. That Federal Register notice would also announce how USFWS proposes to comply with NEPA if it grants the amendment.
- The fourth option is to **replace the CCAA with a new CCAA or with a habitat conservation plan (HCP)**. As discussed in the last section, an amendment is a flexible option that can include a few changes or many changes. However, when many changes are proposed such that they would substantially change many elements of the plan, it may be better to replace the CCAA with a new CCAA or in some cases with an HCP.

  The HCP Handbook (USFWS and NMFS 2016) states that HCPs must cover at least one listed species, effectively precluding the use of an HCP just for non-listed species. However, as part of this realignment process USFWS has stated that guidance has changed to now allow HCPs to cover only non-listed species, making this option worth considering as a potential outcome of the CCAA realignment process.

Chapter 2

Phase 1 Realignment Process

Chapter Summary

- Phase 1 of the CCAA realignment process involved document review, stakeholder interviews, participant workshops, creation of a financial model, and focused workgroups to develop concept proposals that included realignment recommendations.
- To receive and record input from realignment participants (representatives from WAFWA, the oil and gas industry, state wildlife agencies, and USFWS), ICF:
  - Reviewed key documents and interviewed stakeholders to understand the background and context of the CCAA realignment.
  - Facilitated three workshops and two focused workgroups to gain input from participants about key realignment issues and to identify best approaches to realign the CCAA.
  - Coordinated with Conservation Investment Management and WAFWA to develop a program financial model to help assess the cost implications of realignment actions or inaction.
  - Collaborated with workgroup members and Conservation Investment Management to develop two concept proposals recommending approaches for the realignment.
  - Completed this Phase 1 Findings and Recommendations Report.

This chapter describes Phase 1 of the CCAA realignment process. As noted in the sections below and shown in Figure 2, Phase 1 began in January 2020 with a review of various documents. Numerous stakeholder interviews were then conducted to inform a series of workshops that were held with CCAA participants. The development of a financial model and formulation of focused workgroups followed, which led to conceptual proposals to realign the CCAA. Together, these actions shaped the findings and recommendations detailed in this report.

Figure 2. Process Elements of Phase 1 of the CCAA Realignment Process

2.1 Participants

Participants in Phase 1 of the CCAA realignment process included oil and gas industry representatives; staff from WAFWA, state wildlife agencies, and USFWS; non-federal property owners with land enrolled in the CCAA for conservation; and experts in species conservation and mitigation finance. Appendix A lists all participants.

2.2 Document Review and Stakeholder Interviews

ICF reviewed relevant documents and interviewed stakeholders to understand the context of the CCAA realignment. Documents reviewed are listed below.

- *Range-Wide Oil and Gas Candidate Conservation Agreement with Assurances for the Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*) in Colorado, Kansas, New Mexico, Oklahoma and Texas* (USFWS and WAFWA 2014).
- *Final Finding of No Significant Impact and Final Environmental Assessment for the Range-Wide Oil and Gas CCAA for the Lesser Prairie Chicken* (USFWS 2014a).
- Set of Findings and Recommendations for Issuance of a Section 10(a)(1)(A) Enhancement of Survival Permit to WAFWA in Association with the CCAA (USFWS 2014a).
- Intra-Service Section 7 Conference Opinion (USFWS 2014a).
- USFWS Section 10(a)(1)(A) Enhancement of Survival Permit (USFWS 2014a).
- *The Lesser Prairie-Chicken Range-wide Conservation Plan* (Van Pelt et al. 2013).
- *2018 Lesser Prairie-Chicken Range-wide Conservation Plan Annual Progress Report* (Wolfe et al. 2019).
- *Audit of the Lesser Prairie Chicken Mitigation Framework* (Guillon 2019).
- Correspondence between WAFWA, LPCIC, and USFWS regarding CCAA realignment.

ICF coordinated with WAFWA to identify a list of key stakeholders for interviews to understand the broader context of the CCAA and how various stakeholders view the program. Between January and May 2020, ICF conducted 12 phone interviews with industry participants, current and former WAFWA staff, current and former USFWS staff, the Taylor Ranch property manager, and representatives of Common Ground Capital (Appendix A).

2.3 Workshops and Workgroups

2.3.1 Workshop 1

ICF facilitated a series of three workshops to determine the best approach for realigning the CCAA. Workshop 1 was held in Denver, Colorado, on February 6, 2020, and was attended by 24 individuals consisting of industry representatives, USFWS staff, WAFWA and state wildlife agency staff, and consultants working for WAFWA (Conservation Investment Management and ICF). Workshop 1 was

a full-day session with the primary objective of identifying key issues to consider in the realignment of the CCAA.

Participants separated into small groups with a range of stakeholder representatives to identify important issues to address in the realignment. Then the larger group reviewed all issues identified and prioritized these issues based on their importance for CCAA realignment. The key issues resulting from this prioritization included the following, in general order of importance.

1. Understand clearly the compliance requirements of the CCAA and determine whether the CCAA is compliant.
2. Ensure proper implementation of the CCAA.
3. Understand USFWS's concerns about CCAA defensibility.
4. Understand whether the assumptions underlying the CCAA are legally defensible in the currently regulatory framework.
5. Increase participation in the CCAA.

Another key outcome from Workshop 1 was that the group recommended and WAFWA agreed to prepare the next annual report for the CCAA as a stand-alone document, as opposed to a combined Range-wide Plan/CCAA annual report that it had prepared in prior years. This decision was made to more clearly adhere to the reporting requirements of the CCAA and to help clarify WAFWA's obligations to the CCAA as a stand-alone program.

2.3.2 Workshop 2

Workshop 2 was held online on March 26, 2020. Following up on the priority key issues from Workshop 1, it focused on understanding the compliance requirements and status of the CCAA and the defensibility concerns of USFWS. ICF presented a preliminary assessment of CCAA compliance. USFWS described concerns about the CCAA's defensibility, explaining that if LPC were to be listed, the Enhancement of Survival Permit could be subject to legal challenge.

During the workshop, participants expressed a range of opinions on how much the CCAA may need to change to address the defensibility concerns presented by USFWS (details are included in Section 2.5.2, *Workgroup 2: Concept Proposal to Improve the CCAA's Defensibility*).

Given the lack of consensus on the defensibility of the CCAA and how these potential issues might be addressed in the CCAA realignment, ICF sought additional participant engagement and evaluation of the CCAA realignment options by forming two focused workgroups (described below in Section 2.3.4, *Workgroups*). The workgroups met several times to review and refine a financial model of the program (described below in Section 2.4, *Program Financial Model*) and develop concept proposals for consideration by the full group (described below in Section 2.5, *Concept Proposals*).

2.3.3 Workshop 3

After the workgroups completed their work, the final workshop was held. Workshop 3 consisted of two, half-day online sessions (August 12 and August 27, 2020). This workshop focused on the LPC listing evaluation process, schedule, and implications for the CCAA; a detailed review of the program financial model; and discussions of strategies to improve the financial viability and defensibility of the CCAA. Options to replace the CCAA with an HCP were also discussed. Key differences between

HCP and CCAA approaches were considered, including the flexibility an HCP allows for future enrollment.

2.3.4 Workgroups

Following Workshop 2, ICF organized and facilitated two workgroups around the four primary options available for CCAA realignment[17]:

1. **Internal CCAA realignment only**. Address financial, transparency, and reporting improvements to ensure compliance, proper implementation, and sustainability of the CCAA, only with internal program changes that do not change the CCAA itself.
2. **Internal CCAA realignment + administrative changes.** In addition to #1, make additional administrative changes to the CCAA to clarify compliance requirements, clearly document changes that have occurred via adaptive management, and make desired changes to implementation and administrative actions based on experience. Administrative changes can be made internally by WAFWA through minor changes to the CCAA document.
3. **Internal CCAA realignment + administrative changes + amend CCAA to improve defensibility.** In addition to #1 and #2, formally amend the CCAA to improve its defensibility by addressing some or all of USFWS's defensibility concerns. This formal amendment would be submitted to USFWS for its review and approval. The amendment would be formally published in the Federal Register and made available for public comment. Additional evaluation under NEPA may also be needed.
4. **Replace the CCAA with an HCP.** Consider replacing the CCAA with an HCP. The defensibility concerns raised by USFWS may be more easily addressed if the CCAA were converted to an HCP because the regulatory standard is to mitigate the impacts of the taking to the maximum extent practicable, reduced from the net conservation benefit standard of a CCAA.

Workgroup 1 focused on realignment options #1 and #2. Workgroup 2 focused on realignment options #3 and #4. Workgroup participants are shown in Appendix A. The initial charge of each workgroup was to identify (1) the components of each of the two CCAA realignment options, (2) the benefits and drawbacks of each of the two options to WAFWA and industry participants, and, if possible, (3) a recommended option, given the CCAA implementation and defensibility concerns identified to date.

Each workgroup met four times prior to Workshop 3. Both workgroups also conducted an extensive review of the draft CCAA program financial model. Workgroup participants were tasked with developing concept proposals for each of the realignment options in their charge, with the focus of each group ultimately narrowing such that Workgroup 1's concept proposal focused on the CCAA's financial viability, while Workgroup 2's concept proposal focused on changes to address the defensibility concerns of USFWS (see Section 2.5, *Concept Proposals*). Concept proposals developed by key members of each workgroup were then discussed and refined by each workgroup and then discussed at Workshop 3. These concept proposals are included in this report as Appendix B and Appendix C.

[17] For simplicity in Section 1.3, these options are presented as being mutually exclusive. In forming the workgroups, we acknowledged that the only mutually exclusive option is replacing the CCAA with an new CCAA or an HCP.

2.4 Program Financial Model

During the realignment process it became clear that in order to effectively assess CCAA realignment options, a tool was needed to evaluate the long-term financial implications of each option. Ben Guillon (Conservation Investment Management), with input from WAFWA and ICF, developed a program financial model to help evaluate the financial performance of the CCAA's conservation framework. The model was built using Microsoft Excel and is comprehensive in accounting for all main sources of CCAA program revenue, expenses, and endowment balances projected through the end of the CCAA permit term in 2044. The model allows for adjusting key inputs to determine how the endowment balance changes over time. The financial model provided insights on the following.

- How budget constraints affect WAFWA's ability to deliver conservation for the entire permit term.
- The importance of the long-term returns from endowment balances.
- How long endowments will last if conservation exceeds offset needs and when delivering a specific mix of conservation (e.g., iterative term contracts versus permanent easements).
- Potential changes that have the greatest or least effect on long-term financial sustainability.

Workgroups 1 and 2 extensively reviewed and commented on the financial model to refine and improve it. The model helped workgroup members understand the financial status and outlook of the program. This was especially important for Workgroup 1's focus of addressing the CCAA's financial issues. The program financial model will continue to be used in the remainder of the realignment process to help evaluate the costs and benefits of realignment options. Even after realignment, WAFWA can use the program financial model as a financial planning and assessment tool while continuing to implement the program.

2.5 Concept Proposals

Volunteers from each workgroup drafted a concept proposal for review by each workgroup. These concept proposals were developed through several working sessions with assistance from ICF and Conservation Investment Management. Workgroup 1's concept proposal focused on the CCAA's financial viability. Workgroup 2's proposal focused on changes to address the defensibility concerns of USFWS. These concept proposals summarized below and provided in their entirety as Appendix B and Appendix C. The primary conclusions and recommendations of the concept proposals are discussed in more detail in the next chapter.

2.5.1 Workgroup 1: Concept Proposal to Improve the CCAA's Financial Viability

Workgroup 1 participants reviewed the financial model of the CCAA and its underlying data and assumptions to provide comments and suggestions to improve its accuracy and usefulness. The general conclusion of the group was that the CCAA is not financially viable as currently implemented. In particular, the administrative endowment is depleted, and current levels of revenues cannot properly resource the administrative function needed for the program in the short term. In addition, the level of expenditure for conservation activities is currently greater than the returns generated by the endowments, calling into question their long-term sustainability.

Workgroup 1 was tasked with proposing changes to the implementation of the CCAA with the goal of improving its financial sustainability. In the Workgroup 1 concept proposal, these proposed changes are provided as three separate options. The option selected depends on the willingness of participants to make voluntary changes to their CIs and credit balances. Workgroup 1 members expressed broad support for Proposal A as the best way to begin improving the CCAA's financial sustainability.

- **Proposal A (Preferred and Primary Proposal).** Proposal A relies on a sufficient number of participants agreeing to restructure the CCAA to balance assets and liabilities through forgiving balances in their conservation credit funds. Forgiven balances would then be redistributed to replenish the administrative endowment in order to support continued long-term operation of the program. Restructuring the funding of the CCCA would involve implementation of several actions to improve the transparency and financial viability of the CCAA, including the following.
    - *Improve transparency of the CCAA*, including developing a new sustainable business plan for the CCAA, improving SRF's accounting framework for transparency and proper disclosure of finances, and improving reporting for increased transparency to participants and USFWS.
    - *Reduce SRF's liability* through participants agreeing to forgive balances in their Habitat Conservation Fund Accounts to move funding to the administrative endowment and cancelling mitigation obligations for excess Conservation Fund Account balances for participants that have been terminated.
    - *Ensure the administrative sustainability of the CCAA* by developing a new business plan based on WAFWA's realigned administrative function, creating a non-wasting endowment to support the administrative function, and revising the business plan periodically to ensure its financial sustainability.
    - *Reduce conservation costs* by terminating iterative term conservation contracts generating offset units beyond what is required to offset impacts, limiting management on portions of permanent conservation properties that are not needed to offset impacts, and reevaluating habitat restoration and management practices.
    - *Generate immediate revenues* by selling SRF assets and excess land not needed to obligated conservation offset units and returning proceeds back to the SRF conservation and/or administrative endowments.

  The items in Proposal A were all determined to have "high impact" on the financial viability of the program (i.e., they would result in relatively larger improvements in financial sustainability). All or most of the items would need to be implemented successfully to ensure financial viability. Implementing these measures would likely not require an amendment to the CCAA and could be accomplished internally to the program. The solutions of Proposal A only address financial viability with the current program and do not consider costs/revenues for changes related to defensibility. If the CCAA is amended to address some or all defensibility concerns raised by USFWS staff, those costs/revenues would also need to be considered. If Proposal A fails, Proposal B would be applied.

- **Proposal B (Secondary Proposal).** This proposal assumes that not enough participants are willing to restructure the CCAA to balance assets and liabilities. Proposal B does not require any participants to write off current account balances and does not assume restoration of the administrative endowment and continued use of the conservation endowment for all program needs. This proposal would reduce costs as much as possible to continue the program as long as

possible. Proposal B assumes an amendment is needed to combine the two endowments and that it is still possible to bring the CCAA back to financial balance within a reasonable timeframe. If Proposal B fails, Proposal C would be applied.

- **Proposal C ("Last Resort").** If the participants are not willing to rebalance SRF's assets and liabilities, and if Proposal B does not create a long-term path to sustainability, then Proposal C is a last resort. Under this proposal, WAFWA would terminate the CCAA because it is no longer financially viable, selling all lands associated with the CCAA, relinquishing the permit, and dissolving the SRF. WAFWA would determine how to return unused monies, including the sale of assets, back to the program participants.

2.5.2 Workgroup 2: Concept Proposal to Improve the CCAA's Defensibility

Workgroup 2 was tasked with considering changes to the CCAA that would require a major amendment or replacing the CCAA with an HCP. The Workgroup 2 concept proposal, while still considering financial implications, focuses on identifying strategies to improve the defensibility of the CCAA by addressing all of USFWS's defensibility concerns. Four primary concepts were identified by USFWS staff to improve defensibility.

1. Increase the targeted proportion of conservation offset units from permanent conservation easements from 25% to at least 50%.
2. Increase the assumed impact radius of wells from 200 meters to 300 meters.
3. Define impact units and conservation units in terms of acres of LPC habitat instead of using the HEG calculation.
4. Clarify and increase restoration requirements by defining restoration and enhancement so each can be measured and accounted for in compliance monitoring.

The concept proposal to improve the CCAA's defensibility presented many solutions to explore that would address the issues raised by USFWS. However, Workgroup 2 members asked many questions about the practicality, cost, and details of these ideas. Workgroup 2 members acknowledged progress but expressed a clear need to explore these concepts further in terms of their feasibility and cost implications.

2.6 Communication with WAFWA and the Public

During Phase 1 of the CCAA realignment process, ICF maintained consistent communication with WAFWA staff and state wildlife agency representatives to communicate status and progress, test ideas, and review and analyze data.

ICF also assisted WAFWA in communicating the status of the realignment process to partners and the public. These communications included the following.

- In-person presentations to the LPCIC and the public at the WAFWA mid-winter meeting (January 10, 2020).
- Technical support to WAFWA as it designed and prepared its annual report and communicated the new approach to the public.

- Webinar presentations on the CCAA realignment progress and status to the LPCIC and the public at the WAFWA summer meeting (July 10, 2020).
- Webinar presentation on the CCAA realignment process and preliminary findings and recommendations to the LPCIC and invited guests at the Association of Fish and Wildlife Agencies annual meeting (September 9, 2020).

2.7 Report Preparation

ICF began preparation of this report after Workshop 3. As noted above, we presented our preliminary findings and recommendations to realignment participants at the LPCIC meeting during the Association of Fish and Wildlife Agencies annual meeting on September 9 and received initial feedback.

Select members of the realignment process including WAFWA, state wildlife agency, industry, and USFWS representatives reviewed a draft report and provided comments. ICF considered their feedback and produced a second draft report. Feedback on the second draft report informed this final report.

Chapter 3
Phase 1 Findings

Chapter Summary

- The findings presented in this chapter inform the recommendations for Phase 2, which are described in Chapter 4, *Recommendations for Phase* 2.
- The financial management of the program needs restructuring because current costs exceed revenue, the administrative endowment is exhausted, and the conservation endowment will be exhausted in 10–15 years based on its current trajectory if financial changes are not made.
- Compliance issues could result from the financial issues faced by the program. The program does not have sufficient endowments to permanently support conservation for its offset units.
- WAFWA tracks some of the key components of the CCAA (credits, debits, funding) in combination with the Range-wide Plan, making it difficult to evaluate the CCAA independently.
- Once WAFWA addresses the CCAA's financial issues, the program may still be at risk. USFWS staff have identified four areas where, should LPC be listed and the Enhancement of Survival Permit be challenged, the program may not be defensible according to the net conservation benefit standard required of CCAAs.
- USFWS will have to consider these defensibility concerns if WAFWA applies to amend the CCAA and its permit.
- Measures that WAFWA can take to address the CCAA's financial and defensibility issues may be limited by participants' CIs, which can only be changed if participants voluntarily agree to changes. Addressing the CCAA's financial issues through restructuring is likely to require changes to existing CIs.
- If USFWS decides to list LPC, the listing would not be expected take effect until mid- to late-2022. Once LPC is listed, WAFWA's Enhancement of Survival Permit would be activated. At that time, the CCAA could be subject to re-evaluation under Section 7 of the ESA, potential legal challenge, and potential enforcement actions by USFWS.
- If LPC is not listed, WAFWA's Enhancement of Survival Permit would remain inactive and free from risk of legal challenge or enforcement by USFWS, but WAFWA would still be responsible for proper implementation of the CCAA.
- Replacing the CCAA with either a new CCAA or an HCP has certain advantages and disadvantages. If WAFWA decides to update the conservation framework of the CCAA and enlists enough participants to voluntarily amend their CIs to this updated framework, ICF recommends that WAFWA prepare either a new CCAA or HCP—selection depends on the time available before LPC listing is final in mid- to late-2022 and whether it is important to WAFWA to allow new enrollment after listing.

The following sections summarize the major findings of Phase 1 of the CCAA realignment process. These findings form the basis of the recommendations for Phase 2 (see Chapter 4, *Recommendations for Phase 2*). The findings are organized into seven topical sections: financial status, implementation status, regulatory assurances, regulatory standard, CIs, and LPC listing process and timing. The final

section provides an assessment of the benefits and drawbacks of replacing the CCAA with either a new CCAA or an HCP.

3.1 Financial Status

Below we summarize the primary financial issues facing the CCAA program based on the results of the program financial model and extensive discussions with WAFWA staff, its financial consultant (Conservation Investment Management), CCAA participants, and stakeholders (Appendix A).

Without changes, financial models predict that all endowments will be exhausted. Currently, WAFWA's cost to administer the CCAA exceeds its revenue collected from fees and the return generated from the endowments. The administrative endowment, which is required by the CCAA to hold sufficient non-wasting funds to pay for administrative expenses, was exhausted in 2017. The conservation endowment, which is required by the CCAA to hold sufficient non-wasting funds to support the conservation costs of the program (e.g., landowner payments for conservation properties and future acquisitions), is now supporting program administrative costs with income earned from endowment investments. The financial model predicts that without changes, the conservation endowment will be exhausted in approximately 10–15 years.[18] Potential costs associated with changes to the program that are intended to increase defensibility have not been estimated; additional cost without additional revenue would exhaust the endowment earlier. In 2019 and 2020, WAFWA substantially reduced its administrative costs. WAFWA now needs to immediately reduce its long-term program costs and increase revenues in order to sufficiently fund the endowments to sustain the CCAA's administration and conservation.

Conservation assets exceed WAFWA's financial resources to support those assets long term. The CCAA requires WAFWA to use fees from participants enrolling land in the CCAA as partial prepayment of mitigation fees (see Section 1.2.4, *Project Mitigation Fees*) in advance of participants generating impact units from their projects. Within the first 2 years following CCAA approval, industry participants in the CCAA alone enrolled over 7.8 million acres in the program, and the combined CCAA and Range-wide Plan conservation programs collected $65 million by the end of 2016.[19] From 2013 through 2014, WAFWA used conservation funds to secure iterative term contracts to supply the required offset credits for impacts occurring under the CCAA and Range-wide Plan. From 2015 to 2017, WAFWA secured several permanent easements to increase the amount of permanent conservation to meet the 25% permanent conservation target in the Range-wide Plan and CCAA. As a result, the combined iterative term contract and permanent easement conservation that WAFWA secured is now in excess of the average 2:1 offset unit to impact unit ratio (Table 1).

Viewed from a conservation standpoint, WAFWA has provided more conservation for LPC than the CCAA requires. Some of this excess conservation is necessary to provide a buffer ensuring that conservation offset units will meet the demand for impacts. However, WAFWA does not have sufficient funds to administer the program because exceeding the CCAA's required conservation to

[18] The large variation in time depends on the average annual net returns (i.e., net after fees and inflation) that can be generated from the conservation endowments. This timeframe assumes a net return range of 4.0% (10 years to exhaustion) to 5.5% (15 years to exhaustion).

[19] WAFWA's accounting does not separate CCAA funds from Range-wide Plan funds, so the funds paid into just the CCAA cannot be determined without review of all prior payments to the CCAA and Range-wide Plan.

impact ratio has imposed greater than anticipated obligations on WAFWA to support the conservation lands in perpetuity. These obligations come with greater than anticipated costs that must be supported by the program's non-wasting endowment. This has exacerbated an imbalance between the program's current funding and expected revenue. The CCAA requires only that offset units are maintained at twice the amount of impact units (2:1 ratio). A cushion of conservation units is needed to anticipate some future impact units—but not nearly as large as what WAFWA currently maintains based on available financial resources. The options available to WAFWA to address this are described in Chapter 4, *Recommendations for Phase 2*, and should be further explored in Phase 2 of the CCAA realignment process.

Table 1. CCAA Impact Units and Estimated Offset Units in Excess by Ecoregion

Ecoregion	Impact Units[a]	Offset Units Required[b]	Total Offset Units Secured[a]	Percent (%) Permanent/ Temporary	Assumed Offset Units Secured for the CCAA[c]	Percent (%) Excess of Offset Units
Mixed Grass Prairie	8,621	17,243	54,211	5/95	43,369	152
Sand Sagebrush Prairie	612	1,224	30,765	72/28	24,612	1,910
Shinnery Oak Prairie	1,315	2,630	8,325	15/85	6,660	153
Shortgrass Prairie	618	1,235	7,377	36/64	5,902	378
Total	**11,166**	**22,332**	**100,678**	**29/71**	**80,542**	**261**

[a] As of end of Fiscal Year 2019.

[b] Offset units required at 2:1 ratio of impact units. For simplicity, this table uses the 2:1 average ratio of offset units to impact units required by the CCAA to provide an approximation of the offset units required in each ecoregion. The CCAA uses a tiered mitigation system with impact and offset multipliers determined by CHAT category. Evaluating the impact and offset units by CHAT category in each ecoregion would provide a more accurate estimate of the excess offset units in each ecoregion.

[c] WAFWA does not separate offset units for the CCAA from the Range-wide Plan. We assume that the Range-wide Plan accounts for 20% of all conservation units, so that 80% of the total offset units secured would be attributed to the CCAA.

Fees paid have not covered the costs of fee title acquisition, ongoing temporary contract payments, land management, restoration, and administration. Enrollment fees and mitigation fees have not been sufficient to pay the full cost of administering and maintaining offset units in perpetuity. This deficiency is due to several factors, including the following.

- Since the program's inception, a formula error resulted in WAFWA undercharging companies by 4–65% on a per impact unit basis, contributing to a lack of revenue sufficient to cover the cost of securing and maintaining conservation. As a result, the endowment did not grow as much as it should have to support the amount of offset units secured.
- The proportion of enrollment and mitigation fees allocated to the administrative endowment[20] is not, and likely never was, sufficient to fund administration of the program. The proportion of fees directed toward funding program administration costs is directly proportional to the

[20] The CCAA began by allocating 12.5% of all enrollment and mitigation fees to the administrative endowment. This was later increased by WAFWA in 2018 to 16.5%.

amount of mitigation required for a given project and does not sufficiently fund the program to account for baseline program administration costs.

- The CCAA allows WAFWA to increase mitigation fees up to 3% per year for inflation plus up to 4% per year for adaptive management changes, for a total maximum annual increase of 7%.[21] WAFWA has increased fees 3–5% in total in over 6 years (depending on the ecoregion); meanwhile, costs have increased by 8.5% due to inflation alone.[22]
- WAFWA assumed that the cost of conservation would be similar in all ecoregions and that all properties would be similarly efficient in generating offset units per acre. Both assumptions proved incorrect for three of four ecoregions—but particularly so for the Shinnery Oak Prairie and the Shortgrass Prairie ecoregions. The net result was that actual costs of conservation exceeded the estimated per-unit cost of conservation as follows: Mixed Grass Prairie +21%, Sand Sagebrush Prairie +4%, Shinnery Oak Prairie +63%, and Shortgrass Prairie +65%.

WAFWA will need to develop an operating budget from which it can administer the CCAA. Based on the audit's findings, WAFWA immediately made changes in 2019 to improve its short-term financial situation by reducing administrative costs. It also suspended new enrollments in the CCAA in 2019, which reduced the administrative burden of the program. However, the program's 2020 budget (and 2021 budget) will need to be evaluated in light of what is needed to administer the program sustainably. For example, in order to reduce its administrative costs, WAFWA deferred the evaluation of project permitting data in 2019. It also used ground survey data collected by the state wildlife agencies to report LPC population numbers in 2019 in lieu of a range-wide aerial survey, as it had done from 2013 to 2018. WAFWA remained in compliance with the CCAA with these changes, but they were departures from prior years' monitoring and reporting practices. If WAFWA is to properly implement the CCAA, it must determine the administrative budget necessary to provide sufficient monitoring and compliance oversight of participants and landowners and have sufficient resources to process new enrollments when they are allowed again. Chapter 4, *Recommendations for Phase 2*, discusses this issue further.

Financial management has not met requirements of the CCAA nor aligned with best practices. The program audit made findings with respect to WAFWA's financial management, including that WAFWA over-valued certain assets and did not appropriately track its expected future liabilities to provide conservation units. WAFWA's future reporting must provide transparent financial information so that WAFWA, industry participants, and USFWS can accurately assess the financial status of the program. The CCAA requires WAFWA to "provide for an audit annually by an independent party to account for expenditures and accomplishments of CCAA" (USFWS and WAFWA 2014:12). WAFWA contracted third-party financial audits in 2016, 2019, and 2020. The 2020 audit did not find any issues with WAFWA's reporting of financial information (Moore pers. comm.). It is not typical for a conservation program to require an independent financial audit and program assessment on an annual basis. WAFWA should discuss with USFWS reducing the frequency of this requirement to lessen the administrative and financial burden on the program.

[21] The CCAA also allows WAFWA to increase mitigation fees more than 3% per year to keep pace with inflation, provided that inflation is greater than 3% in that year and that the long-term average annual increase does not exceed 3%.

[22] This is based on the difference in the Consumer Price Index for the Southern Region (including Texas and Oklahoma) between March 2014 and August 2020, as published by the U.S. Bureau of Labor Statistics.

3.2 Implementation Status

Several of the terms of the Enhancement of Survival Permit obligate WAFWA to fully implement the CCAA. In many important respects, the CCAA is in compliance, including operating well under its level of authorized take, successfully implementing avoidance and minimization measures, and securing conservation to generate offset units at greater than a 2:1 ratio of impact units.[23] However, the realignment process identified several reporting and financial findings that, if unaddressed, present potential compliance issues, which are summarized below. Many of these findings are associated with the financial challenges facing the program, for which WAFWA is already making changes to address.

Conservation endowments are not sufficient to fund management and restoration through iterative term contracts and permanent easements supplying offsets in perpetuity. See Section 3.1, *Financial Status.*

WAFWA's revenue is not sufficient to meet the expected administrative responsibilities required by the CCAA in perpetuity. See Section 3.1, *Financial Status*.

WAFWA's reporting does not allow for complete determination of the CCAA's compliance. The CCAA requires WAFWA to report annually to USFWS on the status of implementation.[24] CCAA reporting for its first 5 years of implementation (2014–2018) was combined with reporting for the Range-wide Plan. This combined reporting made it difficult to evaluate the CCAA for compliance with the terms and conditions of the Enhancement of Survival Permit and—for some items like the amount of conservation offset units attributable to the CCAA—impossible. In April 2020, WAFWA submitted the 2019 annual report for the CCAA as a stand-alone document (i.e., without any reporting on the Range-wide Plan). This new approach aided in meeting the reporting requirements of the CCAA and improved the transparency of the program to the public.[25] However, WAFWA's offset unit database still combines offset units for the CCAA and the Range-wide Plan, so CCAA compliance cannot be fully determined yet. This issue is discussed further in Chapter 4, *Recommendations for Phase 2*.

The adaptive management process has fallen short of the CCAA's intentions. The CCAA was intended to "align and complement implementation of the Range-wide Plan" (USFWS and WAFWA 2014:24), and it relies on the Range-wide Plan's organizational structure and decision-making process (described in Section 1.2.6, *CCAA Governance*) to implement adaptive management. The CCAA also identifies a process for modifications or amendments (USFWS and WAFWA 2014:47–48), but it is not clear how this process aligns with the CCAA's organizational structure and process identified for considering adaptive management and changed circumstances. Consequently, the adaptive management process for the CCAA has not been successfully implemented. For example, the administrative fee is listed in Table 1 of the CCAA as an evaluated element to trigger the adaptive management process, but WAFWA did not increase the administrative fee sufficiently to prevent exhausting the administrative endowment (see Section 3.1, *Financial Status*).

[23] WAFWA documents compliance with the 2-to-1, conservation-to-impact ratio for the entire Range-wide Plan, it does not separate offset units for just the CCAA.

[24] See CCAA Section 20, pages 45–46 (USFWS and WAFWA 2014).

[25] All annual reports are posted on the WAFWA website at: https://www.wafwa.org/initiatives/grasslands/lesser_prairie_chicken/annual_performance_reports/

This issue may have resulted from adaptive management financial triggers not being routinely reviewed to initiate adaptive management changes. The Advisory Committee did make two recommendations to adjust administrative fees. The initial recommendation adjusted the percentage of mitigation fees dedicated to administration of the CCAA and was approved by the LPCIC and applied in 2018, but it proved inadequate. The Advisory Committee made a second recommendation to the LPCIC in 2019 to establish an administrative fee for all projects, but the LPCIC did not act on this recommendation.

Table 1 of the CCAA also lists an adaptive management trigger as "restoration and remediation not occurring on half the required acreage (see appendices D and E of the RWP)" after 5 years of implementation. As of the end of 2018, there was an estimated 18,040 acres of restoration[26] and 2,008 acres of remediation from the Range-wide Plan and CCAA combined (Wolfe et al. 2019) (2% and 8% of the required totals in Appendices D and E of the Range-wide Plan, respectively), so this adaptive management trigger appears to have been reached in 2019. The CCAA would benefit from more clearly defined processes and dedicated organizational structure to facilitate objective, effective, and timely program assessment and adaptive management decision-making.

WAFWA changed its monitoring practices in 2019 to limit administrative costs. WAFWA is responsible for monitoring participant compliance at project impact sites and in relation to required fees and for addressing any noncompliance according to procedures outlined in the CCAA. WAFWA has fully implemented the monitoring requirements of the CCAA, including conducting compliance checks on participants' new impact activities in each ecoregion in 2019 and 2020, as required by the CCAA. However, due to staffing and funding reductions in 2019, WAFWA made two changes to monitoring.

- WAFWA was unable review publicly available project permitting data in 2019 to evaluate if all projects on enrolled property requiring mitigation were reported to WAFWA, as it had in prior years (WAFWA and SRF 2020:7). Although WAFWA is not required by the CCAA to review projects on enrolled property if they are not new impact activities, confirming that such projects are not impacting LPC habitat serves to provide another "check" on participants' compliance with the CCAA.
- In 2019, WAFWA used ground survey data collected by the state wildlife agencies to estimate the LPC population (WAFWA and SRF 2020:18) rather than the range-wide aerial surveys completed from 2013 to 2018 (USFWS and WAFWA 2014:45). In 2020 WAFWA was able to conduct range-wide aerial surveys with state funding.

Important to note is that neither change affected WAFWA's compliance with the CCAA. The value of this monitoring to program implementation, however, will need to be evaluated and budgeted for as appropriate in the future.

3.3 Regulatory Assurances

WAFWA decided to realign the CCAA in part to ensure adequate regulatory assurances for its participants. The regulatory assurances of the CCAA provide that, if the species is listed, participants

[26] This includes 1,242 acres of range planting by WAFWA and 16,798 acres of brush management as reported in the 2018 Range-wide Plan annual report (Wolfe et al. 2019). These data likely understate actual amounts because WAFWA does not collect data on all properties when management is conducted by the landowner.

do not have to do more than their commitments in the plan and permit. However, those regulatory assurances rely on WAFWA and CCAA participants properly implementing the program. As described in this chapter, WAFWA will need to correct several financial and implementation issues in order to demonstrate proper implementation of the CCAA.

Assuming WAFWA is able to improve the financial status of the program (Section 3.1, *Financial Status*) and correct the implementation items identified (Section 3.2, *Implementation Status*), the program may still be at risk. Although the program has succeeded in acquiring more conservation units than are needed to offset impacts as measured by the CCAA, USFWS staff expressed concerns about the CCAA's ability to clearly demonstrate a net conservation benefit to LPC. USFWS staff recommended four ways to improve the CCAA's defensibility to more clearly demonstrate that the CCAA is meeting its conservation commitments.

If LPC is listed, the Enhancement of Survival Permit becomes active and subject to any legal challenge. After listing, the defensibility concerns identified by USFWS staff present a risk to the regulatory assurances for participants if USFWS cannot defend the permit against legal challenge.

These defensibility concerns would also be relevant if WAFWA proposes a formal amendment to the CCAA. To approve a formal amendment, USFWS must re-evaluate the entire CCAA against all permit issuance criteria. This would include evaluating the CCAA against the requirement to provide a "net conservation benefit" for LPC (see the next section for an explanation of this standard). If WAFWA proposes a formal amendment, USFWS would likely raise some or all defensibility concerns it has identified. If these concerns remain unaddressed, USFWS may not be able to approve an amendment to the CCAA.

After extensive review, ICF concurs with the four defensibility concerns identified by USFWS staff. The following four findings are based on these defensibility concerns.

The CCAA does not clearly define restoration or how much restoration must occur per unit of impact, so the total amount of habitat gained or lost is unclear. The CCAA requires habitat restoration and habitat enhancement (Section 11, B, 4) but does not clearly define what these terms mean or quantify how much should occur under the CCAA.[27] In implementing the CCAA, WAFWA has previously indicated that on an acreage basis, it targets 20% of conservation units to come from habitat restoration and 80% to come from habitat enhancement.[28] As of the end of 2019, 17,602 acres of restoration had been completed on conservation properties, including removing invasive trees and nonnative invasive plants, amounting to 11.8% of the 149,653 acres of conservation enrolled under the CCAA or Range-wide Plan (WAFWA and SRF 2020). Furthermore, the current 20/80 restoration/enhancement framework can result in a net loss of habitat. Protecting existing LPC habitat from development reduces the LPC's primary threat of habitat loss and fragmentation (Deyoung and Williford 2016; Fuhlendorf et al. 2017; Sullins et al. 2019). However, protecting existing habitat alone does not increase the amount of habitat available to LPC on the landscape enough to fully offset the amount of habitat lost from impacts, all else being equal. A hypothetical example is described below to illustrate how habitat loss could occur.

[27] The CCAA refers to Appendix D of the Range-wide Plan for restoration goals, which are very large "requirements" and "goals" for restoration and enhancement; the CCAA's share of Range-wide Plan goals or requirements is not stated. Table 10 in the Range-wide Plan notes "an assumption of 25% restoration" (Van Pelt et al. 2013:118).

[28] USFWS noted this assumption in a presentation for Workshop 2, and ICF confirmed it was documented through prior USFWS/WAFWA correspondence (Nichols pers. comm. [a])

- A project results in 100 acres of lost LPC habitat.
- Applying a 2:1 conservation to impact ratio would require 200 acres of conservation to offset the habitat loss.
- Of those 200 acres conserved, 20% would be restored (i.e., assumed to be previously lost habitat returned to functioning LPC habitat), and 80% would be enhanced (i.e., assumed to already be habitat that would be improved), resulting in 40 acres of restored habitat and 160 acres of enhanced habitat.
- The net result, in terms of acreage of habitat regardless of habitat quality,[29] is 60 acres of habitat loss (100 acres of impact minus 40 acres of restoration = net loss of 60 acres).

The example above does not explicitly consider habitat quality. WAFWA has demonstrated using field sampling (HEG scores) that the habitat lost to covered activities is, on average, substantially lower quality than the habitat preserved (WAFWA and SRF 2020). The CCAA's conservation framework requires offset units for impacts to *all* areas modeled as LPC habitat, even if the impacted habitat was very low quality or unsuitable for LPC when measured in the field (i.e., had a very low HEG score). This means that some amount of mitigation under the program was likely for areas unsuitable for the species.[30] Based on this finding, it is probable that the amount of impact on existing functional habitat of LPC has been somewhat overstated and actual impacts on suitable habitat are lower than indicated in the CCAA ledger. Given this, and assuming that the CCAA has provided some mitigation in the form of restoration (turning unsuitable habitat into suitable habitat), it is possible that the program has already provided a net benefit in conservation. WAFWA is currently conducting an analysis to determine this.

The CCAA does not measure habitat uplift from baseline in a way that clearly demonstrates a net conservation benefit. All properties secured for conservation are subject to participation contracts with landowners that include conservation plans specifying the habitat management practices on the property that will benefit LPC. Upon execution of contract, the property generates offset units from the existing habitat placed under conservation immediately without any documented uplift in habitat quality. A hypothetical example to illustrate this point is described below.

- 100 acres enrolled in the program for conservation have an existing HEG score of 0.5 upon enrollment.
- The current mitigation framework would generate 50 conservation offset units from this property upon enrollment.[31]
- If habitat quality increases in future years due to management practices implemented to benefit LPC (e.g., the HEG score increases to 0.7), the property would then generate 70 offset units as opposed to only counting the increase, 20 offset units.

[29] This example, for simplicity, assumes that habitat quality is constant for all acres of habitat. Although habitat quality is an important factor for LPC, USFWS identifies habitat loss and fragmentation as the primary threat to the species as noted in Deyoung and Williford (2016:19), Fuhlendorf et al. (2017), and Sullins et al. (2019).

[30] This is a common approach in landscape conservation plans due to the difficulty in accurately predicting field conditions over vast areas. In a regulatory context, species habitat distribution models are often designed to be somewhat conservative and err on the side of overpredicting the extent of species' habitat. This approach recognizes that "over mitigation" is balanced by the time and cost savings of the regional mitigation program to participants and regulators.

[31] Note that the offset multiplier has been removed from this example for simplicity.

While putting acreage under conservation is a legitimate compensatory mitigation measure, failing to separate the offset units generated from just the action of conserving existing land on the landscape from those that are generated from providing ecological uplift makes it more difficult to determine the net conservation benefit resulting from the CCAA.

The proportion of CCAA conservation acreage secured through iterative term contracts is too high. The CCAA provides that one quarter (25%) of the offset units are targeted toward permanent easements to support long-term conservation and population strongholds. The remaining three-quarters (75%) of the offset units are targeted towards iterative term contracts (5–10 years). Although each iterative term contract ends in 5–10 years, the intention is to provide permanently conserved acreage for LPC because all iterative term contract acreage is supported by the non-wasting endowment and the acreage under conservation is usually renewed. Iterative term contracts that are not renewed must be replaced by new iterative term contracts.

Part of the rationale for this proportion of iterative term contracts is to allow the program flexibility to conserve habitat that could move around the landscape over time to address the biological needs of LPC in a changing landscape. For example, compared to permanent easements, iterative term contracts allow the flexibility to move conservation acreage more easily should incompatible land uses[32] or climate change effects degrade the habitat value on conserved properties. However, literature suggests that permanently conserving large tracts of grassland habitat free of anthropogenic features (e.g., power lines, wells, roads, and buildings) is the most important measure to support sustainable LPC populations (Hagen et al. 2011; Fuhlendorf et al. 2017; Sullins et al. 2019).

Compared to permanent conservation easements, iterative terms contracts as administered under the current CCAA do not provide the same level of certainty that conservation will occur in perpetuity for the following reasons.

- The CCAA requires that conservation offset units be maintained in perpetuity, but the CCAA does not describe how this will be accomplished. For example, will iterative term contracts continue to be used after permit expiration, and in the same allocation as during the permit? USFWS expressed concern during the realignment process that the CCAA's silence on this important question creates substantial uncertainty regarding the long-term viability of satisfying 75% of the conservation offset unit obligations using iterative term contracts. If the permit expires without these assurances in place, the risks and liabilities associated with these iterative term contracts would be transferred to USFWS.
- The CCAA requires a non-wasting endowment to support management of land conserved in perpetuity, including conservation offset units secured under iterative term contracts; however, that conservation endowment is currently being drawn down to support administration of the program.
- Landowners with iterative term contracts can voluntarily terminate the agreement and refund the landowner payments received with only 30 days' notice. Although this has not yet occurred, it could. In contrast, permanent conservation easements provide greater assurances that the conservation will remain in perpetuity.

[32] Incompatible land uses could occur on nearby properties, such as tall structures (transmission line, wind turbine) or, on split estate lands where the subsurface mineral rights are owned separately than surace, on the conservation property itself.

Targeting 75% of conservation through iterative term contracts increases the risk that the CCAA will fail to maintain sufficient conservation in perpetuity to meet the net conservation benefit standard of the CCAA.

The assumption in the CCAA for take of LPC 200 meters from wells does not align with USFWS policy of assuming take of LPC 300 meters from wells. Based on its interpretation of effects from oil and gas development to LPC as documented in scientific literature (Hunt and Best 2004; Pitman et al. 2005; Hagen et al. 2011; Plumb et al. 2019; Sullins et al. 2019), USFWS assumes take of LPC occurring from wellheads out to 300 meters (USFWS 2014b), while the CCAA defines take from wellheads occurring to 200 meters (see Appendix C of this report for more context). The regulatory assurances provided to WAFWA ensure that new information such as this does not change the requirements of the CCAA.

However, activation of the Enhancement of Survival Permit upon listing would require that USFWS update its evaluation under Section 7 of the ESA by converting its 2014 Conference Opinion to a Biological Opinion.[33] At that time, USFWS would consider what it determines to be the best available science relating to LPC as well as the implementation status of the CCAA. During the realignment process, USFWS stated that a new Biological Opinion would define take of LPC in terms of a 300-meter wellhead impact buffer (consistent with current policy) versus the 200-meter buffer applied by the CCAA. While the total effect on the CCAA's conservation framework of increasing the buffer from 200 meters to 300 meters is unclear,[34] this discrepancy between the CCAA and USFWS's Biological Opinion could be interpreted by some to undermine the CCAA's defensibility (i.e., it could be viewed as underestimating the amount of take from enrolled projects) and increase the risk of legal challenge.

3.4 Regulatory Standard

During the realignment process, there was discussion about the regulatory standard for the CCAA when it was approved in 2014 versus the standard USFWS would apply today if the CCAA was amended. The CCAA was approved by USFWS under the original CCAA policies and regulations. Under the 1999 CCAA policy (64 FR 32726; June 17, 1999), to approve a CCAA USFWS had to determine that the "benefits of the conservation measures implemented by a property owner under a CCAA, when combined with those benefits that would be achieved if it is assumed that conservation measures were also to be implemented on other necessary properties, would preclude or remove any need to list the covered species.''

In 2016, USFWS clarified and revised the CCAA standard to require a "net conservation benefit" to the covered species specifically on the properties to be enrolled, eliminating references to "other

[33] Conference Opinions are prepared for candidate and other non-listed species, while Biological Opinions are prepared for listed species.

[34] The overall amount of impact would depend upon how close a new well is to existing wells and the extent to which the impact buffers overlap. WAFWA staff noted their analysis of existing impacts suggests that using a 300-meter impact buffer would result in a net decrease in the amount of conservation delivered by the CCAA by as much as 33% (Kyle, pers. comm. [b]).

necessary properties" that caused confusion in the past.[35] USFWS also added a new definition of net conservation benefit:

> "the cumulative benefits of the CCAA's specific conservation measures designed to improve the status of a covered species by removing or minimizing threats so that populations are stabilized, the number of individuals is increased, or habitat is improved. The benefit is measured by the projected increase in the species' population or improvement of the species' habitat, taking into account the duration of the Agreement and any off-setting adverse effects attributable to the incidental taking allowed by the enhancement-of-survival permit." (81 FR 95171)

The term "net conservation benefit" was not part of the original CCAA policy, so the LPC CCAA did not use this term. USFWS staff participants stated that the 2016 policy simply clarified the original 1999 CCAA policy and did not change the underlying conservation standard. Other participants hold the view that the 2016 CCAA policy changed the standard and that USFWS was improperly evaluating the LPC CCAA against a higher standard.

ICF's view on this issue is that it is for attorneys to opine on whether the 2016 net conservation benefit definition is the same or different from the standard in the 1999 CCAA policy and regulations. If attorneys find a difference in standards, the CCAA must be judged against the standard when it was approved in 2014. However, if WAFWA decides to seek an amendment to the CCAA, USFWS has to evaluate the amendment (and the rest of the CCAA in context) against the current CCAA policy and regulations (2016), including the new net conservation benefit definition.

Setting aside the regulatory standard, the LPC CCAA and Range-wide Plan commit WAFWA to provide conservation benefits to LPC through a variety of avoidance, minimization, and mitigation measures (called conservation measures and activities). Specifically, the LPC CCAA commits WAFWA to contribute to the Range-wide Plan's commitment to "expand and sustain" LPC populations on all enrolled lands.[36] Therefore, regardless of which regulatory standard is applied, we believe that the conservation provided by the LPC CCAA should be evaluated against these commitments, applied to all lands enrolled in the LPC CCAA (i.e., collectively on impact sites, conservation offset sites, and all other enrolled lands).

3.5 Certificates of Inclusion

The existing CCAA CIs for industry participants can only be changed if participants voluntarily agree to changes. This limit applies even if WAFWA modifies or amends the CCAA. In other words, if WAFWA amends the CCAA in ways that affect future impacts or fees on land already enrolled by participating companies, the amendment would only apply to those lands already enrolled if the participant voluntarily amends its CI to align with the CCAA amendment. Without those voluntary changes to CIs, any CCAA amendment would only apply to future enrollments.[37]

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[35] Candidate Conservation Agreements with Assurances Policy was published December 27, 2016 (81 FR 95164–95175). On the same day USFWS also published revised regulations for CCAAs at 50 CFR 17.22(d) and 17.32(d) to align them with the revised policy (81 FR 95053–95056).

[36] See CCAA Section 14, pages 42–44.

[37] Regardless of the implementation or permit status of the CCAA, the CI (Section 8) also states that any funds remaining in participants' Habitat Conservation Fund Accounts "will be retained by WAFWA and be used for

Workgroup 1 determined that ensuring the CCAA's financial viability will very likely require changes to existing CIs. Therefore, the program will only be made financially sustainable and compliant if enough participants willingly modify their CIs. In addition, WAFWA must address the question of what happens to participants who are unwilling to change their CIs yet wish to remain covered by the CCAA in place at the time of their CI (i.e., an unamended or unchanged CCAA). WAFWA will need to decide whether or not to continue to administer the old CCAA for the remaining participants. If WAFWA chooses not to administer the old CCAA, WAFWA will also need to decide at what point to abandon it.

3.6 Lesser Prairie-Chicken Listing Process and CCAA Implications

USFWS is required by settlement agreement to complete a 12-month finding in response to a petition to list LPC by May 26, 2021. The possible findings are listed below.

- Not warranted.
- Warranted and proposed listing as threatened.
- Warranted and proposed listing as endangered.
- Warranted but precluded.

As part of its evaluation of whether to list LPC, USFWS will complete a Species Status Assessment that considers threats to LPC and how existing conservation programs for the species, including the CCAA, address those threats.

If USFWS proposes LPC for listing, there would be a 12- to 18-month public review and comment period, with a final listing decision expected between May and November 2022. Substantial public comments on the proposed listing decision could further push out the timeline, as has occurred with other species listings. If after public comments USFWS decides to list the species, the listing would typically take effect 30 days after the decision (June to December 2022).

If USFWS decides not to list LPC, the decision would be based upon a determination that threats are not impacting LPC to such a degree to warrant listing and/or that conservation programs such as this CCAA have adequately reduced or eliminated the threats facing the species. In that situation, WAFWA's Enhancement of Survival Permit would remain inactive and free from risk of legal challenge or enforcement measures from USFWS, but WAFWA would still be responsible for proper implementation of the CCAA.

If USFWS decides to list LPC, the decision would be based upon a determination that threats are impacting LPC to warrant listing and that existing conservation programs have not adequately reduced or eliminated those threats. The final listing in 2022 would activate WAFWA's Enhancement of Survival Permit, leading to the following potential outcomes.

- USFWS is required by Section 7 of the ESA to convert the 2014 Conference Opinion to a Biological Opinion using what USFWS considers to be the best available science. Any significant

Conservation of the [LPC]." Section 8 of the CCAA also states any funds remaining in Participant's Habitat Conservation Fund Account at the time of termination, voluntary or for cause, will be donated to WAFWA for conservation efforts to support the [LPC], and will not be refunded."

difference between USFWS's interpretation and the CCAA's interpretation of best available science could present new risk to the CCAA and Enhancement of Survival Permit because it potentially undermines USFWS's ability to defend the permit if it is challenged legally.

- The permit could be subject to any legal challenge for alleged issues related to compliance or failure to meet permit issuance criteria.
- USFWS could pursue regulatory action under 50 CFR Part 13 if there are persistent permit compliance issues that WAFWA fails to correct. Enforcement actions could include suspending the permit pending correction of any deficiencies. If this occurred, all future take authorization would cease. Take that has already occurred under the permit would remain valid, and WAFWA would ensure that all mitigation and conservation obligations are met up until the point of permit suspension or revocation.

3.7 Assessment of New CCAA or Habitat Conservation Plan

As described in Section 1.3, *Options Available for CCAA Realignment*, WAFWA could replace the CCAA with either a new CCAA or an HCP. These options are worth considering because WAFWA may need to create a new program document for the industry participants who wish to voluntarily amend their CIs to align with a revised mitigation framework. In this scenario, the industry participants who do not wish to amend their CIs would remain part of the original CCAA (this approach is discussed further in Actions D-6 through D-8 in Section 4.5, *Recommended Actions to Improve Defensibility*). The participants in the updated program could do so using a new CCAA or an HCP, both of which are evaluated below in general terms.

3.7.1 New CCAA

WAFWA may need to amend the CCAA to address the defensibility issues outlined in Section 3.3, *Regulatory Assurances*, and discussed further in Section 4.5, *Recommended Actions to Improve Defensibility*. It may be simpler for WAFWA to administer the CCAA program if the participants who wish to participate in the updated program (by voluntarily amending their CIs) join a new CCAA. A new CCAA and Enhancement of Survival Permit offer the advantage of more clearly separating the participants in the original CCAA from the participants in the updated program. For this to work, USFWS would have to approve the new CCAA and issue the new permit prior to finalizing a listing of LPC, if that is proposed in May 2021. Given that the new CCAA would be based heavily on the current CCAA, we expect that review and processing to be expedited. USFWS could perhaps satisfy NEPA compliance for the new CCAA by relying entirely on the original Environmental Assessment and approving the new CCAA with a Categorical Exclusion. Once the CCAA program is updated, WAFWA would likely close off new enrollments in the old program. A new CCAA could also give WAFWA the opportunity to apply for a permit duration longer than the current permit (i.e., beyond 2044), bringing additional value to participants.

The drawbacks to a new CCAA include the additional time and cost to prepare a new CCAA, including negotiations with USFWS to ensure that the new CCAA adheres to the 2016 CCAA policy (see Section 3.4, *Regulatory Standard*). An important consideration for a new CCAA is timing; a new CCAA could be approved by USFWS as early as late 2021 or early 2022 because of the time required to develop the new mitigation framework (see Section 4.6, *Realignment Phase 2 Schedule*, for details

on schedule). A new CCAA approved in early 2022 would only leave a number of months for enrollment (or re-enrollment) prior to a potential listing being final in mid- to late 2022.[38]

3.7.2 Habitat Conservation Plan

If WAFWA decides to amend the CCAA to address financial and defensibility concerns, WAFWA should consider preparing an HCP for the new participants as an alternative to a new CCAA. USFWS guidance until now has been that HCPs must cover at least one listed species, effectively precluding the use of an HCP just for a non-listed species (USFWS and NMFS 2016). As part of this realignment process, USFWS has stated that its policy is changing to allow HCPs to cover only non-listed species.[39] In fact, USFWS is already working with several applicants around the country who are preparing HCPs only for non-listed species.

There are several important differences between an HCP and a CCAA that should be considered. First, HCPs have a different regulatory standard from a CCAA. HCPs must "fully offset" the impact of the take or mitigate it to the maximum extent practicable. This mitigation standard is arguably lower than the "net conservation benefit" standard in the 2016 CCAA policy (and which would apply to a new CCAA).[40]

Second, an HCP allows for companies to enroll at any time, before or after LPC listing. In contrast, a CCAA only allows enrollment before listing occurs. If LPC listing becomes final in mid- to late 2022, the current CCAA would allow additional enrollment for, at most, another 12–18 months from when enrollment is reopened, assuming this happens next year (enrollment is currently closed pending realignment). Industry participants in the realignment process were more immediately concerned with ensuring the financial sustainability of the program than with expanding enrollment, so this difference between an HCP and CCAA may not be as important to WAFWA.

Finally, an HCP would take more time to prepare and cost more than a new CCAA. The time and cost involved in a new HCP depends heavily on the type of NEPA document USFWS selects and how different the HCP would be from the original CCAA. An HCP has more requirements than a CCAA, although many of those requirements can be met by incorporating work already done by WAFWA in implementation (e.g., monitoring program, funding plan). It is unclear whether NEPA compliance for a new HCP could be accomplished with Categorical Exclusion or whether a new Environmental Assessment may be needed. USFWS makes the determination after an evaluation of the differences between the HCP conservation strategy and the original CCAA conservation measures, and other factors such as the level of controversy expected (a Categorical Exclusion cannot be used if there is

[38] In the past where there was little time between the approval of a CCAA and a new listing taking effect, USFWS has in some cases allowed interested parties to submit a letter stating their intent to enroll in the CCAA. As long as these letters were received prior to listing, USFWS allowed the details of enrollment to be finalized after the listing. A similar approach could be available with a new CCAA, which would alleviate some of the time pressure.

[39] The ESA and its implementing policies and regulations do not preclude an HCP for non-listed species, but USFWS guidance in its HCP Handbooks (1996 and 2016) have effectively precluded it. USFWS and HCP applicants can deviate from the guidance in the HCP Handbook if USFWS management approves that the change does not conflict with policy or regulation. USFWS has also stated it intends to update ESA regulations soon to explicitly allow this approach.

[40] USFWS staff noted that in the case of LPC, the difference in regulatory standard between an HCP and CCAA may not matter because a similar level of conservation may be required to avoid a jeopardy determination. ICF believes that the distinction remains and is important, but we acknowledge this cannot be confirmed until a conservation strategy is developed for an HCP and compared to the CCAA.

"extensive controversy"[41]). ICF estimates that a new HCP could take as little as 1 year to prepare or as long as 2–3 years to prepare. If the HCP was not completed before an LPC listing took effect, the CCAA could remain in effect until the HCP was completed to provide take authorization in the meantime. The additional cost of a new HCP could be covered, in part, by a federal HCP planning assistance grant but only with the longer timeframe.[42]

Some participants expressed concern that an HCP would not meet the purpose of the CCAA to help preclude the listing of LPC. USFWS has made clear during the realignment process that, all else being equal, whether a conservation program is a CCAA or HCP has no bearing on its evaluation of the program when making its listing determinations. Listing regulations provide the authority for USFWS to consider CCAAs, Safe Harbor Agreements, and HCPs equally. In other words, if the conservation programs are the same, USFWS considers an HCP the same as it would consider a CCAA in its listing decisions (if an HCP conservation program included less conservation than a CCAA, USFWS may weigh the CCAA more heavily in its listing decision). What matters to a listing decision is the conservation program's demonstrated benefits to LPC and the reduction in threats it provides, not the conservation tool used.

[41] USFWS 516 Department of Interior Manual Appendix 2.

[42] The Cooperative Endangered Species Conservation Fund (aka "Section 6 grants") administered by USFWS provides matching funds for HCP preparation. Because of the long cycle to apply for and receive these funds (18–24 months), such a grant would only be useful if WAFWA prepared an HCP with a longer timeframe. At a recent conference (November 18, 2020), USFWS grant program managers stated that the new Section 6 grants will allow applications to support preparation of HCPs only for non-listed, at-risk species.

Chapter 4
Recommendations for Phase 2

Chapter Summary

- The goals of the CCAA realignment process are improving financial sustainability, improving defensibility, and improving transparency.
- Key questions remain as to whether participants will decide to make certain changes to realign the CCAA; answering these questions will help shape the CCAA realignment strategy.
- WAFWA, in coordination with the CCAA realignment implementation team, should take actions in Phase 2 of the realignment process to improve the CCAA's transparency and financial sustainability.
- WAFWA, in coordination with the CCAA realignment implementation team, should determine in Phase 2 the cost implications of realignment options to address the program's defensibility issues, and determine how many participants are willing to accept these costs to improve the program's defensibility.
- The number of participants willing to modify their CIs to accept changes to the program can help determine whether WAFWA should amend the existing CCAA or create a new CCAA or HCP.
- If WAFWA opts to amend the CCAA, it should complete that amendment before USFWS's final listing decision for LPC is made. In order to complete the CCAA realignment process by that time, WAFWA should implement the recommended actions by October 2021.

Chapters 1, 2, and 3 address Phase 1 objectives to identify issues, assess the CCAA's financial status, clarify options available to improve the CCAA, and identify potential changes (see Figure 1 in Chapter 1). In this chapter, we identify our recommended strategy for Phase 2 of the CCAA realignment process, including next steps for design and implementation. Our recommendations are based on (1) achieving the goals of the CCAA realignment, which we describe below in Section 4.1, *Goals of the CCAA Realignment*; (2) answering the remaining questions for realignment, which we describe below in Section 4.2, *Remaining Questions for Realignment*, and illustrate in Figure 4; (3) extensive input from WAFWA staff, state wildlife agency leadership, oil and gas industry participants, and key stakeholders; and (4) our experience and professional judgment gained from developing and implementing successful large-scale ESA Section 10 mitigation and conservation programs across the country.

4.1 Goals of the CCAA Realignment

Initially, WAFWA set the following goals for the CCAA realignment process.

1. Ensure adequate regulatory assurances for industry participants and landowners.
2. Ensure the long-term financial sustainability of the conservation program.

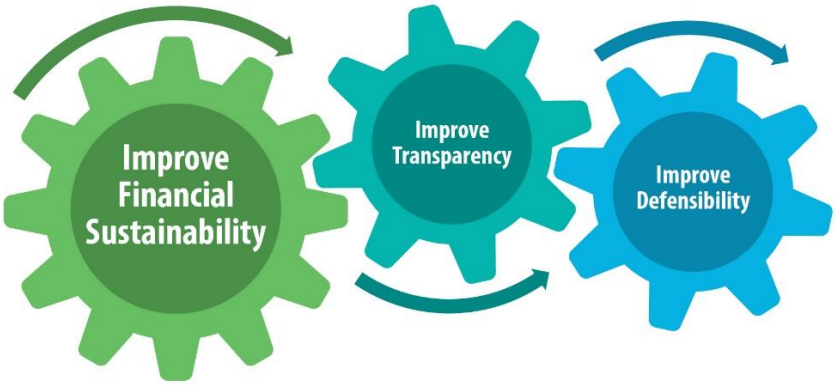
During Phase I of the CCAA realignment process, these goals were refined and expanded in response to stakeholder input. These revised goals are listed below and illustrated in Figure 3.

1. Improve CCAA financial sustainability to ensure the long-term viability of the program.
2. Improve CCAA defensibility to ensure adequate regulatory assurances for industry participants and landowners.
3. Improve CCAA transparency of the program to participants and the public to demonstrate compliance, financial sustainability, and defensibility.

Goals 1 and 2 derive from WAFWA's original intent of the CCAA's realignment. Feedback received during Phase 1 confirmed that these goals remain of primary importance to the CCAA realignment. We added the third goal because it addresses an important issue consistently raised in Phase 1: the need for greater transparency in the CCAA program.

In the following sections, we recommend actions to achieve these goals and address the findings identified in Chapter 3, *Phase 1 Findings*.

Figure 3. Goals of the CCAA Realignment Process



4.2 Remaining Questions for Realignment

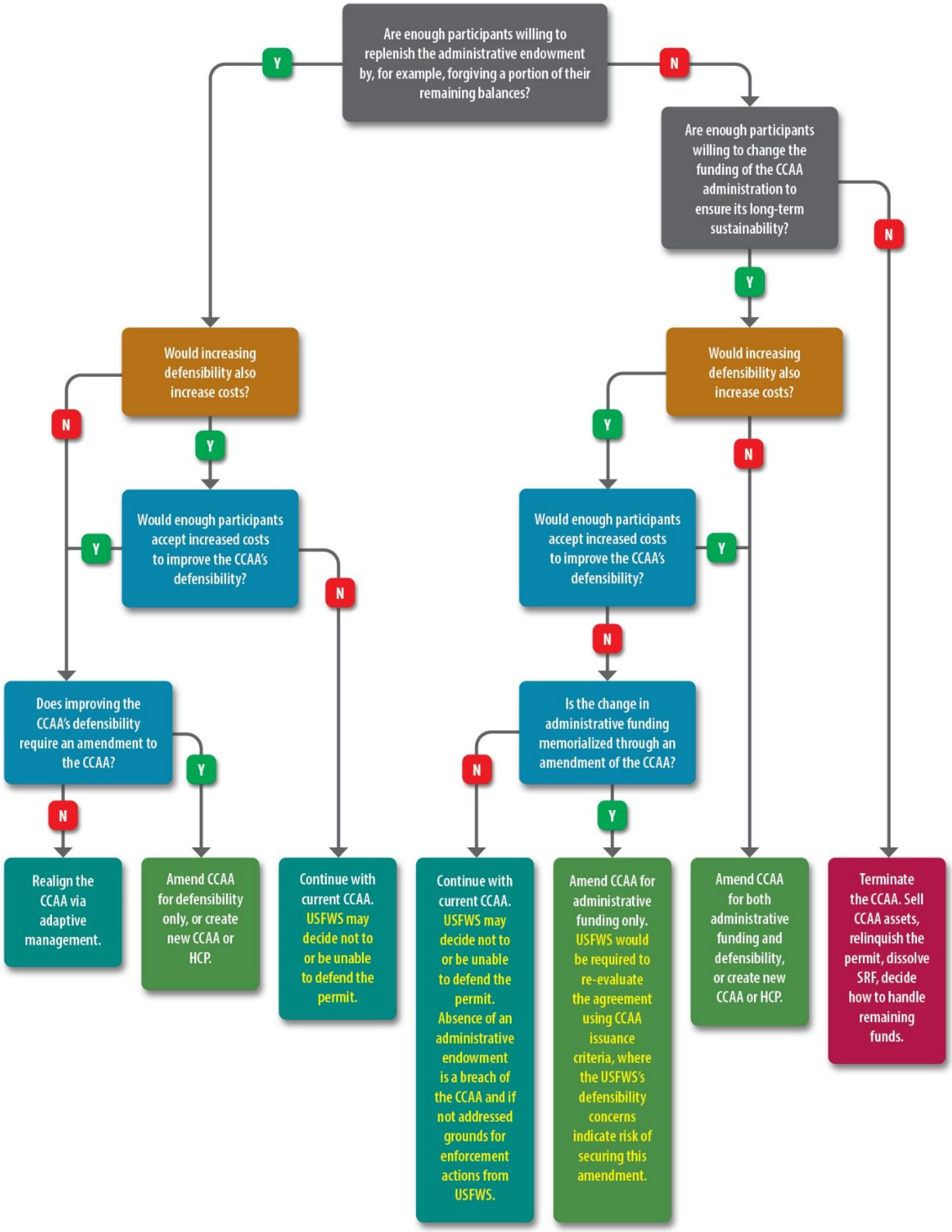
Based on the findings presented in the previous chapter, Figure 4 on the following page illustrates the sequence of key questions to address in the realignment process and how the answers to these questions lead to potential outcomes. The key questions that must be answered are listed below.

1. Are enough participants willing to replenish the administrative endowment by, for example, forgiving a portion of their remaining balances, or are enough participants willing to change the funding of the CCAA administration to ensure its long-term sustainability?
2. If reducing the conservation costs of the program (see Section 2.5.1, Workgroup 1: Concept Proposal to Improve the CCAA's Financial Viability) and shifting funds from the conservation endowment to the administrative endowment requires early termination or partial termination of some iterative term contracts, will this negatively affect the ability of the program to secure future iterative term contracts? How can WAFWA address this issue?
3. Would addressing the defensibility issues in the CCAA also increase costs and, if so, by how much?
4. If addressing the defensibility issues in the CCAA would increase costs, would enough participants accept increased costs to improve the CCAA's defensibility?

5. Do changes to improve the CCAA's financial viability or defensibility require a formal amendment? (If an amendment is necessary, USFWS will evaluate all Enhancement of Survival Permit issuance criteria in its determination of whether to approve the amendment, making all defensibility concerns of USFWS staff relevant to the potential amendment outcome.)

Our recommendations below identify steps that WAFWA should take in the next phase of the realignment process to answer these key questions. We also recommend actions WAFWA and industry participants should take immediately to begin to address the financial risks facing the program.

Figure 4. Key Questions and Potential Outcomes for the CCAA Realignment



4.3 Recommended Actions to Improve Transparency

We recommend that WAFWA improve the transparency for the CCAA realignment process itself and the CCAA through a focus on **clear communication** and **effective organization**. We believe that all recommended actions to improve transparency can be accomplished by WAFWA through internal or administrative changes to the CCAA (see Section 1.3, *Options Available for CCAA Realignment*), without the need for a formal amendment (one possible exception to this is noted in Action T-3).

Action T-1: Convene an implementation team for CCAA realignment

Action: WAFWA should formalize an implementation team for the CCAA realignment. We recommend this team be formally invited or appointed to this role by the LPCIC. The implementation team membership should be pre-determined to ensure adequate and clear representation. For example, the team could be composed of 10 individuals representing WAFWA staff and consultants (4), LPCIC members (2), industry participants (2), and USFWS (2). The implementation team should have a clear charge and goal defined by the LPCIC. One of the initial actions taken by the CCAA implementation team should be to establish, in coordination with the LPCIC, a clear charter to help define its work and purpose to define CCAA realignment.

Rationale: During the CCAA realignment process, there has been uncertainty as to how the various committees established to oversee and advise the Range-wide Plan (see Section 1.2.6, *CCAA Governance*) are involved in the CCAA realignment process. Formalizing the CCAA realignment implementation process will make the process more transparent by communicating to participants and stakeholders who is participating and how it will proceed. It will also make the process more effective by clarifying roles and responsibilities for participants to improve accountability.

Action T-2: Simplify WAFWA decision-making for CCAA

Action: WAFWA should clarify in a memorandum or other simple document the decision-making process it intends to follow to make important decisions regarding the CCAA, including how WAFWA will act on the implementation team's recommendations and how the CCAA will be realigned. This clarification should explain the role, if any, of the committees and subcommittees described in the Range-wide Plan and summarized in Section 1.2.6, *CCAA Governance*. This clarification should also formalize an advisory role for oil and gas industry participants in the CCAA.

Rationale: The CCAA describes the adaptive management process but does not describe how WAFWA will make decisions about the CCAA beyond this. One view is that that the same decision-making process for the Range-wide Plan will be used for the CCAA. The Range-wide Plan decision-making process[43] has not proven effective for the CCAA (see Section 1.2.6, *CCAA Governance*). For example, the Advisory Committee has an oversight role in the CCAA but includes members representing wind, transmission, and agriculture—i.e., industries not involved in the CCAA. WAFWA should establish clear procedures to separate the CCAA's oversight process from that of the Range-wide Plan or establish a separate advisory committee to conduct oversight of the CCAA.

Based on the findings of realignment to date, a simpler and more transparent decision-making structure would streamline CCAA administration and increase the likelihood that issues and

[43] For details about the Range-wide Plan's decision-making process, see pages 110–116 of that plan (Van Pelt et al. 2013).

solutions are identified early. The CCAA and its separate Enhancement of Survival Permit give WAFWA the flexibility to devise a simpler decision-making process for the CCAA than used by the Range-wide Plan. By improving the CCAA's administration, WAFWA will also be in position to more clearly communicate its compliance status and benefits to LPC to USFWS, stakeholders, and the public.

Action T-3: Separate accounting and tracking of CCAA from the Range-wide Plan

Action: WAFWA should track impact units (debits) and conservation offset units (credits) associated with the CCAA separately from the Range-wide Plan. This will require assigning portions of each conservation property to either the CCAA or to the Range-wide Plan.

Rationale: As described in Section 1.2.1, *Relationship to Range-wide Plan*, although the CCAA shares many of the components of the Range-wide Plan, it is a distinct permit from the Range-wide Plan and compliance should be tracked separately. For example, impact debit and conservation credit tracking is essential to evaluating the performance of the CCAA's conservation strategy. Currently, WAFWA accounts for and tracks CCAA impact units separately from the Range-wide Plan, but it has not separated conservation offset units for projects enrolled in the CCAA from offset units for impacts from projects enrolled in the Range-wide Plan. This approach obscures the performance of the CCAA's conservation strategy and makes it more difficult to demonstrate that the CCAA is meeting the conservation standards required by a CCAA. Depending on how this action is implemented, it could be accomplished through an administrative change to the CCAA, or it may require a CCAA amendment.

Action T-4: Continue to refine and produce stand-alone annual report for CCAA

Action: WAFWA should continue to refine and produce the annual compliance report for the CCAA that focuses exclusively on the CCAA program.

Rationale: The annual report is the primary means WAFWA has to communicate with USFWS and the public its demonstration of compliance with and proper implementation of the CCAA. In April 2020, WAFWA submitted to USFWS a stand-alone 2019 annual report for the CCAA that was not combined with the Range-wide Plan annual report. This report helped to clarify the CCAA's compliance and conservation performance apart from the Range-wide Plan. The revised compliance report was well received and has improved transparency.

Action T-5: Revise CCAA accounting framework and ensure proper disclosure of finances

Action: WAFWA needs to continue to address the audit findings relative to financial management, including aligning accounting with WAFWA's program operations and correcting material deficiencies identified by the audit to ensure the CCAA's disclosure of finances according to best practices and public accounting standards for non-profits.

Rationale: The program audit contained several findings addressing WAFWA's finances (Guillon 2019:12). WAFWA is already addressing these findings, and it should also consider clarifying how its accounting aligns with the separate CCAA and Range-wide Plan programs. In developing the

program financial model, it became clear that WAFWA lacks clear rules for how to allocate costs between the CCAA and Range-wide Plan. For example, the annual LPC range-wide population survey is a requirement of the CCAA and Range-wide Plan, but the costs of this item (approximately $500,000 annually) are not allocated between the two programs. These allocation rules are important to be able to properly and consistently forecast the CCAA's long-term costs and help ensure its financial sustainability.

Action T-6: Clarify CCAA implementation roles and responsibilities of WAFWA and SRF

Action: WAFWA and SRF should clarify through written agreement their respective roles and responsibilities in implementing the CCAA.

Rationale: WAFWA is listed as the permittee on the Enhancement of Survival Permit. WAFWA created the SRF, a 501(c)4 nonprofit organization, to manage the financial operations of the CCAA. SRF has the same Executive Committee and Board of Directors as WAFWA. The 2020 CCAA annual report lists both WAFWA and SRF as entities responsible for the CCAA. According to WAFWA staff and the financial audit, the dual responsibility and overlapping governance structure has created confusion as to which entity should perform certain tasks in implementation. WAFWA should clarify SRF's role in implementing the CCAA as it relates to WAFWA's authority and decision-making process as the permit holder.

4.4 Recommended Actions to Improve Financial Sustainability

We recommend the following actions to improve financial sustainability. These actions fall into four categories: **improve forecasting**, **reduce CCAA liabilities and costs**, **increase revenue to the CCAA,** and **ensure adequate endowments in perpetuity for the CCAA**. We believe that all of the recommended actions to improve financial sustainability can be accomplished by WAFWA through internal or administrative changes to the CCAA (see Section 1.3, *Options Available for CCAA Realignment*) without the need for a formal amendment.

4.4.1 Improve Forecasting

Action F-1: Develop 5-year business plan for CCAA

Action: WAFWA should develop a 5-year business plan for expected CCAA administration and operational costs. This business plan should be revisited and reassessed annually, including financial goals that are tied to the financial program model inputs and results. The business plan should consider the following.

- Utilizing external resources when feasible to save long-term costs.
- Including a policy regarding clear allocation of costs to either the CCAA or the Range-wide Plan.

Rationale: As described in earlier chapters, WAFWA has substantially reduced its operating costs for the CCAA in 2019 and 2020. However, these operating costs are not sustainable over the long-term. To accurately determine revenue needs and endowment performance, WAFWA must develop

a business plan with projected operating costs that incorporate the adopted realignment actions. The realignment participants recommend developing a 5-year business plan to better forecast needs and reassessing this 5-year plan annually (see Appendix B).

The realignment participants also suggest using external resources, such as third-party contractors, state employees, academic institutions, landowners, or oil and gas company participants, to reduce costs. These external resources may be able to perform tasks or provide other program functions, as long as public funding or resources do not pay for mitigation[44] (also see Appendix B for additional suggestions). The program financial model provides a tool to develop and refine these cost forecasts as part of a 5-year business plan for the CCAA.

Action F-2: Expand financial model to assess full potential costs of program

Action: WAFWA should develop a new program financial model that allows estimates of the costs of mitigation under different options to address defensibility issues (see Actions D-1 through D-4). After the stakeholders have agreed on the components of the conservation framework, WAFWA should develop a working model, similar to the financial model for the existing CCAA developed to date, of the new CCAA that allows entering actual costs and preparing forecasts under different scenarios (see Action D-5).

Rationale: Participants need a solid understanding of the potential costs of changes to the conservation framework to address defensibility issues (see Section 4.5, *Recommended Actions to Improve Defensibility*). The cost implications of these program changes will influence, in part, how many participants would be willing to voluntarily amend their CIs to adopt the new conservation framework (see Action D-6 below). This action will address the question posed in Section 4.2, Remaining Questions for Realignment: *would addressing the defensibility issues in the CCAA also increase costs and, if so, by how much?* Should WAFWA and participants choose to modify the conservation program, WAFWA needs to understand costs in order to determine the cost per unit of conservation on which to base fees to participants. WAFWA can also use the model to properly forecast the future financial position of the program.

Action F-3: Develop strategy for securing offset units to improve the financial viability of investments in conservation

Action: WAFWA should develop a proactive acquisition strategy for target conservation properties, using a wide range of tools to secure offsets more cost-effectively.

Rationale: To date, WAFWA has acquired conservation offsets mostly by acquiring conservation properties through offers from landowners or through traditional land markets. WAFWA could potentially secure conservation offsets units more cost-effectively by utilizing a wider range of tools and approaches. Developing an acquisition strategy for conservation properties would better prepare WAFWA to maximize the conservation value of its investments in conservation properties, including the following advantages.

- Optimize mitigation costs by targeting high conservation value sites on the most cost-efficient properties and activities.
- Find off-market opportunities that may be more cost-effective than market transactions.

[44] Typically, public funding sources cannot pay for private mitigation.

- More actively engage landowners already providing land as conservation under the program to identify additional conservation or restoration opportunities.
- Partner with other organizations share costs of larger acquisitions (although the mitigation needs of the CCAA to be completely funded by WAFWA).
- Identify if there are opportunities to create creative partnerships where other organizations to provide the mitigation (e.g., non-profit organizations, mitigation banks).

4.4.2 Reduce CCAA Liabilities and Costs

As described in Section 3.1, *Financial Status*, WAFWA must reduce its long-term liabilities and costs for conservation offsets so that the conservation endowments can last beyond the permit term. The actions described in this section are intended to achieve this goal.

Action F-4: Terminate early excess iterative term contracts from CCAA

Action: WAFWA should reassess all iterative term contracts for the CCAA and determine where excess contracts are not needed for current and future offset needs. These excess contracts should be (1) terminated now, or (2) terminated early, or (3) allowed to expire (i.e., not be renewed), or (4) assigned to the Range-wide Plan in ways that best improve the long-term financial sustainability of the CCAA program while best preserving landowner relationships. Contract terminations should occur first in lower CHAT categories where conservation is of lower priority.

Rationale: As described in Section 3.1, *Financial Status*, the CCAA's conservation assets exceed the CCAA's conservation needs based on impact units generated to date and expected in the near future. The action that will have the largest and potentially most immediate financial benefit is to cut short as many of the excess iterative term contracts as possible.[45] WAFWA has determined that it has the legal ability and authority to terminate iterative term contracts at any time. However, early termination may have adverse consequences for long-term relationships with key landowners. There may be ways for WAFWA to negotiate new contract terms with each landowner that substantially reduce CCAA liabilities and costs and maintain good relations with these landowners.

Action F-5: Restore administrative endowment by rebalancing assets and liabilities of CCAA

Action: WAFWA should coordinate via the CCAA implementation team working with industry participants to voluntarily forgive of a portion of their credit balance or a contribution of additional funds to the program (see Section 2.5.1, *Workgroup 1: Concept Proposal to Improve the CCAA's Financial Viability*). These forgiven balances or additional revenues could be used to restore the administrative endowment to a level needed to pay for long-term administrative costs. The restored administrative endowment should be designed so that it grows over time with the expected growth in administrative costs as the program itself grows.

Rationale: As discussed in Chapter 3, *Phase 1 Findings*, the CCAA must have sufficient conservation offset units available and endowments of sufficient size to cover its long-term prepaid mitigation

[45] For example, the financial model predicts that WAFWA's current CCAA endowments will last beyond the permit term (2044) if all excess iterative term contracts are terminated today. If all iterative term contracts are renewed, current endowments will be exhausted in 10–15 years, all else being equal.

obligations and its associated annual administrative costs. The Workgroup 1 concept proposal (Appendix B) includes several options that should be seriously explored in combination to accomplish this.

- Participants willingly cancel a portion of their initial balance with WAFWA. The result would be that participants who have an existing account balance in the CCAA would see part of it forgiven through a restructuring process. The forgiven balance would then be removed as a liability (i.e., canceled as pre-paid mitigation).
- Participants who do not carry an existing balance may have to contribute additional funds to the CCAA.
- Another option would be to only reduce existing balances. Only companies with an existing balance would accept a diminution in value, while companies without balances would not be required to pay extra into the fund.
- Transfer forgiven balances to restore the administrative endowment consistent with the requirements of the CCAA, and in sufficient amount to cover long-term administrative costs forecast in the 5-year business plan (see Action F-1).
- Design the restored administrative endowment so that it grows over time.

Given the sensitivity of these discussions and the confidentiality of each company's data, the realignment participants recommend that WAFWA first provide the acceptable level of liability for the program given the program's current and foreseeable conservation obligations (see Action F-4 above and Action F-9 below), and then allow the participants to negotiate an acceptable sharing of the burden by themselves. The process needs to be perceived as fair by the participants to maximize participation.

An important finding of Phase 1 was that the administrative functions and costs of the CCAA continued to grow as the program grew, but the administrative endowment got smaller and smaller until it was exhausted in 2017. To prevent this from occurring again, the restored administrative endowment must be designed to grow in parallel with the expected growth of the CCAA program, so that endowment returns keep pace with expected increases in cost.

Action F-6: Cancel balances and obligations for terminated participants

Action: WAFWA should cancel credit balances and conservation obligations for participants that have been terminated without generating any impact units. In addition, WAFWA could contact participating companies who have not generated impact units recently to verify their continued participation in the program. Going forward, WAFWA should strengthen procedures and deadlines for termination.

Rationale: WAFWA has terminated CIs with 16 companies for non-payment (Guillon pers. comm.). In the 2019 annual report, WAFWA identifies two companies that have been suspended from the program to date due to non-payment. By assessing the status of all enrolled companies, WAFWA may be able to reduce its liabilities further by cancelling CIs or terminating additional companies that have recently gone bankrupt or do not intend to use the program any further. In addition, some companies may have sold their assets. WAFWA has established deadlines for fee payment and notifications of non-payment. WAFWA could also establish a regular notification process to verify a company's continued participation in the CCAA that could be combined with an annual forecast of future impact unit and expected conservation offset unit needs.

Action F-7: Reassess all landowner incentive payments and payments for management and restoration

Action: WAFWA should conduct a study to inventory all landowner management and restoration actions and the fees paid for those actions, in order to determine the most cost-effective means of achieving the restoration goals of the CCAA (see also Action D-1 regarding restoration). As part of this study, the need for all incentive payments to landowners should be reassessed.

Rationale: Based on the assessment by the realignment participants, WAFWA currently pays landowners fixed per acre fees for management actions that appear to exceed typical rates in this region for the same actions. Furthermore, the CCAA's mitigation framework, which uses the HEG to measure habitat quality, does not directly measure the ecological value or uplift for these actions to demonstrate the conservation benefit required to meet the CCAA standard. This is due, in part, to the vague definition of *restoration* in the CCAA and a lack of any definition of *enhancement*.

WAFWA has been paying landowners an "incentive payment" upon enrollment in the program to make the program more attractive. WAFWA staff's rationale for these incentive payments is that they were needed at the beginning of the program to incentivize first-time enrollments and to help landowners offset the costs of important changes to their operations that benefit LPC (e.g., reducing livestock stocking rates, adding water or fencing to change stocking locations). Such payments may no longer be necessary for contract renewals. For transparency, if payments are still needed to offset management costs, these payments should be part of clear payments to landowners for specific enhancement or restoration benefits, not as a bonus to enroll in the program.

4.4.3 Increase Revenue to CCAA

Action F-5 (*Restore administrative endowment by rebalancing assets and liabilities of CCAA*) may sufficiently fund the administrative endowment by transferring funds from the conservation endowment, but WAFWA should also evaluate ways to generate new revenue for the CCAA. Additional recommended actions to generate revenue to the CCAA are listed below.

Action F-8: Improve endowment performance while managing long-term risk

Action: WAFWA should continue its process currently underway to improve the financial performance of its endowments while minimizing long-term risk.

Rationale: The long-term net returns that WAFWA can obtain from its endowments (i.e., returns minus inflation and investment management fees) is critical to ensuring the program's sustainability. WAFWA must balance its desire to maximize investment returns with its fiduciary responsibility to manage risk and to maintain the endowments in perpetuity. WAFWA has formed an investment advisory committee to advise the Executive Director on its investment decisions.

Action F-9: Assess feasibility of selling land assets

Action: WAFWA should assess the legal and financial feasibility of selling land assets to generate revenue immediately, including its largest asset by far, Sunview Ranch; the office building in Boise, Idaho; and land owned by the Texas Parks and Wildlife Department (TPWD).

Rationale: In 2016 WAFWA purchased Sunview Ranch (formerly called Tate Ranch) in fee title. This nearly 30,000-acre ranch provides high-quality habitat for LPC in the Sand Sagebrush Prairie

ecoregion. Although the site is a cornerstone property of the Range-wide Plan and the CCAA, it provides conservation offset units currently in excess of what is needed in that ecoregion. Conservation units there are also in excess of what is expected in that ecoregion for the foreseeable future. In 2020 Sunview Ranch is estimated to provide 22,212 conservation offset units, but the CCAA program only needs 694 offset units in that ecoregion (3% of available credits).[46] WAFWA should assess the feasibility of selling the Sunview Ranch in fee simple while retaining a conservation easement only on the portion of the ranch needed for conservation offsets long-term. The Nature Conservancy owns the current conservation easement over the property, which may preclude this type of sale or transfer. WAFWA and industry will need to work together to estimate long-term conservation offset needs in the Sand Sagebrush Prairie ecoregion in order to determine how much of the ranch WAFWA should retain or can afford to retain in an easement for the CCAA and Range-wide Plan, if this approach is feasible. There may be another opportunity for a similar sale or transfer with land owned by TPWD that is also part of the conservation program for the CCAA. When assessing the feasibility of selling permanent conservation assets, WAFWA should also consider the potential implications for LPC conservation strongholds identified in Section 19 of the CCAA and on pages 84–85 of the Range-wide Plan.[47]

Action F-10: Develop and adopt policy for routine fee increases to keep pace with inflation

Action: WAFWA should develop and adopt a policy change to ensure that CCAA fees are either (1) automatically increased annually to keep pace with inflation, or (2) "trued up" with actual program costs within the limits established by the CCAA.

Rationale: As described in Section 3.1, *Financial Status*, CCAA revenue through fees has not kept pace with increasing program costs. This was due, in part, to WAFWA not reassessing fees at least annually and not increasing fees enough times to help offset rising costs. One example is to include provisions for automatic fee increases tied to accepted indices of general cost inflation such as the Consumer Price Index for a particular region.[48] We believe that such changes can be made by WAFWA internally (i.e., by policy) without amending the CCAA, as long as the fee increase caps are followed.

4.4.4 Ensure Adequate Endowments in Perpetuity for CCAA

Action F-11: Formalize the newly formed investment committee

Action: WAFWA should formalize the composition and role of the Investment Committee.

Rationale: SRF is in a position of fiduciary with regard to the management of the endowments. Therefore, it should have robust policies and processes in place to ensure that funds are managed appropriately based on the CCAA, the CIs, and applicable laws and regulations. Because of the complexity of this task, it is advisable that WAFWA's Executive Committee (see Section 1.2.6, *CCAA Governance*) creates a formal Investment Committee tasked with advising the Executive Committee

[46] WAFWA holds an additional 8,552 conservation offset units in that ecoregion from iterative term contracts.

[47] The CCAA does not identify any acreage objectives for strongholds, but includes an adaptive management element for strongholds on page 26 that refers to stronghold acreages in the "WAFWA affected acreage report."

[48] Consumer Price Index changes are published monthly by the U.S. Bureau of Labor Statistics, both nationally and by large regions.

and supervising SRF's financial advisor. The Investment Committee should be composed of members who offer a diversified mix of knowledge and experience. In addition, the Investment Committee should develop a charter that details, at a minimum, its processes for record-keeping and decision-making and establishes timelines for performance reviews.

Action F-12: Develop and maintain an investment policy statement

Action: WAFWA should develop a clear Investment Policy Statement and ensure that investment decisions are made in accordance with that Investment Policy Statement.

Rationale: An Investment Policy Statement would be used to clearly communicate the Executive Committee's expectations to SRF's financial advisors. It should establish key parameters such as the return and risk expectations, the need for liquidity, and the type of investments that are allowed or prohibited. Given the impact of investment returns on the sustainability of the endowment, this is a critical point for the Executive Committee and the Investment Committee to focus on. In addition, any sub-endowment (e.g., established for individual properties) should be managed in accordance with the Investment Policy Statement.

Action F-13: Develop a forecasting framework

Action: Beyond the financial model proposed in F-2, WAFWA should develop a framework to forecast the effect of changes in economic conditions or regulations on the sustainability of the CCAA.

Rationale: After the model proposed in F-2 is developed, SRF should establish a clear protocol to regularly forecast the potential effects on the sustainability of the program of factors such as changes in participants' activities, changes in economic conditions in the oil and gas industry, changes in stock/bond market conditions and of return expectations, and changes in regulations on the development of oil and gas resources. An established committee (either finance or investment) should be tasked with defining future scenarios and reporting the forecast to the Executive Committee.

4.5 Recommended Actions to Improve Defensibility

Throughout the realignment process, USFWS staff have identified defensibility concerns with the CCAA (see Section 3.3, *Regulatory Assurances*) and recommended changes to the CCAA that they advise will improve its defensibility (see Appendix C). We recommend Actions D-1 through D-4 to consider changes to address USFWS staff's defensibility concerns through developing a revised conservation framework. This revised conservation framework would be vetted by the CCAA realignment implementation team (Action T-1), used to estimate costs for implementing the program (Action D-5), and used to answer remaining questions for realignment numbers 3, 4, and 5 (Section 4.2, *Remaining Questions for Realignment*) and to determine the ultimate outcome of the CCAA realignment through Actions D-6 through D-8. Many of the recommended actions to improve defensibility may be accomplished by WAFWA through internal changes (including adaptive management) or administrative changes. However, depending on the nature of some changes (particularly Action D-7), a formal amendment may be necessary.

Action D-1: Consider modifying conservation framework to clarify and increase restoration requirements

Action: WAFWA should define restoration and enhancement more clearly in the CCAA, clarify how these terms apply to the conservation framework, and consider increasing the amount of restoration required to offset habitat loss in order to increase the likelihood that the program can demonstrate that it has achieved a net conservation benefit.

Rationale: As described in Section 3.3, *Regulatory Assurances*, WAFWA targets 20% of offset units to arise from restoration and 80% of offset units to arise from enhancement. However, these targets are not identified in the CCAA, nor does the CCAA clearly define restoration versus enhancement. The conservation framework should clearly define these terms and could consider USFWS's definition of restoration as a starting point.

> Restoration is the reestablishment of ecologically important habitat and/or other ecosystem resource characteristics and function(s) at a site where they have ceased to exist, or exist in a substantially degraded state. That is, taking an action to convert non-usable space to space that is usable for the lesser prairie-chicken. The three primary examples of restoration of LPC habitat include removal of woody vegetation encroachment, converting cropland or introduced pasture to native grassland, and removal of infrastructure which is impacting space use by the LPC.[49]

Given that the primary threats to LPC are habitat loss and fragmentation, clearly measuring the amount of habitat conserved to offset the amount of habitat lost is important for the conservation framework to demonstrate that it is resulting in a "net conservation benefit." USFWS staff's position is that offsetting LPC habitat loss by simply protecting and improving existing habitat is not enough to meet this standard. To meet the net conservation benefit standard, each acre of habitat lost due to project impacts should be offset with an acre of habitat restored. This framework would provide no net loss of habitat and more clearly demonstrate net conservation benefit. Using the 2:1 offset to impact ratio of the CCAA, this would mean that for each acre of LPC habitat impacted, 1 acre of LPC habitat would be restored and 1 acre of LPC habitat would be enhanced. This conservation framework could also use different ratios depending on the CHAT in which impacts occur. The Workgroup 2 concept proposal (Appendix C) includes other ideas to increase restoration in the conservation framework. The cost of implementing this measure needs to be determined (see Action D-5, which is intended to address this uncertainty).

Action D-2: Consider modifying conservation framework to increase the proportion of permanent conservation

Action: WAFWA should consider increasing the minimum proportion of permanent conservation easements from 25% to at least 50%. WAFWA should also document for USFWS how it intends to administer iterative term contracts in perpetuity (i.e., after permit expiration) to provide USFWS with assurances that WAFWA can rely upon iterative term contracts for a large share of the permanently conserved acreage for LPC.

Rationale: WAFWA's use of iterative term contracts has benefits and should remain a component of the conservation framework. These benefits include increased flexibility to shift conservation on the landscape to address changed environmental conditions affecting LPC habitat. For example, climate

[49] As supplied in the Workgroup 2 concept proposal (Appendix C). USFWS developed this definition in discussing ESA Section 10 permits for LPC with applicants (Nichols pers. comm. [b])

change could result in changes to LPC range or habitat distribution, or other development could occur on the landscape in the vicinity of conservation lands that degrades their value for LPC. However, the proportion of conservation secured through permanent conservation easements should be increased to 50% to increase certainty of permanent habitat conservation to offset LPC's primary threat, habitat loss. Increasing the proportion of permanent conservation that produces offset units would have the following benefits for the CCAA.

- It would provide greater certainty that conservation occurs on the landscape in perpetuity,[50] which reduces the risk to LPC and strengthens regulatory assurances for participants.
- WAFWA can more easily transfer its liability of conservation in perpetuity with permanent conservation easements because they could be held by a third party responsible for maintaining the easement in perpetuity with a non-wasting endowment created when the easement is recorded. Iterative term contracts held by WAFWA create a more uncertain future liability because WAFWA is responsible for administering these offset units in perpetuity without knowing where the conservation would occur or how it will be achieved.
- Permanent conservation is a more proven approach that eliminates the uncertainty of renewal or replacement of iterative term contracts after their term ends.
- Increasing the proportion of permanent conservation facilitates more long-term investment in habitat enhancement and restoration actions where benefits to the species could take many years to be fully realized (i.e., beyond the duration of one 5–10-year iterative term contract). Especially if the conservation framework is to clarify and increase the amount of restoration action occurring to offset impacts (see Action D-1), permanent conservation easements would support projects that take longer to restore LPC habitat.

Action D-3: Consider modifying the conservation framework to define impact units and conservation offset units in terms of acres of lesser prairie-chicken habitat, not in terms of Habitat Evaluation Guide calculation

Action: WAFWA should consider using acres of LPC habitat to define units of impact and conservation offset, instead of units based on the HEG score. HEG score can continue to be used for monitoring purposes to measure habitat quality on conservation lands.

Rationale: The HEG is an objective, repeatable means of measuring important components of habitat quality for LPC, which is an important consideration meeting the biological needs of the species. However, applying it as a continuous variable that changes annually to determine impact units and offset units increases complexity in the conservation framework's debit/credit tracking system and causes issues related to the CCAA's compliance and defensibility.

- The HEG measures some aspects of habitat quality but not others. For example, it factors in vegetation composition but not vegetation structure.

[50] This assumes that the permanent conservation easement adequately protects the conservation property in perpetuity from rights and uses that could diminish its habitat value for LPC. Even if the conservation easement cannot protect the habitat from mineral entry on split estates (i.e., where the subsurface mineral rights are severed from the surface development rights), it would protect the habitat from non-mineral development in perpetuity. In contrast, term conservation contracts can be voluntarily terminated by the landowner with only 30 days' notice.

- Using the HEG to measure impacts and conservation is not aligned with the units of take authorization in the Enhancement of Survival Permit, which is defined as acres without modification by a HEG score. This misalignment complicates evaluating the CCAA's compliance with the permit.
- The HEG, as currently applied to generate conservation units, inflates the conservation benefit to LPC. WAFWA generates conservation units as compensatory mitigation without considering additionality.[51] In other words, conservation units are generated upon enrollment of conservation properties, based on the HEG score, without any actual change in habitat value for LPC through enhancement or restoration. Removing the HEG score from the calculation of initial conservation credit may eliminate this problem.

The HEG system could still be used in the conservation framework apart from measuring impact and offset units. Realignment participants suggested that the HEG could continue to be used to measure habitat quality on conservation lands as part of effectiveness monitoring. The HEG score could be used to measure initial habitat quality on conservation lands and to measure improvements in habitat quality as a result of enhancement and restoration actions.

Realignment participants expressed concern that removing the HEG score from the calculation of impact offset units and conservation offset units would eliminate an important result of the CCAA—that impacts have occurred on lower quality sites for LPC while conservation has occurred on higher quality sites. This outcome could still be maintained with a modified application of the HEG, for example, but using it to categorize acres of LPC habitat according to their quality, such as low, medium, or high. The cost of implementing this measure is unclear (see Action D-5, which is intended to address this uncertainty).

Action D-4: Consider increasing the assumed well impact radius from 200 meters to 300 meters

Action: WAFWA should consider increasing the assumed impact radius around a well from 200 meters to 300 meters. Increasing the assumed impact radius around wells to 300 meters would not create additional mitigation obligations for existing wells.

Rationale: The CCAA assumes an impact buffer of 200 meters (656 feet, which is up to 31.05 acres of a full circle) around all new oil and gas wells. Increasing the impact radius of wells from 200 meters to 300 meters (984 feet and up to 69.87 acres) would align the CCAA impact assumptions with USFWS policy regarding take of LPC. USFWS policy, which is established in its current guidelines for LPC mitigation (USFWS 2014b), is based on the agency's interpretation of scientific evidence (see last finding in Section 3.3, *Regulatory Assurances*, for citations of scientific literature provided by USFWS). USFWS indicated during the realignment process that, if LPC is listed and the agency must replace its Conference Opinion with a Biological Opinion to activate the Enhancement of Survival Permit, USFWS would have to assume a 300-meter well impact radius to be consistent with current policy. Continuing to use a 200-meter impact radius assumption in the CCAA would create an inconsistency with the USFWS Biological Opinion, complicating how WAFWA and USFWS would evaluate permit compliance.

[51] Additionality ensures that the compensatory mitigation to offset resource loss results from actions that would not have otherwise occurred (Sprague et al. 2015).

Current CIs cannot be changed to increase impact radii of past projects retroactively. To apply this change to future projects on enrolled properties, current participants would need to voluntarily adopt this change by amending their CIs. If CCAA enrollment is reopened, WAFWA can apply this change to future projects on new enrolled lands.

The cost of implementing this measure is unclear (see Action D-5, which is intended to address this uncertainty).

Action D-5: Update financial model to forecast costs of revised conservation framework

Refer to Action F-2.

Action D-6: Determine how many participants are willing to adopt realigned program

Action: WAFWA should explain proposed updated conservation framework and its implications to current participants and obtain feedback on whether enough participants would voluntarily amend their CIs to adopt the realigned CCAA and conservation framework.

Rationale: This action will answer the question posed in Section 4.2, *if addressing the defensibility issues in the CCAA would increase costs, would enough participants accept increased costs to improve the CCAA's defensibility?* Accepting this increased cost would require participants voluntarily modifying their CIs, as noted in Section 3.5, *Certificates of Inclusion*.

Action D-7: Choose how to implement the updated conservation framework: via CCAA adaptive management changes, CCAA amendment, new CCAA, or new habitat conservation plan

Action: WAFWA should determine whether changing the existing CCAA or creating a new program is most feasible for ensuring regulatory assurance, depending on how many and which participants would adopt the updated program.

Rationale: If all participants are willing to amend their CIs (Action D-6), then WAFWA can change the existing CCAA. WAFWA could change the CCAA either through adaptive management or through a formal amendment to the CCAA, depending on the nature of the change (see Section 1.3, *Options Available for CCAA Realignment*, and Section 4.2, *Remaining Questions for Realignment*). However, if only some participants are willing to amend their CIs, WAFWA cannot simply amend the original CCAA; the original CCAA must remain in place to support the participants unwilling to amend their CIs, and WAFWA must create a new CCAA for the participants willing to amend their CIs. If few or no participants are willing to modify their CIs, then WAFWA should consider relinquishing the original permit and only creating a new CCAA or HCP or perhaps only amending the original CCAA.

To be financially sustainable in the long-term, the amended program would need sufficient size to realize the economies of scale that the current CCAA enjoys. In total, 6,228,136 acres are currently enrolled in the CCAA (WAFWA and SRF 2020). The permit allows up to 1,866,855 acres of habitat loss, which is 30% of all land enrolled currently. To ensure that the amended program retains the necessary scale, we recommend enrollment of at least 1 to 2 million acres. If participants with enough enrolled land are willing to amend their CIs (i.e., enough to make the program financially sustainable), then we recommend creating a new CCAA or HCP for these participants and either

retaining the old CCAA for the unwilling participants or relinquishing it (see Action D-8 below for the latter decision). Creating a new CCAA or HCP gives WAFWA the opportunity to clearly distinguish the new program from the old program and to create a conservation framework that is separate from the Range-wide Plan. If not enough participants are willing to amend their CIs to make a new CCAA or HCP worthwhile, then WAFWA would maintain the current CCAA and only address financial sustainability.

The decision of whether to prepare a new CCAA or HCP rests with WAFWA and the participants willing to update their conservation framework. There are benefits and drawbacks of each approach (see Section 3.7, *Assessment of New CCAA or HCP*, for details). Based on available information, ICF recommends that if WAFWA updates the conservation framework, WAFWA should complete a new CCAA several months before listing of LPC takes effect to provide enough time to transfer enrollments of willing participants from the current CCAA to the new CCAA. If this timeframe is not feasible or if WAFWA wants to expand enrollment in the new program beyond current participants, then we recommend that WAFWA prepare a new HCP instead.

As described in Chapter 1, *Introduction*, about 20% of the funding of the LPC conservation program administered by WAFWA comes from enrollments in the Range-wide Plan. Regardless of which tool WAFWA uses for the revised conservation framework, WAFWA should consider how the revised framework may affect the Conservation Agreements under the Range-wide Plan.

Action D-8: Determine what happens to remaining participants in old CCAA

Action: WAFWA should decide if it will continue to administer the "old" CCAA for participants unwilling to modify their CIs to the updated program. If WAFWA intends to relinquish or transfer the old permit, it should determine when it will do so.

Rationale: Some participants in the current CCAA may be unwilling to amend their existing CIs to align with an amended CCAA. Alternatively, if WAFWA chooses to replace the current CCAA with a new CCAA or HCP, some existing participants may be unwilling to transfer their participation to the new permit. In any case, WAFWA needs to determine whether and how to administer the remaining CCAA and its participants. Section 8 of the CIs indicates "All funds remaining in the Habitat Conservation Fund Account will be retained by WAFWA and be used for conservation of the [LPC]." Depending on the level of remaining participation, WAFWA's administrative costs may increase substantially to the point where it is infeasible to remain as the permit holder and administrator. WAFWA may have several options available, including the following.

- Maintain the original CCAA and permit and continue to administer it on behalf of the remaining oil and gas industry participants.
- Relinquish the original CCAA and permit and provide the option to participants to transfer to the Range-wide Plan.[52]

[52] Participants in the Range-wide Plan are required to sign a WAFWA Certificate of Participation and enter into a WAFWA Conservation Agreement.

4.6 Realignment Phase 2 Schedule

As noted in Section 3.6, *Lesser Prairie-Chicken Listing Process and CCAA Implications*, a proposed listing decision for LPC is anticipated in May 2021, and a final listing decision is anticipated between May and November 2022. In order to complete the CCAA realignment process by the time of the final listing decision, WAFWA should implement the actions recommended above to complete Phase 2 of the realignment by October 2021. Table 2 proposes a schedule for implementing each action. If the outcome of Phase 2 is amending the CCAA or creating a new CCAA, this schedule would allow enough time for NEPA review through an Environmental Assessment, which would take approximately 6 months (until about April 2022). If the outcome of Phase 2 is creating an HCP, the timeline for the final listing decision is less relevant because an HCP would allow enrollments before and after the listing.

Table 2. Schedule for Realignment Phase 2 Actions

	2020[a]	2021			
Action	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
T-1: Convene an implementation team for CCAA realignment					
T-2: Simplify WAFWA decision-making for CCAA					
T-3: Separate accounting and tracking of the CCAA from the Range-wide Plan					
T-4: Continue to refine and produce stand-alone annual report for CCAA					
T-5: Revise CCAA accounting framework and ensure proper disclosure of finances					
T-6: Clarify CCAA implementation roles and responsibilities of WAFWA and SRF					
F-1: Develop 5-year business plan for CCAA					
F-2: Expand financial model to assess full potential costs of program					
F-3: Develop strategy for securing offset units to improve the financial viability of investments in conservation					
F-4: Terminate early excess iterative term contracts from CCAA					
F-5: Restore administrative endowment by rebalancing assets and liabilities of CCAA					
F-6: Cancel balances and obligations for terminated participants					
F-7: Reassess all landowner incentive payments and payments for management and restoration					
F-8: Improve endowment performance while managing long-term risk					
F-9: Assess feasibility of selling land assets					
F-10: Develop and adopt policy for routine fee increases to keep pace with inflation					
F-11: Formalize the newly formed investment committee					
F-12: Develop and maintain an investment policy statement					
F-13: Develop a forecasting framework					

	2020[a]	2021			
Action	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
D-1: Consider modifying conservation framework to clarify and increase restoration requirements					
D-2: Consider modifying conservation framework to increase the proportion of permanent conservation					
D-3: Consider modifying the conservation framework to define impact units and conservation offset units in terms of acres of lesser prairie-chicken habitat, not in terms of Habitat Evaluation Guide calculation					
D-4: Consider increasing the assumed well impact radius from 200 meters to 300 meters					
D-5: Update financial model to forecast costs of revised conservation framework					
D-6: Determine how many participants are willing to adopt realigned program					
D-7: Choose how to implement the updated conservation framework: via CCAA amendment, new CCAA, or new HCP					
D-8: Determine what happens to remaining participants in old CCAA					

[a] Note that some actions are underway as of the writing of this report.

Chapter 5
References

5.1 References

DeYoung, R. W., and D. L. Williford. 2016. Genetic Variation and Population Structure in the Prairie Grouse. Pages 77–97 in D. A. Haukos and C. W. Boal (eds.). *Ecology and Conservation of Lesser Prairie-Chickens*. Berkeley, CA: University of California Press.

Fuhlendorf, S. D., et al. 2017. A Hierarchical Perspective to Woody Plant Encroachment for Conservation of Prairie-Chickens. *Rangeland Ecology & Management* 70(1):9–14. Available: http://dx.doi.org/10.1016/j.rama.2016.08.010. Accessed: November 19, 2020.

Guillon, B. 2019. *Audit of the Lesser Prairie Chicken Mitigation Framework. Prepared for the Western Association of Fish and Wildlife Agencies*. July 10. Confidential Report. Conservation Investment Management.

Hagen, C. A., J. C. Pitman, T. M. Loughin, B. K. Sandercock, R. J. Robel, and R. D. Applegate. 2011. Impacts of Anthropogenic Features on Habitat Use by Lesser Prairie-Chickens. Pages 63–75 in B. Sandercock, K. Martin, and G. Segelbacher (eds.). *Ecology, Conservation and Management of Grouse. Studies in Avian Biology 39*. Berkeley, CA: University of California Press.

Hunt, J. L., and T. L. Best. 2004. *Investigation into the Decline of Populations of the Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*) on Lands Administered by the Bureau of Land Management, Carlsbad Field Office, New Mexico*. June 30. Cooperative Agreement GDA010007.

Pitman, J. C., C. A. Hagen, R. J. Robel, T. M. Loughlin, and R. D. Applegate. 2005. Location and Success of Lesser Prairie-Chicken Nests in Relation to Vegetation and Human Disturbance. *Journal of Wildlife Management* 69(3):1,259–1,269.

Plumb, R. T., J. M. Lautenbach, S. G. Robinson, D. A. Haukos, V. L. Winder, C. A. Hagen, D. S. Sullins, J. C. Pitman, and D. K. Dahlgren. 2019. Lesser Prairie-Chicken Space Use in Relation to Anthropogenic Structures. *Journal of Wildlife Management* 83:216–230.

Sprague, M., D. Ross, G. Mannina, and W. White. 2015. *Universal Principles of Compensatory Mitigation*. National Mitigation Banking Association. Available: https://www.agorarsc.org/wp-content/uploads/2015/08/Universal-Principles-of-Compensatory-Mitigation-by-NMBA.pdf. Accessed: September 25, 2020.

Sullins, D. S., D. A. Haukos, J. M. Lautenback, J. D. Lautenback, S. G. Robinson, M. B. Rice, B. K. Sandercock, J. D. Kraft, R. T. Plumb, J. H. Reitz, J. M. Shawn Hutchinson, and C. A. Hagen. 2019. Strategic Conservation for Lesser Prairie-Chickens among Landscapes of Varying Anthropogenic Influence. *Biological Conservation* 238:108213.

[USFWS] U.S. Fish and Wildlife Service. 1996. *Habitat Conservation Planning and Incidental Take Permit Processing Handbook*. November 4.

[USFWS] U.S. Fish and Wildlife Service. 2014a. Final Lesser Prairie-Chicken Oil and Gas CCAA Documents. Last updated: May 19, 2014. Available: https://www.fws.gov/coloradoes/Lesser_prairie_chicken/. Accessed: November 19, 2020.

[USFWS] U.S. Fish and Wildlife Service. 2014b. *Guidelines for the Establishment, Management, and Operation of Permanent Lesser Prairie-Chicken Mitigation Lands.* December. Available: https://www.fws.gov/southwest/es/Documents/R2ES/LPC_Guidelines_for_LPC_Mitigation_Lands_Dec2014.pdf. Accessed: September 29, 2020.

[USFWS] U.S. Fish and Wildlife Service. 2016. *Habitat Conservation Planning and Incidental Take Permit Processing Handbook.* December 21.

[USFWS] U.S. Fish and Wildlife Service. N.D. *Preliminary Priorities for CCAA Realignment, Discussion Draft*. Transmitted via email from Susan Millsap, U.S. Fish and Wildlife Service. September 17, 2019.

[UFSWS and NMFS] U.S. Fish and Wildlife Service and National Marine Fisheries Service. 2016. *Habitat Conservation Planning and Incidental Take Permit Processing Handbook*. December 21. Available: https://www.fws.gov/endangered/esa-library/pdf/HCPBKTOC.PDF. Accessed: September 30, 2020.

[USFWS and WAFWA] U.S. Fish and Wildlife Service and Western Association of Fish and Wildlife Agencies. 2014. *Range-Wide Oil and Gas Candidate Conservation Agreement with Assurances for the Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*) in Colorado Kansas, New Mexico, Oklahoma, and Texas*. February 28.

Van Pelt, W. E., S. Kyle, J. Pitman, D. Klute, G. Beauprez, D. Schoeling, A. Janus, and J. Haufler, 2013. *The Lesser Prairie-Chicken Range-wide Conservation Plan*. Western Association of Fish and Wildlife Agencies. Cheyenne, WY. 367 p.

[WAFWA and SRF] Western Association of Fish and Wildlife Agencies and the WAFWA Species Restoration Fund. 2020. *2019 Annual Report for the Range-wide Oil and Gas Candidate Conservation Agreement with Assurances for the Lesser Prairie-Chicken*. April 20.

Wolfe, R. L., S. C. Kyle, J. C. Pitman, D. M. VonDeBur, and M. E. Houts. 2019. *The 2018 Lesser Prairie-Chicken Range-wide Conservation Plan Annual Progress Report*. Western Association of Fish and Wildlife Agencies. Boise, ID. 123 p.

5.2 Personal Communications

Guillon, Ben, CEO, Conservation Investment Management—phone call with Lucas Bare, Senior Manager, ICF, September 28, 2020.

Kyle, Sean [a], Western Association of Fish and Wildlife Agencies—email with file data (*WCT_Variable_Reference_Table_20200928.xls*) to Lucas Bare, Senior Manager, ICF, September 28, 2020.

Kyle, Sean [b], Western Association of Fish and Wildlife Agencies—Comment on Realignment Phase 1 Findings and Recommendations revised draft report sent to Lucas Bare, Senior Manager, ICF, December 2, 2020.

Moore, Chris, Western Association of Fish and Wildlife Agencies—email to Lucas Bare, Senior Manager, ICF, December 30, 2020.

Nichols, Clay [a], U.S. Fish and Wildlife Service—Email to Lucas Bare, Senior Manager, ICF, November 16, 2020.

Nichols, Clay [b], U.S. Fish and Wildlife Service—Email to Lucas Bare, Senior Manager, ICF, December 15, 2020.

Appendix A

Realignment Phase 1 Participants

Participant	Interviews	Workshop 1	Workshop 2	Workshop 3	Workgroup 1	Workgroup 2
Industry Representatives						
Donna Williams, Conoco-Phillips		X	X	X		X
Chris Hatchet, Merit Energy		X				
Jay Prudhomme, Merit Energy	X	X	X		X	
Kat Lyles, Merit Energy	X	X	X	X	X*	
Karen Sinard, Occidental Petroleum		X	X	X	X*	
Myles Culhane, Occidental Petroleum	X	X	X	X		X*
Matthew Thompson, Apache Corporation		X	X			
Ron Schindler, Pioneer Natural Resources		X	X	X	X	
Stan Casey, Concho Resources		X	X	X		X
Ben Sheppard, PBPA			X			X
WAFWA and State Wildlife Agencies						
Chris Moore, WAFWA		X	X			
Bill Van Pelt, WAFWA		X	X	X		X
Chanda Pettie, WAFWA		X	X	X		
Sean Kyle, WAFWA		X	X	X	X	
Brad Loveless, KDWPT		X	X	X		
Kent Fricke, KDWPT		X	X	X		X
Jake George, KDWPT					X	
Clayton Wolf, TPWD		X	X		X	
David Klute, CPW		X	X	X		
Dan Prenzlow, CPW						
Reid DeWalt, CPW		X	X			
J. D. Strong, ODWC		X	X	X	X	
Michael Sloane, NMDGF			X			
Stewart Liley, NMDGF		X	X	X		X
Tim McCoy, Nebraska Game and Parks			X			
USFWS						
Beth Forbus	X	X	X	X		X
Chris O'Meilia	X	X	X	X		X
Clay Nichols	X	X	X	X		X*

Participant	Interviews	Workshop 1	Workshop 2	Workshop 3	Workgroup 1	Workgroup 2
Pete Fasbender	X	X	X	X	X	
Non-federal Property Owners						
Jenny Pluhar, Taylor Ranch	X					
Experts and Consultants						
Ben Guillon, PhD, Conservation Investment Management	X	X	X	X		
Jim Pitman, National Wild Turkey Federation	X					
Adam Riggsbee, RiverBank Conservation LLC	X					
Barrett Jenkins, Restoration Systems	X					
Wayne Walker, Common Ground Capital	X					
Ted Koch, North American Grouse Partnership	X					
David Zippin, PhD, ICF	X	X	X	X	X	X
Lucas Bare, ICF	X	X	X	X	X	X
Jennifer Piggott, ICF		X	X	X		
Alex Bartlett, ICF	X	X	X	X		

Notes: *denotes participant who developed concept proposal

TPWD: Texas Parks and Wildlife Department; ODWC: Oklahoma Department of Wildlife Conservation; KDWPT: Kansas Department of Wildlife, Parks, and Tourism; PBPA: Permian Basin Petroleum Association; WAFWA: Western Association of Fish and Wildlife Agencies; USFWS: U.S. Fish and Wildlife Service; NMDGF: New Mexico Department of Game and Fish.

Appendix B

Workgroup 1 Concept Proposal

Note: *ICF distributed this concept proposal was distributed to CCAA participants prior to Workshop 3. ICF considered edits and comments on the concept proposal received during and subsequent to Workshop 3 in the Realignment Phase 1 Findings and Recommendations draft report.*

Concept Proposal: Lesser Prairie-Chicken CCAA Changes to Improve Financial Sustainability

This proposal was prepared by Kat Lyles (Merit Energy), Karen Sinard (Occidental Petroleum), Ben Guillon (Conservation Investment Management) Lucas Bare, and David Zippin (ICF).

Need for Proposal

A financial model of the CCAA, prepared by Conservation Investment Management, was presented to members of WAFWA, participants and USFWS who attended the LPC CCAA realignment workshops. All parties had an opportunity to review the model, the underlying data and assumptions and to provide comments and suggestions to improve its accuracy and usefulness. The general conclusion of the group was that the CCAA is not financially viable as currently implemented. In particular, the administrative endowment is depleted, and current levels of revenues cannot properly resource the administrative function needed for the program in the short term. In addition, the level of expenditure for conservation activities is currently greater than the interest generated by the conservation endowment, putting in question its long-term sustainability.

Workgroup 1 was specifically tasked with proposing changes to the implementation of the CCAA with the goal to improve its financial sustainability. Proposed changes are not expected to necessitate an amendment to the agreement.

We are presenting three different proposals that depend on key assumptions presented at the beginning of each proposal. The associated goals for each proposal are organized by order of importance.

Proposal A

The key assumption for Proposal A is that a large majority of participants agree to a restructuring of the CCAA and of SRF, similar to a bankruptcy process.

Goal 1. Improve CCAA transparency

1.1 Prepare a business plan that outlines operations, budgets, conservation activities, and governance for the coming 5 years[1]

[1] It may be difficult to establish a business forecast beyond 5 years. However, the forecast should be updated every

The business plan that was included in the Range-Wide Plan needs to be modified to ensure that the CCAA will be sustainable in the long term. We recommend that WAFWA SRF considers utilizing external resources, including but not limited to third-party contractors, state employees, academic institutions, or Participants, for field workto better align SRF's costs with the variable needs of the Program and activity levels.We recommend that the business plan be revisited each subsequent year and extended for an additional year. We recommend that the business plan be revisited each subsequent year and extended for an additional year.

1.1 Improve SRF's accounting framework to ensure full transparency, including full disclosure of financial liabilities

1.2 Improve SRF's conservation reporting to ensure that participants and the USFWS have a clear picture of the mitigation actually provided

For example, SRF should provide the participants with annual statements that show the impacts and the mitigation for each individual company. In addition, the stand-alone annual report for the CCAA should continue to provide conservation metrics to FWS to demonstrate the effectiveness of the CCAA.

Goal 2. Reduce SRF's liability

2.1 Rebalance the assets and liabilities of SRF

Different options can be explored but the solution needs to result in SRF having enough assets to cover its prepaid mitigation and its associated administrative costs (see below administrative endowment). The process needs to be perceived as fair by the participants to ensure a maximum of participation. One option could be to cancel a portion of the initial balance for all participants. The result would be that participants that have an existing account balance would see part of it forgiven through the restructuring process while participants that do not carry an existing balance may have to contribute additional funds. Another option would be to only reduce existing balances. Only companies with an existing balance would accept a diminution in value, while companies without balances would not be required to pay extra into the fund. Given the sensitivity of these discussions, we recommend that WAFWA SRF, in coordination with the participants, first provides the acceptable level of liability for the program and then allow the participants to negotiate an acceptable sharing of the burden by themselves.

2.1 Cancel mitigation obligations and existing balances for participants that have been terminated

Companies that have terminated their participation in the CCAA (either by non-payment or because their

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year based on this 5-year horizon.

land was sold to non-participants) are still receiving mitigation benefits for past impacts and may still carry an existing balance. We recommend that the balances be canceled and that the mitigation units be made available to the existing participants.

Goal 3. Ensure the sustainability of the administrative function of the CCAA

3.1 Right size the administrative function

Based on the new business plan, WAFWA SRF should determine the minimum budget needed to effectively and efficiently manage the CCAA. Some of the approaches that WAFWA SRF may want to explore are listed below:

- The resource plan should consider a part time senior management position, such as an executive director.
- Utilize external resources, including but not limited to third-party contractors, state employees, academic institutions, landowners, or Participants, to perform field work WAFWA could either oversee their work, or delegate responsibility to the external resource and ensure an audit function (similar to federal programs for permitting under CWA and ESA)
- Continue to share the cost of aerial surveys with the states or reduce the frequency of aerial surveys and supplement with on-the-ground lek surveys conducted by the states, landowners, academic institutions, and/or Participants.
- Use third-parties to provide mitigation and evaluate a model where mitigation is provided by third parties who will be in charge of sourcing, closing on and managing those properties.
- Some costs, including, but not limited to, aerial surveys, field work, and GIS-related expenses, could be reclassified as conservation costs.
- Explore using a third-party administrator. WAFWA would retain the CCAA and permit but would delegate the day to day functions to an outsourced administrator.

3.2 Create an endowment to support the current admin function

An administrative endowment to fund the administration of the program is a requirement of the CCAA. However, the administrative endowment is exhausted and would need to be re-funded to comply with the CCAA. In order to re-fund the administrative endowment with existing program funds, participants, WAFWA and USFWS would approve the transfer from the conservation endowment to the administrative endowment of an amount adequate to cover the financial needs of the administrative function. The effect of this transfer would be included in the company balance reduction proposed above to ensure that the CCAA retains an adequate level of assets.

3.3 Ensure that the admin endowment grows in parallel with the admin function to ensure

long term sustainability

WAFWA SRF should update the financial model to ensure that under reasonable assumptions, the administrative function can be funded through the endowment. In addition, any administrative growth plan should be in line with the growth of the associated endowment.

Goal 4. Reduce Conservation Costs

4.1 Terminate any mitigation that is not needed for the foreseeable future:

In some eco-regions, SRF is holding more mitigation than it anticipates needing in the foreseeable future. WAFWA SRF could pursue any or all of the three strategies below:

- Terminate unneeded temporary mitigation contracts.
- Limit management on portions of permanent mitigation properties that are not needed and switch part of the associated endowments back to the unobligated endowment.
- Reassess the restoration strategy for each remaining property and calculate the appropriate endowment for those properties.

4.2 SRF should evaluate the most cost-effective land and landowner payments for the program.

SRF payments have been based on a premium amount over similar NRCS programs, which may not be the most cost effective

We recommend that WAFWA SRF conducts a study to understand which properties and activities are the most cost-effective to provide the mitigation required by the CCAA. The participants and the states may be willing to financially participate in such as study. The workgroup wanted to highlight that additional methods of creative habitat restoration exist, that could be incorporated in the bid process described below, such as:

1) Replacing farm windmills with solar panels to reduce LPC habitat impacts
2) Removing derelict structures (e.g. telephone poles, fencing, windmills) to restore habitat
3) Water improvements (additional water lines and/or water sources with escape ramps) to improve grazing distribution for cattle and other wildlife.
4) Wildlife-friendly fencing to allow free passage of wildlife but improve grazing management plan
5) Flagging of fencing near/around historic/active leks
6) Installation and/or repair of escape ramps in open water sources
7) Brush management/removal of taller vegetation (e.g. mesquite) through chemical treatment with follow-up mechanical removal

8) Revegetation of grasses to create habitat

Based on the results of the study, WAFWA SRF could issue RFPs for projects submitted by landowners, or RFPs for a certain number of credits/units in particular ecoregions over time. We would use the market to generate competitive pricing through a bid process.

1) RFP could be issued on a regular timeframe
2) WAFWA committees could consider the bids from a conservation standpoint and from a business/financial standpoint
3) Bid could be structured so the landowners implement the restoration themselves based on specifications provided by SRF. SRF could pay the actual cost of enhancement and restoration, or payments could also be structured as a cost share program
4) Bid could also be structured for WAFWA or a contractor under WAFWA's supervision to conduct the enhancement or restoration activities on the landowner's property (activity benefits both the chicken and the grazing activity).
5) This approach gives WAFWA more control over when and how the enhancement and restoration work is done to generate credits.

4.3 SRF should pursue available opportunities to help stretch mitigation funding

Identify ways that Pittman-Robertson or other funding from states or partners such as NFWF can support mutual goals of the CCAA.

4.4 Consider eliminating or limiting incentive payments to first-time enrollment of conservation lands

Goal 5. Generate immediate revenues

5.1 Sell excess land:

- Remove easement from the unneeded portion of the ranch and sell the fee simple. (if possible, sell it to another conservation organization).
- TPWD transfers the fee simple land back to SRF who sells it. TPWD would keep the easement.
- Return the monies back to the SRF conservation endowment.

5.2 Sell the building:

- Return the monies back to the SRF conservation endowment.

Goal 6. Ensure long term viability of the program

6.1 Ensure that the unit cost effectively reflects the conservation costs

In progress. WAFWA (Sean) is reassessing the formula for the unit cost.

Proposal B

This proposal assumes that the participants would be unwilling to enter into a restructuring process with the goal to balance assets and liabilities. The assumption is also that it is still possible to bring the CCAA back to financial balance within a reasonable time frame.

Goal 1. Improve CCAA transparency – *See Proposal A*

Goal 2. Ensure the sustainability of the administrative function of the CCAA

2.1 Right size the administrative function

Based on the new business plan, WAFWA SRF should determine the minimum budget needed to properly resource the CCAA. The resource plan should include a part time senior management position, such as an executive director. Some of the approaches that WAFWA SRF may want to explore are listed below:

- Use third-parties to perform the field work (either consultant or employees). WAFWA could either oversee their work, or delegate responsibility to the companies and ensure an audit function (similar to federal programs for permitting under CWA and ESA).
- Share the cost of aerial surveys with the states.
- Explore using a third-party administrator. WAFWA would retain the CCAA and permit but would delegate the day to day functions to an outsourced administrator.

2.2 Formalize the use of the conservation endowment to pay for administrative costs

In the absence of a dedicated administrative endowment, WAFWA SRF does not have any other options but to use the conservation endowment to pay for administrative costs. In addition to optics issue, this solution is likely to require an amendment to the CCAA because the current version prevents the payment of administrative costs through the conservation endowment.

Goal 3. Generate additional revenues

3.1 Sell excess land:

- Remove easement from the unneeded portion of the ranch and sell the fee simple. (if possible, sell it to another conservation organization).
- TPWD transfers the fee simple land back to SRF who sells it. TPWD would keep the easement.

3.2 Sell the building:

3.3 Increase the unit costs:

Since SRF's liabilities are greater than its asset, it is critical to generate a net profit from activities to replenish the endowment. However, the wording of the CCAA is limiting the annual increase in cost that the program can assess. There are several options available

- Correct the formula error.
- Increase the costs to the maximum allowed in 2020.
- Increase the costs by catching up on the forgone price increases of the past 5 years.

Any or all of those options could be applied retroactively. In the foreseeable future, WAFWA SRF would increase each year the unit price by the maximum allowable.

Goal 4. Reduce Conservation Costs

4.1 Terminate any mitigation that is not needed for the foreseeable future:

In some eco-regions, SRF is holding more mitigation than it anticipates needing in the foreseeable future. WAFWA SRF could pursue any or all of the three strategies below:

- Terminate unneeded temporary mitigation contracts.
- Limit management on portions of permanent mitigation properties that are not needed and switch part of the associated endowments back to the unobligated endowment.
- Reassess the restoration strategy for each remaining property and calculate the appropriate endowment for those properties.

4.2 Use third-parties to provide mitigation to limit administrative costs and find the most cost-effective land:

In the past, SRF has provided mitigation directly to the program (I.E. SRF's staff sourced and closed on the properties themselves) and directly managed the relationships with landowners. This necessitated a large field staff that had to be laid off when oil and gas activity slowed. In addition, SRF payments have been based on a premium over similar NRCS programs. In the absence of competition between mitigation providers, we can assume that this payment framework is not the most efficient. We recommend that WAFWA SRF modifies its mitigation procurement method and switch to a model where it is provided by third parties who will be in charge of sourcing, closing on and managing those properties. An additional benefit is that these third parties may be willing to bring additional funds to the deal to purchase acres that would not be beneficial to the CCAA (because those acres cannot be restored into habitat but are still part of the proposed transaction). We recommend that WAFWA SRF conducts a study to understand which properties and activities are the most cost effective to provide the mitigation required by the CCAA (The workgroup wanted to highlight the value of infrastructure removal, such as windmills and unused

poles, as a restoration approach). It may be possible for the participants and the states to financially participate in such as study. Based on the results of the study, WAFWA SRF would issue regular RFPs to request mitigation from third parties. It may be possible to request that USFWS approves the proposed mitigation to ensure that the liability for those properties is severed from the rest of the program.

Goal 5. Reduce SRF's liability

5.1 Cancel mitigation obligations and existing balances for participants that have been terminated

Companies that have terminated their participation in the CCAA (either by non-payment or because their land was sold to non-participants) are still receiving mitigation benefits for past impacts and may still have an existing balance. We recommend that the balances be canceled and that the mitigation units be made available to the existing participants.

Proposal C

If the participants are not willing to rebalance SRF's assets and liabilities, and if Proposal B does not create a long-term path to sustainability, then we recommend that WAFWA considers selling the excess lands, selling the building, terminating the CCAA, relinquishing the permit, dissolving SRF, and determining how to return the unused monies, including the sale of the assets, back to the Participants.

Appendix C

Workgroup 2 Concept Proposal

Note: *ICF distributed this concept proposal was distributed to CCAA participants prior to Workshop 3. ICF considered edits and comments on the concept proposal received during and subsequent to Workshop 3 in the Realignment Phase 1 Findings and Recommendations draft report.*

Concept Proposal:
Lesser Prairie-Chicken CCAA Amendment to Improve Defensibility

This concept proposal was developed by Clay Nichols (USFWS), Myles Culhane (Occidental Petroleum), David Zippin and Lucas Bare (ICF), and Ben Guillon (CIM)for consideration by Workgroup 2 and to support WAFWA's decision on CCAA Realignment.

Workgroup 2 is tasked with considering changes to the CCAA to that could potentially require a major amendment to the CCAA or result in developing an HCP. It appears that some of these proposed changes are unlikely to be accomplished via adaptive management or administrative changes. The focus of Workgroup 1 is on proposed changes intended to improve the financial sustainability of the CCAA and that are likely be accomplished utilizing adaptive management or administrative provisions of the CCAA. This proposal, while still considering financial implications, focuses on identifying strategies to improve the defensibility of the CCAA.

This proposal's intended use is for consideration and discussion as part of the CCAA's realignment process. It is not intended to be decisional. Although it identifies strategies for WAFWA's consideration, this proposal is not able to reach a conclusion on whether the CCAA is defensible. Therefore, this document does not determine, nor is it intended to, make determinations on the CCAA's ultimate defensibility.

Need for Proposal

The USFWS has been petitioned to list the lesser prairie-chicken (LPC) under the Endangered Species Act. As part of its process to decide whether to list lesser prairie-chicken as threatened or endangered, USFWS will re-evaluate the compliance of the CCAA in light of that new listing. Part of this process will include updating the 2014 conference report to issue a Biological Opinion. In this Biological Opinion, the USFWS would consider the current best available science relating to the LPC as well as the implementation status of the current CCAA. Were the CCAA to be amended, the USFWS would also need to develop a conference opinion as part of the final approval package on its decision to approve this amendment. Were there a legal challenge to the CCAA, the agency would have to decide whether it can defend the permit or not.

This concept proposal is provided to WAFWA for its consideration to improve the program's defensibility as one of the goals of the realignment process.

Summary of Revised Mitigation Framework that Improves CCAA Defensibility

The list below outlines a mitigation framework that incorporates all the changes identified in the sections that follow under *Strategies to Improve CCAA Defensibility*.

- All offset units must be in place before impacts occur.
- Each impact unit should be offset with conservation from the same Service Area (Ecoregion).
- A minimum of 50% of the offsets in permanent conservation.

- For iterative-term contracts, agreement has language and mechanism in place to address uncertainty around contracts at the end (and after) the CCAA permit term expires.
- To account for the uncertainties associated with mitigation and to create a conservation benefit, incorporate a mitigation ratio into the mitigation framework. To maintain incentives for avoidance or minimization of impacts, the mitigation framework should incorporate the use of a tiered mitigation strategy (e.g., higher mitigation ratios for activities occurring in areas more important for the LPC and lower mitigation ratios for activities occurring in areas less important to the species).
- Each impact would be offset using credits defined in acres and produced in a CHAT Category of equal to or higher value than the area where the impact occurred.
- On average, offset every acre impacted with one acre of restoration and one acre of enhancement. For impacts that require less than a 2:1 ratio one acre of restoration would be provided for every acre lost to development. Restoration offset units will not be available to offset impacts until appropriate vegetative composition and structure exists.
- Allow restoration in any CHAT region to allow flexibility in program long-term (there may not be enough restoration opportunity just in CHAT 1 + 2) but should have conservation targeting built into the program.
- Prioritize permanent conservation easements in CHAT 1 and 2.

The final result would be a tiered mitigation system that prioritizes higher CHAT categories and results in, on average, for every one acre LPC of habitat lost one acre will be restored (fully replaces lost habitat) and one acre would be enhanced (accounts for uncertainty with mitigation and provides small conservation benefit) with a minimum of one of those conservation acres being under traditional permanent conservation. This mitigation system would be based upon the needs of the species and meeting the appropriate regulatory standards to ensure defensibility. Additionally, this mitigation strategy would be consistent with traditional mitigation frameworks used throughout the country and with standard principals of compensatory mitigation.[1]

Strategies to Improve CCAA Defensibility

The USFWS identified in its presentation during CCAA realignment Workshop #2 what it views as the most prominent risks to the CCAA's defensibility and steps that could be taken to address those risks. The strategies to improve the CCAA's defensibility identified below build upon those steps by providing additional background, rationale, and potential costs and implications of each change. This section concludes with an outline of a mitigation framework that incorporates each of these potential changes. Each of these changes could be incorporated into an amended CCAA or a new HCP. Changes below are listed in no particular order.

Change 1. Increase proportion of permanent conservation(applies to CCAA or HCP).

Summary of Change:

Increase the targeted proportion of permanent conservation easements from 25% to at least 50%.

[1] For example, see https://troutheadwaters.com/wp-content/uploads/backup/2015/07/Principles-of-Compensatory-Mitigation.pdf

Background:

Currently the CCAA provides that one quarter (25%) of the habitat offset units generated through the mitigation framework will be targeted toward permanent easements to support long-term conservation and population strongholds. The remaining three-quarters (75%) of the offset units are targeted towards term contracts (5-10 years); notably, the aggregate amount of term contracts allow for permanent conservation as described on page 91 of the RWP, but term contracts allow flexibility to shift conservation around on the landscape within the targeting goals of the RWP and the CHAT. That is, part of the rationale of short-term contracts was to provide permanently conserved acreage that could move in the landscape to allow more flexibility to address the biological needs of the species (e.g., suitable habitat conditions shifting in response to climate change effects).

However, recent literature indicates that the rationale in the RWP about the need to respond to variation in landscape needs of the LPC is not as important as addressing the primary threat to the species, which is habitat loss and fragmentation[2,3,4].

Other defensibility risks associated with short-term contracts include the following:

- Uncertainties associated with short-term contracts – As the permit term reaches expiration, the permit holder has no obligation for renewal. Currently the CCAA does not address what would happen to these short-term contracts upon permit expiration. Short-term contracts have created future liabilities for the permit holder beyond the permit term. If the permit term expires, the risks and liabilities associated with these short-term contracts would be transferred to the Service and ultimately the species[5].
- Short-term contracts do not carry the benefits of a conservation easement – While short-term contracts may lower upfront costs and provide flexibility to shift conservation around on the landscape within the target goals, they are voluntary and generally do not provide land use restrictions such as those provided via permanent mitigation acreage that includes a conservation easement. If the landowner has options that are more attractive financially, they can simply terminate the agreement (and refund the payments received). Generally, this would not be an option if a conservation easement existed.

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[2]Deyoung and Williford (2016, p. 91) summarized, "…the plight of the LEPC is primarily a problem of habitat loss, both amount and spatial extent. Concerns about habitat loss are paramount because loss of genetic variation, small population size, and amount of habitat, and stochastic events operate in a synergistic, not isolated, manner."

[3] Fuhlendorf *et al.* (2017) summarized, "Conservation efforts for prairie grouse should be focused on landscape processes that contribute to landscape fragmentation, such as increased dominance of trees or conversion to other land uses. In fact, reliance on local management (e.g., maintaining vegetation structure) to alter prairie grouse vital rates is less important to grouse population persistence given contemporary landscape level changes. Changing grass height, litter depth, or increasing the cover of forbs may impact a few remaining prairie-chickens, but it will not create useable space at a scale relevant to the historic conditions that existed before land conversion and fire suppression."

[4]Sullins et al. (2019), finds that "predicted probability of use was greatest in 5-km radius landscapes that were 77% grassland. Based on our model predictions, ~10% of the current expected lesser prairie-chicken distribution was available as habitat"

[5] There are analogous situations where in-lieu fee programs have failed and ultimately resulted in conservation losses for the species.

Habitat loss and fragmentation occurs through a variety of activities including constructions of powerlines and roads, wind energy infrastructure, oil and gas infrastructure, conversion of grassland to cropland, and woody vegetation encroachment. Permanent conservation easements may prove more effective in addressing the primary threat to LPC of habitat loss and fragmentation.

Rationale:

Increasing the proportion of permanent conservation that produces offset units would have the following benefits for the CCAA:

- Provides greater certainty that conservation occurs on the landscape in perpetuity, which provides stronger evidence for a decision not to list the species;
- Avoids the complications that could arise when the permit reaches the end of its term and WAFWA is holding the future conservation liability for term contracts. Because WAFWA is responsible for administering mitigation in perpetuity, it is responsible for these obligations/liabilities.
- Permanent conservation is a more traditional and proven approach that eliminates the uncertainty of renewal or replacement of term contracts after their term ends..
- Facilitates more long-term investment in habitat enhancement and restoration actions where benefits to the species could take many years to be fully realized.
- Tends to have lower per acre transaction costs as compared to term contracts, although it is generally more difficult to acquire permanent easements than term contracts (they tend to be larger acquisitions that take longer).
-

Cost and Other Implications:

- Ending iterative term contracts would have an immediate effect of reducing cost of operating the program. However, permanent conservation easements to offset a minimum 50% of impacts are expected to increase costs relative to establishing iterative term contracts.
- Increasing the proportion of permanent conservation may not, in and of itself, require an amendment to the CCAA. The term “target” could be read to allow adjustment from a 25%/75% split without an amendment to the CCAA. The adaptive management section of the CCAA also identifies adjusting aspects of the mitigation framework to conform with best available science.
- USFWS requested minimum of 50% of permanent conservation easements. Is this target adequate to address defensibility risk?
- For conservation agreements that utilize iterative term contracts, those agreements should contain language to address what will happen with those contracts at the end of the permit term.
- It takes time to establish permanent conservation easements (typically 1-2 years minimum). How should WAFWA maintain sufficient offsets while it establishes more permanent conservation where needed? Is a transition period of 3 years enough to reach the permanent conservation target (e.g., 50%)?
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Change 2. Increase assumed impact radius of wells from 200 meters to 300 meters.

Change Summary

Increase assumed impact radius of wells from 200 meters to 300 meters (= 31.05 acres to 69.87 acres)for all future projects, but not retroactively.

Background

The CCAA uses a 200-meter (656-foot) radius around oil and gas wells to estimate habitat loss from development. This 200-meter radius was determined during development of the RWP based on discussion with species experts about how to account for indirect effects of oil and gas development on the lesser prairie-chicken. This 200-meter impact buffer is used to calculate Impact Units and Mitigation Fees applied to a project covered under the CCAA. It was also used in the impact assessment conducted in the RWP.

When assessing take, the USFWS must review the best available information and apply its policies. Determining what constitutes "take" is a FWS policy decision. Consequently, research on anthropogenic effects to LPC do not measure "take." Rather, relevant research on the LPC measure or estimate response variables to certain actions. There will be a variety of response variables measured, using a variety of techniques, and over a variety of landscapes. All of these will result in conclusions specific to a response variable measured and to that landscape. The USFWS evaluates all this research to make a policy decision regarding where effects rise to the level of take for the LPC. Based on evaluating peer reviewed research on the implications of petroleum productions to the LPC [6], USFWS determined that take of LPC likely occurs out to 300 meters from a well head.

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[6] The primary peer reviewed research around the implications of petroleum productions on the LPC include the following:

- Based on Monte Carlo simulations of observed and random LEPC locations, Hagen *et al*. (2011, p. 69) found that 90% of centroids (the geometric center of a polygon) of LEPC activities were further than expected from oil wells with a range of 242-320 m (794-1,050 ft). Based on that analysis, the authors suggest that to protect 90% of breeding and summer habitats of LECP, oil wells should be sited greater than 300 m (984 ft) from those areas.
- A study in the Sand Sagebrush Ecoregion investigated nesting avoidance in LEPC related to several different anthropogenic structures including wellheads. Results indicated that LEPCs generally avoided wellheads by 80 m (260 ft) when selecting nest sites (Pitman et al. 2005, p. 1264).
- Within study locations representing portions of the Short-Grass, Mixed-Grass, and Sand Sagebrush ecoregions Plumb et al. (2019, p. 224, 228) found altered space use patterns for the LEPC in the presence of oil and gas wells. Specifically, the authors find that when data was pooled across their study areas that LEPC used space farther from wells at greater intensities within their home range and recommend management agencies to increase buffer distances for wells to >450 meters
- Within study locations in the Short-Grass, Mixed-Grass, and Sand Sagebrush ecoregions Sullins *et al.* (2019, p. 5) report that spaces with > 2 wells per 12.6 square km had 8 times lower relative probability of use by the LEPC.
- A study in the Shinnery Oak Ecoregion stated that petroleum production was not compatible with healthy populations of LEPC and found that the average number of active wells near active leks was 1, while the average number of active wells within 1.6 km (1 mile) of abandoned leks during their last active year was 8 (Hunt and Best 2004, p. 99).

Rationale

Increasing the impact radius of wells from 200 meters to 300 meters is necessary to align the CCAA impact assumptions with best available science and recommendations by USFWS in their current guidelines for LPC mitigation.[7]If the CCAA maintains the impact assumption of 200 meters, USFWS would likely need to evaluate the CCAA, if the LPC were listed or if the CCAA amended, assuming take out to 300 meters. This discrepancy between the CCAA and the USFWS's Biological Opinion would undermine the CCAA's defensibility and make it more vulnerable to legal challenge.

Industry representatives have expressed concern that because increasing the impact radius will result in an increase of the impact radius for existing disturbances, that the benefit to the species of such an amendment may be limited. Industry encourages a review by the science committee to determine the impacts of this proposed amendment.

Cost and Other Implications

- The effect of increasing the well impact radius on the mitigation fee for any given well (e.g., fee per well) would depend on the spatial relationship of the project and the existing development around it. The overall effect of increasing the impact buffer on mitigation fees (e.g., average price per well) remains uncertain. Increasing the impact buffer could also cause certain focal areas and connectivity zones to exceed impact thresholds defined in the RWP.
- Cost implications for future projects would be case dependent.
- Applies only to future projects and future Certificate of Inclusions. To apply to past projects CI's would have to be voluntarily amendment by each participant. If participants choose not to amend their CI's there would likely be very little new enrolled acres in the future. The FWS must make the issuance criteria evaluation on the entirety of the CCAA (or HCP), so even if the CCAA is changed to increase the impact buffer to 300 meters, but in practice most impacts are still estimated using the 200-meter buffer, there is the potential to undermine the change's effect on improving the CCAA's defensibility.
- Approach strengthens incentive for companies to co-locate facilities to reduce impact footprint and impact unit cost.
- Can propose this as an adaptive management change to the CCAA (category: "emerging science"), not as part of a CCAA Amendment (note: WAFWA already made a similar change for electrical power lines), but adaptive management is still constrained by limit of 4% annual cost increase in mitigation fees.[8]
- Would result in a change of take and permitted take. What would this do to the impact caps within each ecoregion?
- WAFWA Advisory Committee may request the science subcommittee to review this proposed change. The USFWS has reviewed and has the ultimate responsibility for determining take. It will be WAFWA's decision on the benefits of aligning the CCAA with the USFWS's determination.

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[7] *U.S. Fish and Wildlife Service. 2014. Guidelines for the Establishment, Management, and Operation of Permanent Lesser Prairie-Chicken Mitigation Lands. December.*

[8] Page 66 of the CCAA states: "…adaptive management adjustments will not cause the Mitigation Fee to develop a specific parcel of land in Year N+1 (*e.g.*, year 2) to increase more than 4% of the Mitigation Fee to develop that same parcel of land in Year N (*e.g.*, year 1) (assuming habitat quality on the parcel remains the same from year to year)."

Change 3. Define impact units and conservation units in terms of acres of LPC habitat, not in terms of Habitat Evaluation Guide (HEG) calculation.

Change Summary

Change the CCAA to use acres of LPC habitat to define impact and conservation units. Habitat Evaluation Guide (HEG) score would not be used to define impact units and conservation units. The HEG could continue to be used to measure habitat quality on conservation sites as part of effectiveness monitoring.

Background

HEG is a continuous variable, based on LPC habitat suitability metrics, measuring habitat quality for LPC. It is an objective, repeatable means of measuring habitat quality for the LPC, which is an important consideration meeting the biological needs of the species. Accounting for habitat quality in designing the mitigation framework was a focus of the RWP; therefore, the HEG score underpins the mitigation framework in the CCAA.

However, there is concern that basing impact and mitigation units on a continuous variable creates a complex system that is difficult to explain to the public and to decision makers . It also may complicate accounting for participants' debits and credits. Some are concerned that the use of the HEG overestimates conservation benefits to the LPC because it does not consider the concept of "additionality"[9] and therefore may fail to address primary threat of habitat loss and fragmentation to LPC (i.e., credits generated to sufficiently offset impacts while the net result is loss of LPC habitat).

Industry views the HEG as a sophisticated approach that provides an appropriate estimate of impact and mitigation units based on current landscape conditions. While recognizing that the HEG may be more time intensive during early implementation of the CCAA (and RWP), it has resulted in a better understanding of the landscape and a database that is easy to use, accessible and can promptly return scores that project proponents can adjust activities in the landscape to minimize impacts (and corresponding mitigation fees).

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[9]The mitigation framework includes habitat already existing before enrollment in the program as "enhanced" immediately upon enrollment, and therefore immediately available as mitigation credits, plus any future, actual on-the ground enhancement provided by changing land management. For example (note offset multiplier has been removed from equation for simplicity within this example):

- 100 acres enrolled in the program for conservation has an existing habitat quality score of 0.5 upon enrollment.
- The current mitigation framework awards 50 credits immediately.
- If habitat quality increases in future years due to improved management (for example, to 0.7) the property is given credits based upon the entire value (0.7) as opposed to only counting the uplift (0.2).

The result is that credits generated are inflated relative to the conservation uplift provided to the LPC.

Rationale

- Take limits in CCAA and ITP are expressed in terms of acres of LPC habitat in each ecoregion and within CHAT 1, 2, and 3+4. Take limits are not expressed as impact units using the HEG score. Therefore, the CCAA's impact/mitigation framework is misaligned with its take limit, which makes tracking the implementation of the CCAA relative to its take limit and demonstrating the net conservation benefit of the plan more difficult. The USFWS will continue to evaluate take in terms of acres moving forward, so it may be in the interest of WAFWA to change the mitigation framework to align with the take assessment.
- Changing the CCAA to base impact units and conservation units on acres of LPC habitat will:
    - reduce complexity within the metrics and allow for increased transparency within the program.
    - reduce the administrative burden of the program and reduce tracking complexities.
    - bring WAFWA mitigation strategy into alignment with most traditional species compensatory mitigation systems.
    - reduce administrative costs and mitigation tracking complexity.

Cost and other Implications

- The HEG could still be incorporated into redesigned mitigation framework. For example:
    - HEG score can be used for habitat management effectiveness monitoring on conservation properties (e.g., to measure habitat quality and whether restoration is achieved)
    - Simplified HEG using discrete categories could be used to measure impact sites to incentivize impacts on lower quality habitat
- Removing the HEG from the mitigation framework would require a complete overhaul to determine how the program accounts for impacts and conservation based just on a per-acre basis.
- Industry is concerned that a cost benefit analysis of amending the plan to express impact and conservation units in terms of acres of LPC habitat rather than in terms of the HEG calculation has not been performed.
- Foundations of the redesigned mitigation framework would need to be established to estimate the cost implications. Could change be cost neutral for each participant going forward?

Change 4: Clarify and increase restoration requirements (applies to CCAA or HCP)

Change Summary

Consider defining restoration and enhancement so each can be measured and accounted for in compliance monitoring. This could include the following:

- Establish threshold HEG score below which qualifies as restorable (i.e., actions that raise HEG score above threshold = restoration)<u>OR</u> define categorically LPC habitat vs. non-habitat
- Define what actions are considered restoration vs. enhancement. For example:
    - Restoration: Remove woody vegetation (mesquite in south, red cedar in north)

  - Enhancement: Thinning shinnery oak[10]
  - Restoration: Conversion of cropland to grassland
  - Restoration: Removal of infrastructure fragmenting the landscape (removing abandoned well pads, return abandoned access roads to their natural state, remove vertical structures such as windmills, power lines, power poles, etc.)
  - Expand available restoration and enhancement actions?
- Require overall 2 to 1 ratio for conservation to impacts, in acres, to provide clear net conservation benefit (= no net loss of habitat)
  - 1 acre = enhancement; 1 acre = restoration
  - This overall ratio should still consider using different ratios depending on where impacts are occurring. Impacts in more important habitat areas should have higher ratios and impacts in less important areas should have lower ratios. Table 1 is provided as an example, where ratios are different depending on the CHAT category, but the overall average is 2:1. Implementing the table below would also result in a simplification of the current process as currently there is not a mitigation ratio but instead the equation includes both "impact" and "offset" multipliers which in the end average 2:1 but are imbedded in the equations for calculation of impact and offset units.

Table 1. Proposed Impact to Offset Unit Ratio by CHAT Category

Location of Impact by Chat Category	Impact Units (in acres)	Offset Units (in acres)
1	1.0	2.5
2	1.0	2.25
3	1.0	2.0
4	1.0	1.25
Average	1.0	2.0

Background

The CCAA assumes that per unit of impact, 20% of their efforts will target restoration, and 80% will target enhancement. However, the CCAA does not clearly define 1) what constitutes restoration, or 2) how much must occur per unit of impact.

The current 20/80 restoration/enhancement framework results in a net loss of habitat. For example:

- 100 acres of habitat impacted by new disturbances associated with development;

[10] WAFWA has counted thinning shinnery oak as restoration to date (about 40% of total restoration, or ~8,000 acres). USFWS views shinnery oak thinning as a practice to alter vegetative composition to maximize habitat suitability (i.e., enhancement). Although it comprises lower quality habitat, landscapes with high percentages of shinnery oak do not preclude use by LPC. These spaces are already being used by the species so thinning the shinnery oak is not a restoration action.

- Application of a 2:1 mitigation ratio would require 200 acres of conservation to offset the new disturbances;
- Of those 200 acres, at least 20% would be targeted for restoration and 80% would be targeted for enhancement;
- Restoration of at least 40 acres;
- Enhancement of 160 acres; and,
- The result is 100 acres impacted by new disturbances, at least 40 acres restored, 160 existing acres enhanced, resulting in a potential net loss of 60 acres to new disturbances.

Rationale

- The primary threat to the LPC is habitat loss and fragmentation. For the LPC, and other habitat limited species, the FWS's position is that offsetting habitat loss with simply protecting/improving existing habitat is not adequate to meet the needs of the species. To adequately offset habitat loss for the LPC restoration efforts are required.
- USFWS has already has a definition of restoration that it uses to evaluate conservation actions for the LPC: *Restoration is the reestablishment of ecologically important habitat and/or other ecosystem resource characteristics and function(s) at a site where they have ceased to exist, or exist in a substantially degraded state. That is, taking an action to convert non-usable space to space that is becomes usable for the lesser prairie-chicken. The three primary examples of restoration of LPC habitat include removal of woody vegetation encroachment, converting cropland or introduced pasture to native grassland, and removal of infrastructure which is impacting space use by the LPC.*

Cost and other Implications

- Cost depends on the cost of restoration actions per acre of credit generated. Some actions, like removing tall structures, could generate credits efficiency. For example, removing one tall structure could "restore" approximately 70 acres of habitat by converting this from non-usable to usable space.
- Since removing tall structures is potentially a very cost effective way to restore LPC habitat, could tall structure removal be implemented to generate "bridge credits" to allow for continued development while permanent conservation was established? These credits could be established at higher mitigation to impacts ratios because, if they were to be generated quickly, would not be tied to permanent conservation. For example:
    - 100 acres of impact
    - Offset at a 1:5 ratio requires 500 "bridge credits" to be generated through tall structure removal
    - Requires removal of approximately 8 tall structures (assuming their 300-meter impact buffers do not overlap and all acres within buffer constitute LPC habitat) to generate credits
- Companies can remove powerlines or power poles to generate credits[11]. Could this program be expanded to others to sell remediation credits to WAFWA?

[11] Exhibit C of the Certificate of Inclusion defines how Participants can generate remediation units.