PLAYA LAKES JOINT VENTURE

Area Implementation Plan for the Shortgrass Prairie Bird Conservation Region (18) of Colorado

PLAYA LAKES
JOINT VENTURE

April 2008

APPROVALS

By adopting this plan, PLJV Colorado partners signify:

- Endorsement of the planning process used to develop these habitat conservation recommendations.
- Recognition that the habitat acreage recommendations are based on a modeling process which sometimes required using sparse data and assumptions.
- Recognition that the overall direction and magnitude of the habitat recommendations are more important than specific acreages.
- Awareness that recommendations for some priority species may be detrimental to others, but that collectively the recommendations are balanced to consider the needs of all species.
- Intent to begin working towards the habitat recommendations and to develop the capacity to deliver habitat conservation at the scale needed.
- Intent to develop and support evaluation initiatives (testing assumptions inherent in the planning process) to facilitate re-planning and improvements to the habitat recommendations in future iterations of this plan.
- Understanding that this plan is dynamic and will be improved and updated with suggestions from PLJV Colorado partners.

PLJV Management Board Chairperson

Date April 8, 2008

State Management Board Representative

Date April 8, 2008

State Monitoring, Evaluation, and Research Team Representative

Date April 8, 2008

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EXECUTIVE SUMMARY

This Plan presents habitat management recommendations that, if implemented, should allow priority bird species to reach and sustain objective levels in the Shortgrass Prairie Bird Conservation Region of Colorado. The goal of this plan is to "communicate broad-scale, long-term habitat requirements needed to maintain or increase bird numbers at levels that satisfy socio-economic desires". Management recommendations in this plan are intended to direct attention and resources toward habitats and habitat management actions that are most important for priority bird species. This plan also may help identify new habitat programs or changes to existing programs that are needed to deliver conservation at a scale sufficient to produce positive changes in bird numbers. The primary audiences for this plan are agency and organization administrators, local working groups, and habitat conservation organizations that can use this information to develop and direct specific habitat conservation programs to attain these broad goals.

The following recommendations represent the major habitat actions (i.e., conversion, restoration, management) needed to bring priority birds to desired levels. Priority bird species that are expected to increase to goal levels as a result of the actions are shown in parentheses, with the primary "driver" species in bold.

- Protect playas from sedimentation by installing grass buffers around playas located in cropland. Restore natural hydrology by filling pits and removing excessive accumulated sediments. Install fences around playa basins to manage livestock grazing (**wetland birds**).
- Manage 22,099 acres of floodplain marsh for optimum shorebird foraging suitability (mudflats and very shallow water with minimal emergent cover) (**shorebirds**)
- Manage 2,383,779 additional acres of shortgrass prairie for high grass, especially in the eastern tier of counties (**Grasshopper Sparrow, Lark Bunting**)
- Manage 3,692,114 acres of shortgrass prairie for many shrubs and high grass, in the northwest and southwest (**Cassin's Sparrow, Brewer's Sparrow**)
- Manage shortgrass prairie so that 4,483,888 acres have few shrubs (about equally split between low and high grass) and contribute to large blocks of habitat by placing near current or historic freshwater sources (**Long-billed Curlew**)
- Create 90,000 additional acres of large blocks of sand sage (**Lesser Prairie-Chicken**)
- Convert 72,154 acres of exotic riparian shrubland in the S. Platte corridor to wet meadow (**Short-eared Owl**)
- Convert 400,000 acres of cropland to CRP or another program to create CRP-like habitat (**Grasshopper Sparrow**)
- Convert 1,896,236 acres of CRP from non-native grass mixtures to native grass mixtures (**Cassin's Sparrow**)
- Convert 2,730,082 acres of crops that do not support Ring-necked Pheasants to crops such as wheat or alfalfa (**Ring-necked Pheasant**)
- Create or render suitable an additional 1,237 acres of sandbars within the eastern stretch of the Arkansas River (**Piping Plover**)

- Create or render suitable an additional 552 acres of sandy beach surrounding large reservoirs in the eastern Arkansas River drainage (**Piping Plover)**

Other important actions to preserve the function of existing habitats also are needed, and are recommended in this Plan. Most of these recommendations are intended for implementation over a 30-year time frame (2008-2038). Implementing these actions within this time frame will be a major undertaking, requiring greater commitments of human and fiscal resources in the future than has occurred in the past. By adopting these recommendations, we hope and expect that PLJV partners are inspired to redouble their efforts towards bird habitat conservation and management.

BACKGROUND AND INTRODUCTION

This Area Implementation Plan (AIP) is a product of the PLJV biological planning process. It presents broad-scale, long-term habitat management recommendations that, if implemented, should allow priority bird species to reach and sustain objective levels as prescribed by the four national/continental bird conservation initiatives (*North American Waterfowl Management Plan, U. S. Shorebird Conservation Plan, Waterbird Conservation for the Americas*, and *Partners in Flight*). Although the recommendations made in this plan represent lofty goals, these recommendations do provide visionary direction to recover and sustain regional bird populations.

Area Description

The Area is dominated by shortgrass prairies that provide habitat for declining prairie birds such as Long-billed Curlew, Lark Bunting, Grasshopper Sparrow, Cassin's Sparrow and McCown's Longspur. Additionally, prairie dog towns support Mountain Plovers and Burrowing Owls. This area of Colorado also has the largest amount of Sand Sage Prairie in the PLJV area that supports many grassland species but especially Greater and Lesser Prairie-Chicken, and Scaled Quail.

Three important rivers (South Platte, Arkansas, and Republican) and many smaller streams flow through the Area and provide habitat for nonbreeding waterfowl and breeding Swainson's Hawk, Lewis's Woodpecker, and Bullock's Oriole. These native habitats are intermingled with cropland, principally winter wheat, which provides a mosaic of habitat important for Ring-necked Pheasant and nonbreeding waterfowl. Important natural wetland resources include playas lakes and a few saline wetlands, which support migrations of waterfowl and shorebirds and nesting Least Tern and Piping and Snowy Plover. Many lakes, reservoirs and ponds dot the landscape and provide open water habitat for waterfowl and Western Grebe.

Goal, Purpose, and Intended Audience

The goal of this plan is consistent with the goal of PLJV biological planning: **"Communicate broad-scale, long-term habitat requirements needed to maintain or increase bird numbers at levels that satisfy socio-economic desires"**. Recommendations in this plan are intended to direct attention and resources toward habitats and habitat management actions that are most important for priority bird species. Although this plan is general in nature, it may help to identify new habitat programs or changes to existing programs that are needed to deliver conservation at a scale sufficient to produce positive changes in bird numbers. The primary audiences for this plan are agency and organization administrators, local working groups, and habitat conservation organizations that can use this information to develop and direct specific habitat conservation programs to attain these broad goals.

Plan Format

Habitat management recommendations in this plan are grouped as follows. First, we present recommendations for nonbreeding birds (waterfowl, shorebirds, and waterbirds) and breeding birds (by guild; e.g., grassland birds). In these sections we discuss priority species, abundance trends, seasonal importance of the Area, important habitats and threats to those habitats, abundance targets, planning approach, results of carrying capacity analyses, and specific habitat management recommendations and justification. Details of the carrying capacity analysis are shown in Tables 1 and 2 for all priority species/guilds, including estimated current carrying capacity, and expected carrying capacity after the habitat recommendations are implemented. These sections should be of interest to readers interested in specific birds or bird groups.

Next, we present integrated bird habitat recommendations by habitat. In these sections we explain which birds benefit from recommended management actions, and how birds may be increased or maintained by implementing those actions. We also summarize estimated current habitat acreages, and desired future acreages, in Table 3. These sections should be of interest to readers wanting to know the implications of management actions in a specific habitat to all priority birds.

General Planning Approach

Briefly, we used a process based on principles of *Strategic Habitat Conservation* (USFWS and USGS 2006) to develop habitat management recommendations in this plan. In general, we developed (1) bird abundance targets that are stepped-down from continental objectives in the bird initiatives, and (2) *habitat* objectives that are linked biologically to the abundance targets.

More specifically, we used the following model to estimate current carrying capacity of each habitat for each priority bird species:

> Birds = Acres of habitat * habitat availability factor * habitat suitability factor * large block factor * bird density

The estimated number of birds supported in each habitat is summed, and compared to the bird abundance target. This process quantifies the importance of each habitat to each species. It also quantifies current carrying capacity relative to desired carrying capacity, which allows crafting specific habitat acreage recommendations to bring a species to desired levels.

Habitat recommendations herein are only as good as the model inputs used to develop them. Recommendations may be limited by a number of factors. Specific errors, such as mapping errors and inaccurate estimates of bird density within habitats, may contribute to inexact estimates of required habitat. Further, lack of knowledge about specific habitat relationships or bioenergetic needs for some species limits our ability to accurately predict the exact relationship between population sizes and habitats or food resources. Additionally, some species may be limited by factors not directly related to habitat acreages. Habitat juxtaposition, effects of contaminants and disease, predation impacts, and factors influencing populations outside of the

PLJV area may be critical for understanding and managing bird populations. However, even in light of these limitations, this process provides a useful roadmap for setting broad-scale, long-term habitat objectives which can guide land managers in the implementation of conservation actions to benefit priority bird species. Readers interested in providing information to update the model inputs and resulting habitat recommendations are encouraged to contact the PLJV.

Implementation Timeframe

These recommendations are intended for implementation over a 30-year timeframe (2008 – 2038), although some management actions may require longer intervals to develop desired conditions (e.g., creating late successional riparian forest). Information in this plan should be used to direct the development of habitat conservation programs that are implemented on shorter time frames and at local scales but maintain the context of these long-term recommendations.

Decision Support Tools

The biological planning results and recommendations in this plan are intended to address the question of whether there is enough habitat (in the right quantity and quality) to support desired levels of birds. Another aspect of the planning process (beyond the scope of this plan) can be to delineate specific places on the landscape where habitat work can best benefit priority species. Spatially-explicit conservation recommendations provide more direct focus for conservation efforts, may improve the efficacy of conservation delivery and outcomes, and may improve cost-effectiveness in light of limited budgets. PLJV staff is available to work with partners to develop spatially-explicit models and other decision support tools as needed. Habitat program managers with specified funding levels, priority species, habitats, or project areas are encouraged to contact PLJV staff to begin developing these tools for targeting habitat dollars for maximum benefit.

Relationship of this Plan to other PLJV Biological Planning Reports

This plan presents detailed habitat recommendations for the Area. It is beyond the scope of this plan to present all the details of the planning process. Some users may want to consult sources of additional information relevant to PLJV biological planning in general, and specifically to the habitat recommendations in this plan. These additional information sources provide specific information about model inputs, data quality, modeling assumptions, and other important factors. To fully understand the applicability and limitations of this process, these sources should be consulted:

- *Implementation Planning Guide* (PLJV 2007a). This document describes the PLJV's general approach to biological planning, and describes in detail the *Hierarchical All Bird System* (HABS) database. This database stores the biological data used to model the current carrying capacity of the PLJV for priority birds (e.g., Tables 1 and 2), and to design a landscape that supports desired numbers of all priority bird species.

- *Habitat Assessment Procedures* (PLJV 2006c). This document describes the PLJV's habitat classification system and procedures for estimating acreages of important habitats as shown in this plan (Tables 1 - 3). These acreages were determined from the PLJV's GIS database and additional non-spatial data.
- *Planning Team Reports for Waterfowl* (PLJV 2005), *Shorebirds* (PLJV 2007b), *Waterbirds* (PLJV 2006b), *and Landbirds* (PLJV 2007c). These reports present details on priority species selection, determining important seasonal use periods, developing abundance and vital rate targets, determining limiting factors, and describing the planning approach used to develop habitat objectives. Consult these reports for background and justification for the carrying capacity model parameters shown in Tables 1 and 2.

Related Bird or Habitat Plans for this Area

Several additional planning efforts exist which should be consulted and used in conjunction with this Plan. Although the scope, scale, and breadth of these plans may differ, all of these plans have the intent to influence the conservation of bird communities in the Shortgrass Prairie Region of Colorado.

Colorado's Wildlife Conservation Strategy and Wildlife Action Plans

The Colorado Wildlife Conservation Strategy (CWCS) was completed in 2006 by the Colorado Division of Wildlife (CDOW 2006). The scope of this plan addresses all priority species (Species in Greatest Need of Conservation) from all vertebrate taxa in the state of Colorado. There is significant overlap in the priority species identified by the CWCS and this PLJV plan for Colorado. The plan identifies species- and habitat-specific threats, information needs, and opportunities for implementation. The plan recognizes the need for ongoing cooperation between conservation organizations with complimentary goals.

Conservation Plan for Grassland Species in Colorado

In 2003, CDOW developed the "Conservation Plan for Grassland Species in Colorado" (CDOW 2003). The goal of this plan is to "ensure, at a minimum, the viability of the black-tailed prairie dog and associated species (Mountain Plover, Burrowing Owl, swift fox, and Ferruginous Hawk) and provide mechanisms to manage for populations beyond minimum levels, where possible, while addressing the interests and rights of private landowners". The plan identifies specific habitat objectives for black-tailed prairie dogs, and expects that associated avian species will also benefit. The plan identifies specific management tools (habitat protection, outreach, research, monitoring, etc.) that can be used to achieve plan objectives.

Central Shortgrass Prairie Ecoregional Assessment

The Nature Conservancy and cooperating partners completed an ecoregional assessment for the Central Shortgrass Prairie ecoregion in 2006 (Neely et al. 2006). The geographic range of the plan covers the entire PLJV area in Colorado, as well as parts of Wyoming, Nebraska, Kansas, Oklahoma, Texas and New Mexico. The plan focuses on conserving biodiversity at landscape scales. Although not exclusively specific to priority birds, the ecoregional plan is spatially explicit and may provide direction about where on the landscape conservation actions for priority birds would be most beneficial.

Plan Updates

Consistent with the principles of adaptive management, this plan is intended to be dynamic. It will be updated as new bird and habitat information becomes available, to accommodate changes in strategic direction for habitat conservation, or as otherwise desired by PLJV partners and staff. Interested users of this plan should check the PLJV web site (www.pljv.org) for updates.

NONBREEDING BIRDS

Waterfowl

The PLJV Waterfowl Team Report (PLJV 2005) should be consulted for further detail regarding the planning process for waterfowl.

This Area is primarily important to migrating and wintering waterfowl. Priority waterfowl species for this Area include Northern Pintail, Mallard, and Canada Goose (Shortgrass Prairie Population) for the nonbreeding seasons only. Although several species of waterfowl also breed in the Area, they are at low densities relative to primary waterfowl breeding areas. During the nonbreeding seasons, waterfowl must obtain enough food resources to maintain body condition during winter, and increase body condition during fall and spring for subsequent migration. Studies have shown that birds in better body condition survive at higher rates during the nonbreeding seasons. Waterfowl can best meet energetic and nutritional needs through native foods provided in wetland habitats. Agricultural habitats also are used, especially when wetlands are unavailable due to drought, ice cover, etc.

The PLJV used a bioenergetics approach to habitat conservation planning, which assumes foraging habitat is the primary factor limiting waterfowl abundance, body condition, and survival. This approach assesses foraging habitat availability versus energetic demands of priority species and all other waterfowl species common to the region. Therefore, habitat needs of all nonbreeding waterfowl species are included in the habitat recommendations.

Waterfowl abundance targets for the Area include approximately 338,000 ducks and 104,000 geese during midwinter (early January). For bioenergetics planning purposes, waterfowl abundance targets were translated to “use-days” for three seasons during the nonbreeding period: fall (Sep. – Oct.), winter (Nov. – mid-Feb.), and spring (mid-Feb. – Apr.) Use-day targets are approximately 11.2 million for fall, 66.0 million for winter, and 36.7 million for spring.

The top three wetland foraging habitats are floodplain marshes (estimated 23,516 acres), stock ponds (estimated 48,409 acres), and playas (estimated 64,434 acres) (Table 1). Habitat assessments and bioenergetics modeling suggested that existing foraging habitats in this Area can support the abundance targets in all seasons (Table 1). Therefore, this Plan contains no specific habitat recommendations for these taxa.

Shorebirds – Wetland Guild

The PLJV Shorebird Team Report (PLJV 2007b) should be consulted for further detail regarding the planning process for shorebirds.

Migratory shorebirds use this Area primarily from July through October for fall migration, and from April through May for spring migration. Priority shorebirds in this guild include Snowy Plover, Piping Plover, American Avocet, Long-billed Curlew, Hudsonian Godwit, Semipalmated Sandpiper, Least Sandpiper, White-rumped Sandpiper, Baird's Sandpiper, Pectoral Sandpiper, Stilt Sandpiper, and Long-billed Dowitcher. During migration, shorebirds must obtain enough food resources to maintain and increase body condition. Most migratory shorebirds meet energetic and nutritional needs primarily through invertebrate foods obtained in wetland habitats, although other foods are used (e.g., some seeds).

The PLJV used a bioenergetics approach to habitat conservation planning, which assumes foraging habitat is the primary factor limiting shorebird abundance, body condition, and survival. This approach assesses foraging habitat availability versus energetic demands of priority species and all other migrant shorebird species (approx. 30 total species) common to the region. Therefore, habitat needs of all migrant, wetland-foraging shorebird species were considered during habitat conservation planning.

Existing shorebird survey data for this Area were used to develop an abundance target of approximately 1.8 million use-days, which includes abundance increases recommended in the U.S. Shorebird Conservation Plan. The top three shorebird foraging habitats are playas (estimated 64,434 acres), reservoirs (estimated 110,488 acres), and floodplain marshes (estimated 23,516 acres) (Table 1). Habitat assessments and bioenergetics modeling suggested that existing wetland habitats in this Area can support only about 9% of this abundance target (approx. 1.6 million use-day deficit).

This Area needs additional wetland foraging habitat to support its migrant shorebird objectives. To accomplish this, we recommend managing 22,099 acres of floodplain marsh for optimum shorebird foraging suitability (mudflats and very shallow water with minimal emergent cover) by grazing, burning, brush removal, water level management, etc. This will provide more than 1.6 million additional shorebird foraging use-days and will bring the carrying capacity of the region to the objective level.

Shorebirds - Upland Guild

Two priority shorebird species, American Golden-Plover and Buff-breasted Sandpiper, forage in wetlands during migration, but also forage extensively in upland habitats (short-stature grasslands and cropland). These species are relatively uncommon compared to other shorebird species, which is reflected in the relatively low abundance target of only 1,544 use-days. Important upland habitats for these species include croplands (alfalfa, pasture, and sod farms), CRP, and short- and mixed-grass prairie. Although the proportion of these habitats estimated to be suitable for these species was low, there are large acreages within this Area. Carrying

capacity modeling suggested there is sufficient habitat to support the use-day objective (Table 1). Therefore, this plan contains no specific habitat recommendations for this guild.

Waterbirds

The PLJV Waterbird Team Report (PLJV 2006b) should be consulted for further detail regarding the planning process for waterbirds.

Priority nonbreeding waterbirds include Eared Grebe, Western Grebe, American White Pelican, Sandhill Crane, Whooping Crane, Franklin's Gull, Forster's Tern, and Black Tern. Similar to waterfowl and shorebirds, nonbreeding waterbirds must obtain enough food resources to maintain body condition during winter, and increase body condition during fall and spring for subsequent migration. Waterbirds meet energetic and nutritional needs primarily through foods provided in wetland and aquatic habitats, although agricultural habitats also are used, especially by cranes and sometimes by gulls.

The Area hosts migrating Sandhill Cranes; abundance targets were developed by stepping down objectives from the *Central Flyway Plan* for Midcontinent Population Sandhill Cranes. The Sandhill Crane abundance target is approx. 250,000 use-days in fall and 132,000 in spring.

In this Area, the most important wetland types for cranes are wet meadows, floodplain marshes, and moist-soil units (Table 1). Wet meadows (estimated 298,127 acres) provide important crane foraging habitat. However, the quality of existing wet meadows is suspect due to reductions in hydroperiod (reduced stream flows caused by water impoundments and diversions, irrigation, infestations of exotic hydrophytes, etc.). Floodplain marshes and moist-soil units (estimated 23,516 and 1,272 acres, respectively) also provide important foraging and roosting sites.

Habitat assessments and bioenergetics modeling suggested that this Area can support the use-day objectives for cranes (Table 1). However, the degraded and declining state of many wetlands important to cranes calls for restoration and protection efforts. Wet meadows should be restored by controlling hydrophytes (exotic and native), increasing in-stream flows (e.g., through water use and management policies) where possible, and actively managing water levels (e.g., developing impoundments with water management capabilities) if necessary. For other wetland types, recommendations described above for shorebirds also will benefit for cranes.

For other priority waterbird species (grebes, pelicans, gulls, and terns), we lacked any meaningful information to relate abundance and/or vital rates to habitat conditions. Therefore, we defer developing abundance targets and habitat objectives for these species until such information becomes available. However, we note that conservation recommendations were made for wetland habitats used by these species during the PLJV planning process for nonbreeding shorebirds and cranes. Until more explicit planning can be conducted, we assume that fulfilling habitat needs for shorebirds and cranes will also fulfill habitat needs for other nonbreeding waterbirds. However, we note that many priority waterbirds depend more on open water habitats than do shorebirds and cranes, so gaining knowledge of the relationship between these species and their habitats is an important need (see Next Steps section).

BREEDING BIRDS

For the purposes of this planning effort, all breeding birds were addressed by the Landbird Team Report (PLJV 2007c). This group of species thus included all landbirds, as well as three upland-breeding shorebirds (Mountain Plover, Upland Sandpiper, and Long-billed Curlew), two wetland/riparian-breeding shorebirds (Snowy and Piping Plovers), and one riparian-breeding waterbird (Least Tern).

In addressing the needs of priority landbirds for this Area, the PLJV assumed that providing the habitat needs for breeding landbirds would also provide the habitat needs for migrant and wintering landbirds in the Area. Secondly, we assumed that appropriate breeding habitat was the primary limiting factor for breeding grassland birds. The planning approach assigned a density to each condition of every habitat that a priority species occupied, developed an estimate of current carrying capacity for each priority species, evaluated trends in the BCR to determine those species with statistically significant declining trends from Breeding Bird Survey (BBS) data (Sauer et al., 2005), and then used those trends (with exceptions as noted in the Landbird Team Report) to determine a number of birds needed to bring a species up to goal by calculating the birds lost over the last thirty years and adding to the current estimated carrying capacity. Species with trends which did not fit our data quality requirements or with significant positive trends were assigned a goal of maintaining the current carrying capacity. If trends begin to decrease and/or data quality increases for any these species in the future, the trend will be utilized to determine a population goal at that time. For specifics on this process refer to the Landbird Team Report.

For some species, when data dictated an abundance goal greater than 100% of the current estimated numbers, a provisional goal of doubling is utilized. In this Area, those species were Mountain Plover, Long-billed Curlew, Short-eared Owl, Brewer's Sparrow, Lark Bunting, and Grasshopper Sparrow. Lesser Prairie-Chicken has good documentation of a regional decline, although it does not have a trend from the BBS. The abundance goal for Lesser Prairie-Chicken was determined by the Colorado representative to the Lesser Prairie-Chicken Interstate Working Group (E. Odell, *pers. comm.*).

Grassland Guild

Grasslands are the largest single habitat type found in this Area and support priority species such as Scaled Quail, Swainson's Hawk, Mountain Plover, Long-billed Curlew, Burrowing Owl, Western Kingbird, Loggerhead Shrike, Chihuahuan Raven, Cassin's Sparrow, Lark Sparrow, Lark Bunting, Grasshopper Sparrow and McCown's and Chestnut-collared Longspur. As a guild, grassland birds are declining more rapidly than any other group of landbirds.

The grassland bird guild includes both those species that need primarily grass and those that require shrubs within a grassland matrix. However, the species that are driving this Area's grassland needs are those that reach their highest densities with taller grass and few shrubs on the landscape (Grasshopper Sparrow and Lark Bunting). Two additional grassland species require models to evaluate landscape context (Lesser Prairie-Chicken and Long-billed Curlew).

Threats to grassland habitats include fire suppression and grazing regimes which overemphasize even height grass utilization. In some areas, fire suppression has allowed shrubs to increase. This has had a deleterious effect on those species which require grasslands with few shrubs. Managing grasslands so that there is even utilization across the landscape has had a negative effect on the maintenance of the suite of species that requires a heterogeneous mix of grass heights upon the landscape. Some birds, such as Long-billed Curlew, require very short grass for nesting habitat, but require nearby taller grasses for brood rearing. Other threats include conversion to agriculture. Although many agricultural fields are utilized by some priority birds to some extent, their utilization tends to be at lower densities. Additionally, the extent to which crop maintenance and harvest timing affects productivity has not been well-established for many species. The extent of agricultural conversion on the landscape may be a factor for the decline in Lesser Prairie-Chickens. They thrived with small-scale agriculture adjacent to nearby grass/shrub prairie, but in recent decades with larger-scale conversion to agriculture they have declined. Likewise, the extent to which unutilized agricultural lands are kept or converted back to grasses (and the types of grass mixes used) will have an effect on some species, though these effects have not been well quantified in Colorado.

The advent of CRP in the 1985 Farm Bill has helped to increase numbers of many grassland birds. Recent literature, inside and outside the region, has shown that the seed mixtures used in various CRP fields and the ultimate field species composition greatly influences the bird community utilizing those fields. Programs which may allow increased management of CRP fields, such as burning or short-term grazing as well as conversion to native grass seed mixtures or interseeding with forbs and legumes, may greatly increase use by priority grassland birds.

Specific recommendations are below:

Grasshopper Sparrow has declined at an average rate of 3.3% per year (1966-2005) in BCR 18, meaning more than 50% of the population has been lost (Sauer et al. 2005). We assume that the decline is due to loss of habitat and that a more than doubling of habitat is needed to meet the population goal which is consistent with the PIF goal of doubling the population. Recommended actions are: 1) Manage 2,383,779 additional acres of shortgrass prairie, especially in the eastern tier of counties for high grass, providing 223,418 additional birds. Currently the PLJV estimates that 3,138,720 acres are managed in this condition within occupied Grasshopper Sparrow habitat; 2) Convert 400,000 acres of cropland to CRP especially within the eastern portion of the Area, providing an additional 78,238 birds; 3) Convert 273,008 acres of cropland to crops such as alfalfa, in the western portions of where crops predominate, providing an additional 11,854 birds.

These aggressive recommendations, fully implemented, are modeled to meet only 77% of the goal. However, we recommend implementing toward these acreage goals while partners determine what further habitat work is possible and the models and assumptions are further evaluated.

Lark Bunting has declined at an average rate of 2.3% per year (1966-2005) in BCR 18 (Sauer et al. 2005). Recommended actions are: 1) Convert 400,000 acres of agricultural lands to CRP, providing an additional 126,820 birds; 2) Manage 2,383,779 additional acres of shortgrass prairie

for high grass, providing 67,104 additional birds. Currently the PLJV estimates that 3,138,720 acres are managed in this condition; 3) Manage 1,805,524 additional acres of sand sage for high grass, providing an additional 36,652 birds. Currently the PLJV estimates that 106,207 acres are managed in this way.

These aggressive recommendations, fully implemented, are modeled to meet only 54% of the goal. However, we recommend implementing toward these acreage goals while partners determine what further habitat work is possible and the models and assumptions are further evaluated.

Long-billed Curlew has declined at an average rate of 4.3% per year (1966-2005) in BCR 18, meaning more than 50% of the population has been lost (Sauer et al. 2005). We assume that the decline is due to loss of habitat and that a more than doubling of habitat is needed to meet the population goal which is consistent with the PIF goal of doubling the population. Recommended actions are: 1) Manage shortgrass prairie so that a total of 4,483,888 acres of shortgrass prairie has few shrubs (about equally split between low and high grass), providing 1,087 birds; 2) In combination with shortgrass management, include an additional 19,114 acres of playas so that they contribute to large block models. Currently the PLJV estimates that 8,270 acres of playas do so, contribute to large blocks of habitat.

To support Long-billed Curlews, research in other portions of the country suggests that large blocks of prairie with few shrubs needs to be within approximately 1 mile of a water source. The current PLJV model for Curlew habitat requires 1,650 acres of prairie with no more that 220 acres of shrubs or woodland and less than 51 acres of roads.

These aggressive recommendations, fully implemented, are modeled to meet only 89% of the goal. However, we recommend implementing toward these acreage goals while partners determine what further habitat work is possible and the models and assumptions are further evaluated.

Short-eared Owl has declined at an average rate of 4.6% per year (1966-2005) across the BBS survey area, meaning more than 50% of the population has been lost (there is no appropriate BBS trend for the BCR, Sauer et al. 2005). We assume that the decline is due to loss of habitat and that a more than doubling of habitat is needed to meet the population goal which is consistent with a PIF goal of doubling the population. Recommended actions are: 1) Manage shortgrass prairie so that 196,800 acres have few shrubs and high grass and are in areas without trees or shelterbelts, especially along the S. Platte drainage, providing an additional 99 birds; 2) Convert 72,154 acres of exotic riparian shrubland to wet meadow in the S. Platte River drainage providing 62 birds. Currently the PLJV estimates that 149,063 acres of wet meadow contribute to Short-eared Owl populations. At this time we are cannot guarantee that this acreage exists within the drainage although this amount of exotic riparian shrubland is estimated to be within the Area. Both recommendations should be implemented in areas with no trees within the managed or converted areas.

Grassland birds which utilize prairie-dog colonies (Burrowing Owl and Mountain Plover) have trends that do not meet our data quality requirements (Burrowing Owl) or have habitat

preferences that can also be replicated through appropriate management of shortgrass prairie near where they occur (Mountain Plover).

Mixed Grass acreage is estimated at 30,231 acres and thus provides little of the overall objectives for grassland birds in the Area.

Riparian Guild

Riparian areas comprise a little over 2% of the landscape, or 642,515 acres. Riparian forest and shrublands are important to priority species such as Northern Bobwhite, Swainson's Hawk, Lewis's and Red-headed Woodpecker, Bell's Vireo and Bullock's Oriole. Wet meadow supports priority species such as Short-eared Owl and Ring-necked Pheasant. Sandbars within the river channels can be important for nesting Piping Plover. There are no breeding riparian forest- or shrubland-associated landbirds with statistically significant declining trends in BCR 18, though some, such as Red-headed Woodpecker and Bell's Vireo, show strong national trends. Therefore the abundance goals are to maintain the current estimated carrying capacity for these species.

Short-eared Owl and Ring-necked Pheasant do have declining trends that met our data quality requirements (species accounts under Grassland and Habitat Generalists, respectively). Exotic riparian shrubland, consisting primarily of salt cedar (tamarisk) and Russian olive, comprises a portion of all riparian shrubland in the Area and is estimated at 72,154 acres. Converting these acres to wet meadow will help to support these species as well as improve overall riparian health.

Piping Plover is a state and federally threatened species. Population objectives reflect needs in the U.S. Shorebird Conservation Plan. Recommendations are: 1) Create or render suitable an additional 1,237 acres of sandbars within the eastern stretch of the Arkansas River, providing 12 birds. Currently the PLJV estimates that 1,747 acres of sandbars exist here; 2) Create or render suitable an additional 552 acres of sandy beach surrounding large reservoirs in the eastern Arkansas River drainage, providing an additional 6 birds. Currently the PLJV estimates that 552 acres of sandy beach or shoreline exist in this Area.

Shrubland Guild

Sand sage shrublands comprise a little under 10% of the landscape in the Area. Shrublands are important to a number of priority species including both Greater and Lesser Prairie-Chicken, Scaled Quail, Loggerhead Shrike, Chihuahuan Raven and Cassin's, Brewer's and Lark Sparrow. Many if not most, of these, however, maintain larger numbers in shortgrass prairie and could equally be dealt with in a grassland context. Shrub-associated priority species with declining BBS trends that met our data quality requirements in BCR 18 include Cassin's and Brewer's Sparrow. Others such as Loggerhead Shrike and Lark Sparrow show strongly declining national trends.

There is high concern about past Lesser Prairie-Chicken declines (Davis et. al 2006). There is no BBS trend for this species. In Colorado, a goal of increasing the population by 25% over 20

years is still in discussion as are the particulars of the actual recommendations (E. Odell *pers. comm.*). Using the current model and the goal of increasing the carrying capacity by 25% our recommended actions are: 1) Create large blocks of habitat using sand sage as a base by judicious placement of CRP, regardless of its little benefit to Lesser Prairie-Chickens in Colorado, so that 90,000 additional acres contribute to large blocks of habitat within or near to current Lesser Prairie-Chicken range. This will provide 171 additional birds. Currently the PLJV estimates that 358,980 acres of sand sage contributes to large blocks.

The current PLJV model requires areas at least 1,000 acres of sand sage within a 5,000 acre block that also contains no more than 1) 2,000 acres of cropland, 2) 50 acres of roads (and no 4-lane roads), and 3) 50 acres of woodland types. The current model has a very good fit with the known distribution of Lesser Prairie-Chicken in Colorado. The PLJV can recommend locations that may benefit from an increase in sand sage or new CRP within or near Lesser Prairie-Chicken range. Efforts to increase populations of this bird should focus on increasing the amount of sand sage that can support Lesser Prairie-Chicken, and research on new seed mixes which when planted for CRP may become more valuable to the bird in Colorado, as CRP has been demonstrated to be in Kansas. The PLJV will work in concert with CDOW to further refine the Lesser Prairie-Chicken model in Colorado and will search for additional ways to support this bird in the state.

Cassin's Sparrow has declined at an average rate of -0.9% per year (1966-2005) in BCR 18 (Sauer et al. 2005). Recommended actions are: 1) Convert 400,000 acres of cropland to CRP or CRP-like habitat. Of this new CRP acreage, convert 2,256,236 acres from non-native grass mixtures to native grass mixtures, preferably also with a small shrub component, providing 32,127 additional birds. Currently the PLJV estimates that 237,030 are in such a condition; 2) Manage 448,388 acres of shortgrass prairie in the northwest for many shrubs, providing 37,125 birds. These recommendations, fully implemented, are modeled to meet only 83% of the goal. However, we recommend implementing toward these acreage goals while partners determine what further habitat work is possible and the models and assumptions are further evaluated.

Woodland/Forest Guild

Woodlands and forests within the areas are at the western fringes of the Great Plains in Colorado and comprise about 3% of the landscape. Two major types are represented; pinyon-juniper and ponderosa pine. These areas are critical to a few priority species which are on the eastern edge of their ranges in the United States (Lewis's Woodpecker and Pinyon Jay), as well as a few others including Scaled Quail, Chihuahuan Raven and Lark Sparrow in smaller numbers in pinyon-juniper habitat. Neither of the two primary woodland/forest species (Lewis's Woodpecker and Pinyon Jay) have declining trends that meet our data quality requirements in BCR 18, though Pinyon Jay shows a strong national decline. Therefore the abundance goals are to maintain the current estimated carrying capacity.

Habitat Generalists

Ring-necked Pheasant has declined at an average rate of 1.8% per year (1966-2005) in BCR 18 (Sauer et al. 2005). Our recommendations are: 1) Convert 2,730,082 acres of crops that do not support birds to crops such as wheat or alfalfa (for this exercise alfalfa is used), providing an additional 33,750 birds; 2) convert 400,000 acres of agricultural lands to CRP, providing 3,756 birds, assuming that all current acres of wheat and/or alfalfa remain the same; and 3) Convert 72,154 acres of exotic riparian shrubland to wet meadow, providing 3,968 birds. These manipulations would bring the species up to goal.

INTEGRATED BIRD HABITAT RECOMMENDATIONS

(By Association)

Badlands/Cliffs/Outcrops

There are no priority species associated with these habitats in Colorado and we have no habitat recommendations.

Cropland

Convert 2,730,082 acres of crops that do not support Ring-necked Pheasants to crops such as wheat or alfalfa (for this exercise alfalfa is used). PLJV estimates that currently 7,328,932 acres of crops exist which provide little support to the species.

Convert 400,000 acres of agricultural lands to CRP, however, maintain at least 1,466,607 acres of crops in wheat and 228,869 acres of cropland in alfalfa for Ring-necked Pheasant.

Planting grass corners (as in the Farm Bill program CP-33) on irrigated cropland may improve carrying capacity for some species, including Northern Bobwhite and Ring-necked Pheasant, reducing the need for crop conversion. However, this has not been measured and we are unaware of density differences in croplands with and without crop corners planted to grass.

CRP

Add 400,000 acres of CRP or develop a CRP-like program to supplement current NRCS county caps. The primary driver for this recommendation is Ring-necked Pheasant, but CRP is a proven success for many grassland birds in many regions. In Colorado, CRP supports some of the highest densities of Dickcissel and Grasshopper Sparrow. Gains in CRP over these current recommendations would help to bring numbers of Grasshopper Sparrow, especially, closer to goal.

Convert 1,896,236 acres of CRP from non-native grass mixtures to native grass mixtures, preferably also with a small shrub component, for Cassin's Sparrow. Currently the PLJV estimates that 237,030 acres are in such a condition.

Research appropriate seed mixes for CRP within the range of Lesser Prairie-Chicken in Colorado and the possibility of interseeding with forbs, native legumes or alfalfa may create usable habitat for Lesser Prairie-Chicken. If research proves that new seed mixes for CRP are appropriate for Lesser Prairie-Chicken, the addition of this to the landscape may well support additional numbers of Lesser Prairie-Chicken, and further Colorado's contribution to the conservation of this species.

We note that current high commodity prices are causing many producers to let their CRP contracts expire. To date there has not been another program to convert cropland back to grassland at such a large scale. If the CRP or a similar program cannot be maintained through adequate incentives to private landowners, it will be difficult to reach PLJV goals for many grassland bird species. CRP should be a focus of policy work by the PLJV and its partners.

Mixed Grass

This comprises a very small portion of the landscape but does support several priority species including Greater Prairie-Chicken, Upland Sandpiper and Short-eared Owl. We recommend managing as much of this habitat type as possible for few shrubs and high grass.

Other

PLJV estimates that approximately 950,000 acres of habitat in the Area have been permanently removed as bird habitat for most priority species in the form of cities, towns, transportation corridors, etc. Additionally there are almost 1,000,000 acres of habitat types that do little for the support of most BCR 18 priority species. Species such as Western Kingbird and Bullock's Oriole do breed within towns, however. Increasing the suitability of towns for these species by planting trees, especially native cottonwoods in yards and green belts within city limits will support these species.

Other Wetlands

Ensure no loss or degradation of these wetlands, which include emergent marshes (estimated 1,345 acres) and moist-soil units (estimated 1,272 acres). These wetlands support waterfowl, shorebirds, and waterbirds.

Protect known colonial waterbird colonies and areas where marsh birds breed.

Pinyon/Juniper

This habitat type is critical to the maintenance of birds such as Pinyon Jay within BCR 18. Maintain the current estimated 765,363 acres of pinyon/juniper habitat in this Area. Work toward frequent fire intervals at the ecotone between grassland and juniper, but strive to maintain very low fire frequencies in woodlands with a substantial percentage of pinyon.

Playa

Protect playas (estimated 64,434 acres) from further sedimentation by installing grass buffers around playas located in cropland. Buffer width, species composition, and management should be carefully considered to protect playas from sedimentation yet allow overland water flow to reach the basin. Restore natural hydrology by filling pits and removing excessive accumulated sediments. Install fences around playa basins to manage livestock grazing. Consider double-fencing (a fence around the playa basin and another around the upland buffer) to allow grazing in the uplands while protecting moist-soil plants for wetland birds. This habitat is important to wetland birds, and shorebirds are below goal.

Manage for few shrubs and a variety of grass heights in shortgrass prairie surrounding 19,114 acres of playas so that they can contribute to large blocks of habitat for Long-billed Curlew (see Long-billed Curlew models).

Ponderosa Pine

Maintain all acres of Ponderosa Pine forest. Manage these forests for Lewis's Woodpecker with regular, low-intensity, cool burns. Managing forest for few trees per acre and a grassy understory should attract and maintain these birds.

Reservoirs, Lakes, and Ponds

Maintain reservoir (estimated 110,488 acres) inflows (exotic brush control, minimizing/restoring water diversions, and protecting/improving groundwater levels) and reduce shoreline woody vegetation encroachment to maintain water levels and provide open shoreline foraging habitat for shorebirds and other wetland birds. This habitat is important to shorebirds and the Area is below desired carrying capacity.

Improve stock pond (estimated 48,409 acres) foraging habitat by fencing cattle from the shallow upper ends or instituting other grazing strategies that allow emergent vegetation to flourish in shallow water. This habitat is important to waterfowl.

Piping Plover has recently colonized reservoirs along the eastern stretch of the Arkansas River. Create or render suitable an additional 552 acres of sandy beach or shoreline surrounding large reservoirs in this Area. Currently the PLJV estimates that 552 acres exist in this Area.

Protect known colonial waterbird colonies and areas where marsh birds breed.

Riverine Systems

Convert 72,154 acres of exotic riparian shrubland to wet meadow for Ring-necked Pheasant. This will provide 3,968 Ring-necked Pheasant and support Short-eared Owl.

Restore and enhance river channel flows and floodplain marshes by controlling hydrophytes (exotic and native), increasing in-stream flows (e.g., through water use and management policies) where possible, and actively managing water levels (e.g., developing impoundments with water management capabilities) if necessary. These habitats support waterfowl, shorebirds, and waterbirds.

Additionally, manage 22,099 acres of floodplain marsh (estimated 23,516 acres) for optimum shorebird foraging suitability (mudflats and very shallow water with minimal emergent cover) by grazing, burning, brush removal, water level management, etc. This will provide more than 1.6 million additional shorebird foraging use-days and will bring the carrying capacity of the region to the objective level. This habitat is important for wetland birds but could be improved with additional management. The Area is below desired carrying capacity for shorebirds.

Piping Plover requires sandy areas with minimal vegetation. Create or render suitable an additional 1,237 acres of sandbars within the lower stretch of the Arkansas River. Currently the PLJV estimates that 1,747 acres of sandbars exist here. Additionally, work for this type of habitat on the lower S. Platte River. There is only one documented breeding attempt in this drainage for Colorado, but a growing population at Lake McConaughy in Nebraska could mean additional attempts by this species in the future.

Protect known colonial waterbird colonies and areas where marsh birds breed.

Sand Sage

For both Greater and Lesser Prairie-Chicken, manage this habitat type for residual grasses that are knee-high. Utilize CRP to create 90,000 additional acres of sand sage which contribute to large blocks of habitat, especially in Baca, Yuma and Logan counties and areas immediately south of the Big Sandy and Arkansas rivers in the southeastern quadrant of the state. Currently the PLJV estimates that 358,980 acres of sand sage contributes to large blocks.

Shortgrass

For Short-eared Owl, Grasshopper Sparrow and Lark Bunting, manage 2,383,779 additional acres of shortgrass prairie for high grass, especially in the eastern tier of counties. Currently the PLJV estimates that 3,138,720 acres are managed in this condition.

For Brewer's Sparrow, manage a total of 3,692,114 acres of shortgrass prairie for many shrubs and high grass, especially in Larimer, Logan, Morgan and Weld counties in the north and Huerfano, Las Animas and Pueblo counties in the southwest portion of BCR 18 in Colorado.

Support Long-billed Curlew by managing shortgrass prairie so that 4,483,888 acres have few shrubs (about equally split between low and high grass) and contribute to large blocks of habitat by placing near current or historic freshwater sources (see Long-billed Curlew model).

Manage 343,017 additional acres of shortgrass prairie for few shrubs and low grass near known breeding areas of Mountain Plovers. The PLJV estimates that 22,419 acres are managed in this way within the areas that Mountain Plovers currently occupy.

NEXT STEPS

This plan identifies broad-scale, long-term habitat goals that are expected to provide significant benefits to priority bird species in the planning Area. To make significant progress toward these goals, shorter-term objectives need to be identified with specific actions outlined. This will require more significant interaction with local partners to identify specific processes which can be implemented to reach plan goals. The next steps envisioned for successful implementation of this Plan include:

- Work with local land managers and land owners to implement on-the-ground habitat actions that forward the goals stated in this Plan.
- Coordinate with resource management agencies, conservation organizations, and local working groups to use existing programs to direct programmatic resources to forward the goals stated in this plan. Develop new programs to fill gaps as needed.
- Address policy-level issues at local, state, and national levels to ensure that beneficial conservation opportunities continue or are improved (e.g., CRP, NAWCA, etc.)
- Develop spatially-explicit models and other decision support tools to provide better direction regarding the type and location of habitat actions that will provide the greatest benefit for priority bird populations.
- Explore the impacts of additional factors, beyond habitat availability, that may be impacting bird populations in the planning region (e.g., habitat fragmentation, predation, disease, contaminants, etc.). Develop management actions to address these factors as needed.
- Conduct research to better understand the relationship between priority waterbirds and their habitats during the nonbreeding period. This information is needed to develop appropriate conservation strategies, but is currently lacking for most species.

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GUIDELINES FOR INTERPRETING THE TABLES

Tables 1 and 2

These tables show the carrying capacity models for each priority bird species/guild and are intended to show the details of the model parameters. Carrying capacity is shown for each Association/Condition (i.e., habitat type); under each, the top line shows estimated current habitat conditions and the bottom line shows desired future habitat conditions per recommendations in this Plan (note any acreage changes). The population goal is shown and carrying capacity is expressed as percent of goal. Some nonbreeding birds have separate goals and carrying capacities for multiple seasons (e.g., fall, winter, spring). The post-planning sum over all habitats should show each priority species/guild at or above 100% of goal unless otherwise noted.

Carrying capacity for each Association/Condition is estimated as (also see General Planning Approach section in this Plan, and the PLJV Implementation Planning Guide):

*Carrying Capacity = Condition Acres * Availability * Suitability * Large Block * Units*

Note: Decimal places for some parameters (e.g., Condition Acres) are carried further in the HABS database than shown in this table. So, some rounding errors will occur when multiplying these parameters manually.

Explanation of Column Headings

Assoc Name: "Association Name"; broad level PLJV habitat classification.

Condition Name: Finest level PLJV habitat classification.

Condition Acres: Acreage estimate of this habitat using GIS and other data sources.

Avail.: "Availability Factor"; estimated proportion of Condition Acres that are available to a priority bird/guild (e.g., proportion of acreage within bird's breeding range, proportion not frozen in winter, etc.).

Suit.: "Suitability Factor"; estimated proportion of Condition Acres that are suitable for a priority bird/guild (e.g., proportion of acreage shallow enough for efficient foraging by wetland birds, etc.).

Large Block: "Large Block Factor"; estimated proportion of Condition Acres that are in block sizes sufficient to support priority species that require large blocks of habitat (e.g., Lesser Prairie-Chicken, Long-billed Curlew). See definitions of large block models in text.

Units: Bird densities in habitats that support them, expressed as breeding birds per acre for breeding species, or "use-days" per acre for nonbreeding birds (bioenergetics approach to planning; see planning team reports for details). These estimates were derived from the literature or expert opinion.

CC: "Carrying Capacity"; estimated number of birds (or use-days) that can be supported on a specific habitat type; also summed over all habitats used by a priority species to estimate carrying capacity for a planning Area.

Goal: Bird abundance target (breeding birds or use-days) for an Area; stepped-down from the continental bird initiatives (see planning team reports for details).

% of Goal: Carrying capacity of a priority species/guild expressed as a percent of goal; shown for each habitat and also summed for the planning Area. This number should be at least 100% for all priority species/guilds in the planning Area after habitat recommendations are implemented. However, due to habitat actions need for other species, this number could be well over 100%.

Table 3

This table shows the estimated current habitat acreages, and desired future acreages based on habitat recommendations in this plan. Sums should equal the total area of the planning unit. Pre- and post-planning acreage sums should be approximately equal (not exactly equal due to rounding errors in database calculations).

Explanation of Column Headings

Association Name: Broad level PLJV habitat classification.

Condition Name: Finest level PLJV habitat classification.

Pre-Condition Acres: Current acreage estimate of this habitat (using GIS and other data sources).

Post Condition Acres: Desired future acreage of this habitat, after recommendations in this Plan are implemented.

Net Change: Difference between pre- and post Condition acres, representing the change in acreage of a habitat type after recommendations in this plan are implemented.

Table 1. Carrying capacity models for priority **nonbreeding birds**. Under each Condition Name, the top row represents estimated current habitat conditions, and the bottom row is the desired future habitat conditions.

Species/Guild Name: Cranes ***Season: Fall***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Other Wetlands	Emergent marsh	1,345	1.0000	1.0000	1.00000	396.0000	532,571	249,726	213.26%
		1,345	1.0000	1.0000	1.00000	396.0000	532,571	249,726	213.20%
Other Wetlands	Moist-soil unit	1,272	1.0000	1.0000	1.00000	1,253.0000	1,593,971	249,726	638.29%
		1,272	1.0000	1.0000	1.00000	1,253.0000	1,593,971	249,726	638.20%
Other Wetlands	Saline	0	1.0000	1.0000	1.00000	396.0000	0	249,726	0.00%
		0	1.0000	1.0000	1.00000	396.0000	0	249,726	0.00%
Playa	Wet	5,799	1.0000	1.0000	1.00000	127.0000	736,481	249,726	294.92%
		5,799	1.0000	1.0000	1.00000	127.0000	736,481	249,726	294.90%
Riverine Systems	Wet meadow	298,127	1.0000	1.0000	1.00000	396.0000	118,058,276	249,726	47275.12
		370,281	1.0000	1.0000	1.00000	396.0000	146,631,432	249,726	58716.90
Riverine Systems	Floodplain marsh	23,516	1.0000	1.0000	1.00000	396.0000	9,312,355	249,726	3729.03%
		23,516	1.0000	1.0000	1.00000	396.0000	9,312,355	249,726	3729.00%
Summary for Fall (6 records)				***Pre-planning Sum***			**130,233,654**		**52150.62%**
				Post-planning Sum			**158,806,810**		**63592.20%**

Species/Guild Name: Cranes ***Season: Spring***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Other Wetlands	Moist-soil unit	1,272	1.0000	1.0000	1.00000	1,253.0000	1,593,971	131,812	1209.28%
		1,272	1.0000	1.0000	1.00000	1,253.0000	1,593,971	131,812	1209.20%
Other Wetlands	Emergent marsh	1,345	1.0000	1.0000	1.00000	396.0000	532,571	131,812	404.04%
		1,345	1.0000	1.0000	1.00000	396.0000	532,571	131,812	404.00%
Other Wetlands	Saline	0	1.0000	1.0000	1.00000	396.0000	0	131,812	0.00%
		0	1.0000	1.0000	1.00000	396.0000	0	131,812	0.00%
Playa	Wet	5,799	1.0000	1.0000	1.00000	127.0000	736,481	131,812	558.74%
		5,799	1.0000	1.0000	1.00000	127.0000	736,481	131,812	558.70%
Riverine Systems	Floodplain marsh	23,516	1.0000	1.0000	1.00000	396.0000	9,312,355	131,812	7064.88%
		23,516	1.0000	1.0000	1.00000	396.0000	9,312,355	131,812	7064.80%
Riverine Systems	Wet meadow	298,127	1.0000	1.0000	1.00000	396.0000	118,058,276	131,812	89565.65
		370,281	1.0000	1.0000	1.00000	396.0000	146,631,432	131,812	111242.80%
Summary for Spring (6 records)				***Pre-planning Sum***			**130,233,654**		**98802.58%**
				Post-planning Sum			**158,806,810**		**120479.50%**

Species/Guild Name: Shorebirds-Nonbreeding-Upland ***Season: Nonbreeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Pasture	0	1.0000	0.0001	1.00000	347.0000	0	1,544	0.00%
		0	1.0000	0.0001	1.00000	347.0000	0	1,544	0.00%
Cropland	Sod farm	3,079	1.0000	0.0100	1.00000	347.0000	10,684	1,544	691.97%
		2,959	1.0000	0.0100	1.00000	347.0000	10,268	1,544	665.00%
Cropland	Alfalfa	228,869	1.0000	0.0001	1.00000	347.0000	7,942	1,544	514.38%
		3,018,131	1.0000	0.0001	1.00000	347.0000	104,729	1,544	6782.90%
CRP	Native	237,030	1.0000	0.0001	1.00000	347.0000	8,225	1,544	532.71%
		2,493,266	1.0000	0.0001	1.00000	347.0000	86,516	1,544	5603.30%
CRP	Non-native	2,133,266	1.0000	0.0001	1.00000	347.0000	74,024	1,544	4794.30%
		277,030	1.0000	0.0001	1.00000	347.0000	9,613	1,544	622.60%
Mixed Grass	Few shrubs/high grass	7,558	1.0000	0.0001	1.00000	347.0000	262	1,544	16.97%
		7,558	1.0000	0.0001	1.00000	347.0000	262	1,544	16.90%
Mixed Grass	Many shrubs/high grass	7,558	1.0000	0.0001	1.00000	347.0000	262	1,544	16.97%
		7,558	1.0000	0.0001	1.00000	347.0000	262	1,544	16.90%
Mixed Grass	Few shrubs/low grass	7,558	1.0000	0.0001	1.00000	347.0000	262	1,544	16.97%
		7,558	1.0000	0.0001	1.00000	347.0000	262	1,544	16.90%
Mixed Grass	Many shrubs/low grass	7,558	1.0000	0.0001	1.00000	347.0000	262	1,544	16.97%
		7,558	1.0000	0.0001	1.00000	347.0000	262	1,544	16.90%
Shortgrass	Few shrubs/low grass	2,241,944	1.0000	0.0001	0.00100	347.0000	78	1,544	5.05%
		1,050,054	1.0000	0.0001	0.00100	347.0000	36	1,544	2.30%
Shortgrass	PD town	582,834	1.0000	0.0001	0.00100	347.0000	20	1,544	1.30%
		582,834	1.0000	0.0001	0.00100	347.0000	20	1,544	1.20%

Shortgrass	Many shrubs/low grass	2,241,944	1.0000	0.0001	1.00000	347.0000	77,795	1,544	5038.54%
		1,050,054	1.0000	0.0001	1.00000	347.0000	36,437	1,544	2359.90%
Shortgrass	Many shrubs/high grass	2,241,944	1.0000	0.0001	0.00100	347.0000	78	1,544	5.05%
		3,433,833	1.0000	0.0001	0.00100	347.0000	119	1,544	7.70%
Shortgrass	Few shrubs/high grass	2,241,944	1.0000	0.0001	0.00100	347.0000	78	1,544	5.05%
		3,433,833	1.0000	0.0001	0.00100	347.0000	119	1,544	7.70%
Summary for Nonbreeding (14 records)					***Pre-planning Sum***		**179,972**		**11656.21%**
					Post-planning Sum		**248,905**		**16120.20%**

Species/Guild Name: Shorebirds-Nonbreeding-Wetland ***Season: Nonbreeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Other Wetlands	Moist-soil unit	1,272	0.3500	0.1500	1.00000	74.0000	4,942	1,794,683	0.28%
		1,272	0.3500	0.1500	1.00000	74.0000	4,942	1,794,683	0.20%
Other Wetlands	Emergent marsh	1,345	1.0000	0.1000	1.00000	74.0000	9,952	1,794,683	0.55%
		1,345	1.0000	0.1000	1.00000	74.0000	9,952	1,794,683	0.50%
Other Wetlands	Saline	0	1.0000	0.1500	1.00000	74.0000	0	1,794,683	0.00%
		0	1.0000	0.1500	1.00000	74.0000	0	1,794,683	0.00%
Playa	Wet	5,799	1.0000	0.1000	1.00000	74.0000	42,913	1,794,683	2.39%
		5,799	1.0000	0.1000	1.00000	74.0000	42,913	1,794,683	2.30%
Playa	Wet pit only	3,866	1.0000	0.0010	1.00000	74.0000	286	1,794,683	0.02%
		3,866	1.0000	0.0010	1.00000	74.0000	286	1,794,683	0.00%
Reservoirs Lakes Ponds	Freshwater lake	1,489	1.0000	0.0050	1.00000	74.0000	551	1,794,683	0.03%
		1,489	1.0000	0.0050	1.00000	74.0000	551	1,794,683	0.00%
Reservoirs Lakes Ponds	Lagoon	151	1.0000	0.0050	1.00000	74.0000	56	1,794,683	0.00%
		151	1.0000	0.0050	1.00000	74.0000	56	1,794,683	0.00%
Reservoirs Lakes Ponds	Reservoir	110,488	1.0000	0.0050	1.00000	74.0000	40,881	1,794,683	2.28%
		110,488	1.0000	0.0050	1.00000	74.0000	40,881	1,794,683	2.20%
Reservoirs Lakes Ponds	Stock pond	48,409	1.0000	0.0050	1.00000	74.0000	17,911	1,794,683	1.00%
		48,409	1.0000	0.0050	1.00000	74.0000	17,911	1,794,683	0.90%
Riverine Systems	Floodplain marsh	23,516	1.0000	0.0130	1.00000	74.0000	22,622	1,794,683	1.26%
		23,516	1.0000	0.9528	1.00000	74.0000	1,658,051	1,794,683	92.30%
Riverine Systems	River channel	26,022	1.0000	0.0100	1.00000	74.0000	19,256	1,794,683	1.07%
		26,022	1.0000	0.0100	1.00000	74.0000	19,256	1,794,683	1.00%
Summary for Nonbreeding (11 records)					***Pre-planning Sum***		**159,370**		**8.88%**
					Post-planning Sum		**1,794,799**		**99.40%**

Species/Guild Name: Waterfowl-Nonbreeding ***Season: Fall***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Sorghum	329,448	1.0000	0.0000	1.00000	849.0000	0	11,189,572	0.00%
		316,608	1.0000	0.0000	1.00000	849.0000	0	11,189,572	0.00%
Cropland	Wheat	1,466,607	1.0000	0.0000	1.00000	668.0000	0	11,189,572	0.00%
		1,466,555	1.0000	0.0000	1.00000	668.0000	0	11,189,572	0.00%
Cropland	Corn	716,369	1.0000	0.0000	1.00000	668.0000	0	11,189,572	0.00%
		688,449	1.0000	0.0000	1.00000	668.0000	0	11,189,572	0.00%
Other Wetlands	Moist-soil unit	1,272	0.2800	1.0000	1.00000	1,336.0000	475,876	11,189,572	4.25%
		1,272	0.2800	1.0000	1.00000	1,336.0000	475,876	11,189,572	4.20%
Other Wetlands	Emergent marsh	1,345	1.0000	1.0000	1.00000	1,336.0000	1,796,755	11,189,572	16.06%
		1,345	1.0000	1.0000	1.00000	1,336.0000	1,796,755	11,189,572	16.00%
Other Wetlands	Saline	0	1.0000	1.0000	1.00000	1,336.0000	0	11,189,572	0.00%
		0	1.0000	1.0000	1.00000	1,336.0000	0	11,189,572	0.00%
Playa	Wet	5,799	1.0000	1.0000	1.00000	428.0000	2,481,998	11,189,572	22.18%
		5,799	1.0000	1.0000	1.00000	428.0000	2,481,998	11,189,572	22.10%
Reservoirs Lakes Ponds	Freshwater lake	1,489	1.0000	0.0500	1.00000	225.0000	16,754	11,189,572	0.15%
		1,489	1.0000	0.0500	1.00000	225.0000	16,754	11,189,572	0.10%
Reservoirs Lakes Ponds	Reservoir	110,488	1.0000	0.0500	1.00000	225.0000	1,242,990	11,189,572	11.11%
		110,488	1.0000	0.0500	1.00000	225.0000	1,242,990	11,189,572	11.10%
Reservoirs Lakes Ponds	Stock pond	48,409	1.0000	0.4000	1.00000	225.0000	4,356,771	11,189,572	38.94%
		48,409	1.0000	0.4000	1.00000	225.0000	4,356,771	11,189,572	38.90%
Reservoirs Lakes Ponds	Lagoon	151	1.0000	0.4000	1.00000	428.0000	25,782	11,189,572	0.23%
		151	1.0000	0.4000	1.00000	428.0000	25,782	11,189,572	0.20%
Riverine Systems	Warmwater slough	1,349	1.0000	1.0000	1.00000	428.0000	577,492	11,189,572	5.16%
		1,349	1.0000	1.0000	1.00000	428.0000	577,492	11,189,572	5.10%
Riverine Systems	Floodplain marsh	23,516	1.0000	1.0000	1.00000	1,336.0000	31,417,441	11,189,572	280.77%
		23,516	1.0000	1.0000	1.00000	1,336.0000	31,417,441	11,189,572	280.70%

Riverine Systems	River channel	26,022	1.0000	1.0000	1.00000	50.0000	1,301,093	11,189,572	11.63%
		26,022	1.0000	1.0000	1.00000	50.0000	1,301,093	11,189,572	11.60%
Summary for Fall (14 records)				***Pre-planning Sum***			**43,692,952**		**390.47%**
				Post-planning Sum			**43,692,952**		**390.00%**

Species/Guild Name: Waterfowl-Nonbreeding ***Season: Spring***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Sorghum	329,448	1.0000	0.0000	1.00000	849.0000	0	36,725,937	0.00%
		316,608	1.0000	0.0000	1.00000	849.0000	0	36,725,937	0.00%
Cropland	Wheat	1,466,607	1.0000	0.0000	1.00000	668.0000	0	36,725,937	0.00%
		1,466,555	1.0000	0.0000	1.00000	668.0000	0	36,725,937	0.00%
Cropland	Corn	716,369	1.0000	0.0000	1.00000	668.0000	0	36,725,937	0.00%
		688,449	1.0000	0.0000	1.00000	668.0000	0	36,725,937	0.00%
Other Wetlands	Emergent marsh	1,345	1.0000	1.0000	1.00000	1,336.0000	1,796,755	36,725,937	4.89%
		1,345	1.0000	1.0000	1.00000	1,336.0000	1,796,755	36,725,937	4.80%
Other Wetlands	Moist-soil unit	1,272	0.4200	1.0000	1.00000	1,336.0000	713,814	36,725,937	1.94%
		1,272	0.4200	1.0000	1.00000	1,336.0000	713,814	36,725,937	1.90%
Other Wetlands	Saline	0	1.0000	1.0000	1.00000	1,336.0000	0	36,725,937	0.00%
		0	1.0000	1.0000	1.00000	1,336.0000	0	36,725,937	0.00%
Playa	Wet	5,799	1.0000	1.0000	1.00000	428.0000	2,481,998	36,725,937	6.76%
		5,799	1.0000	1.0000	1.00000	428.0000	2,481,998	36,725,937	6.70%
Reservoirs Lakes Ponds	Lagoon	151	1.0000	0.4000	1.00000	428.0000	25,782	36,725,937	0.07%
		151	1.0000	0.4000	1.00000	428.0000	25,782	36,725,937	0.00%
Reservoirs Lakes Ponds	Reservoir	110,488	1.0000	0.0500	1.00000	225.0000	1,242,990	36,725,937	3.38%
		110,488	1.0000	0.0500	1.00000	225.0000	1,242,990	36,725,937	3.30%
Reservoirs Lakes Ponds	Stock pond	48,409	1.0000	0.4000	1.00000	225.0000	4,356,771	36,725,937	11.86%
		48,409	1.0000	0.4000	1.00000	225.0000	4,356,771	36,725,937	11.80%
Reservoirs Lakes Ponds	Freshwater lake	1,489	1.0000	0.0500	1.00000	225.0000	16,754	36,725,937	0.05%
		1,489	1.0000	0.0500	1.00000	225.0000	16,754	36,725,937	0.00%
Riverine Systems	Warmwater slough	1,349	1.0000	1.0000	1.00000	428.0000	577,492	36,725,937	1.57%
		1,349	1.0000	1.0000	1.00000	428.0000	577,492	36,725,937	1.50%
Riverine Systems	River channel	26,022	1.0000	1.0000	1.00000	50.0000	1,301,093	36,725,937	3.54%
		26,022	1.0000	1.0000	1.00000	50.0000	1,301,093	36,725,937	3.50%
Riverine Systems	Floodplain marsh	23,516	1.0000	1.0000	1.00000	1,336.0000	31,417,441	36,725,937	85.55%
		23,516	1.0000	1.0000	1.00000	1,336.0000	31,417,441	36,725,937	85.50%
Summary for Spring (14 records)				***Pre-planning Sum***			**43,930,890**		**119.61%**
				Post-planning Sum			**43,930,890**		**119.00%**

Species/Guild Name: Waterfowl-Nonbreeding ***Season: Winter***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Corn	716,369	1.0000	1.0000	1.00000	668.0000	478,534,810	65,969,008	725.39%
		688,449	1.0000	1.0000	1.00000	668.0000	459,884,250	65,969,008	697.10%
Cropland	Sorghum	329,448	1.0000	1.0000	1.00000	849.0000	279,701,227	65,969,008	423.99%
		316,608	1.0000	1.0000	1.00000	849.0000	268,800,067	65,969,008	407.40%
Cropland	Wheat	1,466,607	1.0000	1.0000	1.00000	668.0000	979,693,758	65,969,008	1485.08%
		1,466,555	1.0000	1.0000	1.00000	668.0000	979,658,869	65,969,008	1485.00%
Other Wetlands	Emergent marsh	1,345	0.0000	1.0000	1.00000	1,336.0000	0	65,969,008	0.00%
		1,345	0.0000	1.0000	1.00000	1,336.0000	0	65,969,008	0.00%
Other Wetlands	Moist-soil unit	1,272	0.0000	1.0000	1.00000	1,336.0000	0	65,969,008	0.00%
		1,272	0.0000	1.0000	1.00000	1,336.0000	0	65,969,008	0.00%
Other Wetlands	Saline	0	0.0000	1.0000	1.00000	1,336.0000	0	65,969,008	0.00%
		0	0.0000	1.0000	1.00000	1,336.0000	0	65,969,008	0.00%
Playa	Wet	5,799	0.0000	1.0000	1.00000	428.0000	0	65,969,008	0.00%
		5,799	0.0000	1.0000	1.00000	428.0000	0	65,969,008	0.00%
Reservoirs Lakes Ponds	Lagoon	151	0.0000	0.4000	1.00000	428.0000	0	65,969,008	0.00%
		151	0.0000	0.4000	1.00000	428.0000	0	65,969,008	0.00%
Reservoirs Lakes Ponds	Freshwater lake	1,489	0.0000	0.0500	1.00000	225.0000	0	65,969,008	0.00%
		1,489	0.0000	0.0500	1.00000	225.0000	0	65,969,008	0.00%
Reservoirs Lakes Ponds	Stock pond	48,409	0.0000	0.4000	1.00000	225.0000	0	65,969,008	0.00%
		48,409	0.0000	0.4000	1.00000	225.0000	0	65,969,008	0.00%
Reservoirs Lakes Ponds	Reservoir	110,488	0.0000	0.0500	1.00000	225.0000	0	65,969,008	0.00%
		110,488	0.0000	0.0500	1.00000	225.0000	0	65,969,008	0.00%
Riverine Systems	Floodplain marsh	23,516	0.0000	1.0000	1.00000	1,336.0000	0	65,969,008	0.00%
		23,516	0.0000	1.0000	1.00000	1,336.0000	0	65,969,008	0.00%

Riverine Systems	River channel	26,022	0.0000	1.0000	1.00000	50.0000	0	65,969,008	0.00%
		26,022	0.0000	1.0000	1.00000	50.0000	0	65,969,008	0.00%
Riverine Systems	Warmwater slough	1,349	1.0000	1.0000	1.00000	428.0000	577,492	65,969,008	0.88%
		1,349	1.0000	1.0000	1.00000	428.0000	577,492	65,969,008	0.80%
Summary for Winter (14 records)					***Pre-planning Sum***		**1,738,507,287**		**2635.34%**
					Post-planning Sum		**1,708,920,678**		**2590.30%**

Table 2. Carrying capacity models for priority **breeding birds**. Under Condition Name, the top row represents estimated current habitat conditions, and the bottom row is the desired future habitat conditions.

Species/Guild Name: Baltimore Oriole ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Riverine Systems	Riparian canopy - early successional w/ understory	16,577	1.0000	0.1000	1.00000	0.0159	26	187	13.90%
		16,577	1.0000	0.1000	1.00000	0.0159	26	187	13.90%
Riverine Systems	Riparian canopy - late successional w/o understory	11,051	1.0000	0.1000	1.00000	0.0159	18	187	9.63%
		11,051	1.0000	0.1000	1.00000	0.0159	18	187	9.63%
Riverine Systems	Riparian canopy - late successional w/ understory	11,051	1.0000	0.1000	1.00000	0.0520	57	187	30.48%
		11,051	1.0000	0.1000	1.00000	0.0520	57	187	30.48%
Riverine Systems	Riparian canopy - early successional w/o understor	16,577	1.0000	0.1000	1.00000	0.0520	86	187	45.99%
		16,577	1.0000	0.1000	1.00000	0.0520	86	187	45.99%
Summary for Breeding (4 records)				***Pre-planning Sum***			**187**		**100.00%**
				Post-planning Sum			**187**		**100.00%**

Species/Guild Name: Bell's Vireo ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Riverine Systems	Riparian canopy - early successional w/ understory	16,577	1.0000	0.0500	1.00000	0.0178	15	884	1.70%
		16,577	1.0000	0.0500	1.00000	0.0178	15	884	1.70%
Riverine Systems	Native riparian shrubland	157,159	1.0000	0.0500	1.00000	0.1093	859	884	97.17%
		157,159	1.0000	0.0500	1.00000	0.1093	859	884	97.17%
Riverine Systems	Riparian canopy - late successional w/ understory	11,051	1.0000	0.0500	1.00000	0.0178	10	884	1.13%
		11,051	1.0000	0.0500	1.00000	0.0178	10	884	1.13%
Summary for Breeding (3 records)				***Pre-planning Sum***			**884**		**100.00%**
				Post-planning Sum			**884**		**100.00%**

Species/Guild Name: Brewer's Sparrow ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Sand Sage	High grass	106,207	1.0000	0.3000	1.00000	0.0192	612	91,648	0.67%
		1,911,731	1.0000	0.3000	1.00000	0.0192	11,012	91,648	12.02%
Sand Sage	Low grass	2,017,939	1.0000	0.3000	1.00000	0.0192	11,623	91,648	12.68%
		212,415	1.0000	0.3000	1.00000	0.0192	1,224	91,648	1.34%
Shortgrass	Few shrubs/low grass	2,241,944	1.0000	0.3000	1.00000	0.0064	4,305	91,648	4.70%
		1,050,054	1.0000	0.3000	1.00000	0.0064	2,016	91,648	2.20%
Shortgrass	Few shrubs/high grass	2,241,944	1.0000	0.3000	1.00000	0.0064	4,305	91,648	4.70%
		3,433,833	1.0000	0.3000	1.00000	0.0064	6,593	91,648	7.19%
Shortgrass	Many shrubs/high grass	2,241,944	1.0000	0.3000	1.00000	0.0192	12,914	91,648	14.09%
		3,433,833	1.0000	0.8000	1.00000	0.0192	52,744	91,648	57.55%
Shortgrass	Many shrubs/low grass	2,241,944	1.0000	0.3000	1.00000	0.0192	12,914	91,648	14.09%
		1,050,054	1.0000	0.9000	1.00000	0.0192	18,145	91,648	19.80%
Summary for Breeding (6 records)				***Pre-planning Sum***			**46,673**		**50.92%**
				Post-planning Sum			**91,734**		**100.09%**

Species/Guild Name: Bullock's Oriole ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Other	small roads	402,622	1.0000	1.0000	1.00000	0.0016	644	115,084	0.56%
		402,622	1.0000	1.0000	1.00000	0.0016	644	115,084	0.56%
Other	Urban/Suburban	522,770	1.0000	1.0000	1.00000	0.1595	83,382	115,084	72.45%
		522,770	1.0000	1.0000	1.00000	0.1595	83,382	115,084	72.45%
Riverine Systems	Riparian canopy - early successional w/o understor	16,577	1.0000	1.0000	1.00000	0.1584	2,626	115,084	2.28%
		16,577	1.0000	1.0000	1.00000	0.1584	2,626	115,084	2.28%
Riverine Systems	Riparian canopy - late successional w/o understory	11,051	1.0000	1.0000	1.00000	0.5184	5,729	115,084	4.98%
		11,051	1.0000	1.0000	1.00000	0.5184	5,729	115,084	4.98%
Riverine Systems	Riparian canopy - late successional w/ understory	11,051	1.0000	1.0000	1.00000	0.5184	5,729	115,084	4.98%
		11,051	1.0000	1.0000	1.00000	0.5184	5,729	115,084	4.98%
Riverine Systems	Riparian canopy - early successional w/ understory	16,577	1.0000	1.0000	1.00000	0.1584	2,626	115,084	2.28%
		16,577	1.0000	1.0000	1.00000	0.1584	2,626	115,084	2.28%

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Shortgrass	Few shrubs/high grass	2,241,944	1.0000	1.0000	1.00000	0.0016	3,587	115,084	3.12%
		3,433,833	1.0000	1.0000	1.00000	0.0016	5,494	115,084	4.77%
Shortgrass	Few shrubs/low grass	2,241,944	1.0000	1.0000	1.00000	0.0016	3,587	115,084	3.12%
		1,050,054	1.0000	1.0000	1.00000	0.0016	1,680	115,084	1.46%
Shortgrass	Many shrubs/low grass	2,241,944	1.0000	1.0000	1.00000	0.0016	3,587	115,084	3.12%
		1,050,054	1.0000	1.0000	1.00000	0.0016	1,680	115,084	1.46%
Shortgrass	Many shrubs/high grass	2,241,944	1.0000	1.0000	1.00000	0.0016	3,587	115,084	3.12%
		3,433,833	1.0000	1.0000	1.00000	0.0016	5,494	115,084	4.77%
Summary for Breeding (10 records)					***Pre-planning Sum***		**115,084**		**99.99%**
					Post-planning Sum		**115,084**		**99.99%**

Species/Guild Name: Burrowing Owl ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Shortgrass	Many shrubs/low grass	2,241,944	0.0500	1.0000	1.00000	0.0023	258	50,220	0.51%
		1,050,054	0.0500	1.0000	1.00000	0.0023	121	50,220	0.24%
Shortgrass	Few shrubs/low grass	2,241,944	0.0500	1.0000	1.00000	0.0023	258	50,220	0.51%
		1,050,054	0.0500	1.0000	1.00000	0.0023	121	50,220	0.24%
Shortgrass	PD town	582,834	1.0000	0.4000	1.00000	0.2132	49,704	50,220	98.97%
		582,834	1.0000	0.6000	1.00000	0.2132	74,556	50,220	148.46%
Summary for Breeding (3 records)					***Pre-planning Sum***		**50,220**		**100.00%**
					Post-planning Sum		**74,798**		**148.94%**

Species/Guild Name: Cassin's Sparrow ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
CRP	Native	237,030	1.0000	1.0000	1.00000	0.0534	12,657	1,117,772	1.13%
		2,493,266	1.0000	1.0000	1.00000	0.0534	133,140	1,117,772	11.91%
CRP	Non-native	2,133,266	1.0000	1.0000	1.00000	0.0476	101,543	1,117,772	9.08%
		277,030	1.0000	1.0000	1.00000	0.0476	13,187	1,117,772	1.18%
Mixed Grass	Many shrubs/high grass	7,558	1.0000	1.0000	1.00000	0.0828	626	1,117,772	0.06%
		7,558	1.0000	1.0000	1.00000	0.0828	626	1,117,772	0.06%
Mixed Grass	Few shrubs/low grass	7,558	1.0000	1.0000	1.00000	0.0161	122	1,117,772	0.01%
		7,558	1.0000	1.0000	1.00000	0.0161	122	1,117,772	0.01%
Mixed Grass	Many shrubs/low grass	7,558	1.0000	1.0000	1.00000	0.0828	626	1,117,772	0.06%
		7,558	1.0000	1.0000	1.00000	0.0828	626	1,117,772	0.06%
Mixed Grass	Few shrubs/high grass	7,558	1.0000	1.0000	1.00000	0.0161	122	1,117,772	0.01%
		7,558	1.0000	1.0000	1.00000	0.0161	122	1,117,772	0.01%
Sand Sage	High grass	106,207	1.0000	1.0000	1.00000	0.1625	17,259	1,117,772	1.54%
		1,911,731	1.0000	1.0000	1.00000	0.1625	310,656	1,117,772	27.79%
Sand Sage	Low grass	2,017,939	1.0000	1.0000	1.00000	0.1625	327,915	1,117,772	29.34%
		212,415	1.0000	1.0000	1.00000	0.1625	34,517	1,117,772	3.09%
Shortgrass	Few shrubs/high grass	2,241,944	1.0000	0.9000	1.00000	0.0161	32,486	1,117,772	2.91%
		3,433,833	1.0000	0.9000	1.00000	0.0161	49,756	1,117,772	4.45%
Shortgrass	Few shrubs/low grass	2,241,944	1.0000	0.9000	1.00000	0.0161	32,486	1,117,772	2.91%
		1,050,054	1.0000	0.9000	1.00000	0.0161	15,215	1,117,772	1.36%
Shortgrass	Many shrubs/low grass	2,241,944	1.0000	0.9000	1.00000	0.0828	167,070	1,117,772	14.95%
		1,050,054	1.0000	1.0000	1.00000	0.0828	86,945	1,117,772	7.78%
Shortgrass	Many shrubs/high grass	2,241,944	1.0000	0.9000	1.00000	0.0828	167,070	1,117,772	14.95%
		3,433,833	1.0000	1.0000	1.00000	0.0828	284,321	1,117,772	25.44%
Summary for Breeding (12 records)					***Pre-planning Sum***		**859,982**		**76.93%**
					Post-planning Sum		**929,233**		**83.13%**

Species/Guild Name: Chestnut-collared Longspur ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Mixed Grass	Many shrubs/low grass	7,558	1.0000	0.0200	1.00000	0.1000	15	13,501	0.11%
		7,558	1.0000	0.0200	1.00000	0.1000	15	13,501	0.11%
Mixed Grass	Few shrubs/high grass	7,558	1.0000	0.0200	1.00000	0.0498	8	13,501	0.06%
		7,558	1.0000	0.0200	1.00000	0.0498	8	13,501	0.06%
Mixed Grass	Few shrubs/low grass	7,558	1.0000	0.0200	1.00000	0.1000	15	13,501	0.11%
		7,558	1.0000	0.0200	1.00000	0.1000	15	13,501	0.11%
Mixed Grass	Many shrubs/high grass	7,558	1.0000	0.0200	1.00000	0.0498	8	13,501	0.06%
		7,558	1.0000	0.0200	1.00000	0.0498	8	13,501	0.06%

Playa	Dry	54,769	1.0000	0.0200	1.00000	0.0190	21	13,501	0.16%
		54,769	1.0000	0.0200	1.00000	0.0190	21	13,501	0.16%
Shortgrass	Few shrubs/low grass	2,241,944	1.0000	0.0200	1.00000	0.1000	4,484	13,501	33.21%
		1,050,054	1.0000	0.0427	1.00000	0.1000	4,484	13,501	33.21%
Shortgrass	Many shrubs/low grass	2,241,944	1.0000	0.0200	1.00000	0.1000	4,484	13,501	33.21%
		1,050,054	1.0000	0.0427	1.00000	0.1000	4,484	13,501	33.21%
Shortgrass	Many shrubs/high grass	2,241,944	1.0000	0.0200	1.00000	0.0498	2,233	13,501	16.54%
		3,433,833	1.0000	0.0200	1.00000	0.0498	3,420	13,501	25.33%
Shortgrass	Few shrubs/high grass	2,241,944	1.0000	0.0200	1.00000	0.0498	2,233	13,501	16.54%
		3,433,833	1.0000	0.0200	1.00000	0.0498	3,420	13,501	25.33%
Summary for Breeding (9 records)					***Pre-planning Sum***		**13,501**		**100.00%**
					Post-planning Sum		**15,875**		**117.58%**

Species/Guild Name: Chihuahuan Raven ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Mixed Grass	Many shrubs/high grass	7,558	0.1500	1.0000	1.00000	0.0030	3	3,784	0.08%
		7,558	0.1500	1.0000	1.00000	0.0030	3	3,784	0.08%
Mixed Grass	Many shrubs/low grass	7,558	0.1500	1.0000	1.00000	0.0030	3	3,784	0.08%
		7,558	0.1500	1.0000	1.00000	0.0030	3	3,784	0.08%
Mixed Grass	Few shrubs/high grass	7,558	0.1500	1.0000	1.00000	0.0008	1	3,784	0.03%
		7,558	0.1500	1.0000	1.00000	0.0008	1	3,784	0.03%
Mixed Grass	Few shrubs/low grass	7,558	0.1500	1.0000	1.00000	0.0008	1	3,784	0.03%
		7,558	0.1500	1.0000	1.00000	0.0008	1	3,784	0.03%
Pinyon/Juniper	NA	765,363	0.1500	1.0000	1.00000	0.0023	264	3,784	6.98%
		765,363	0.1500	1.0000	1.00000	0.0023	264	3,784	6.98%
Sand Sage	Low grass	2,017,939	0.1500	1.0000	1.00000	0.0030	908	3,784	24.00%
		212,415	0.1500	1.0000	1.00000	0.0030	96	3,784	2.54%
Sand Sage	High grass	106,207	0.1500	1.0000	1.00000	0.0030	48	3,784	1.27%
		1,911,731	0.1500	1.0000	1.00000	0.0030	860	3,784	22.73%
Shortgrass	Few shrubs/high grass	2,241,944	0.1500	1.0000	1.00000	0.0008	269	3,784	7.11%
		3,433,833	0.1500	1.0000	1.00000	0.0008	412	3,784	10.89%
Shortgrass	Many shrubs/high grass	2,241,944	0.1500	1.0000	1.00000	0.0030	1,009	3,784	26.66%
		3,433,833	0.1500	1.0000	1.00000	0.0030	1,545	3,784	40.83%
Shortgrass	Few shrubs/low grass	2,241,944	0.1500	1.0000	1.00000	0.0008	269	3,784	7.11%
		1,050,054	0.1500	1.0000	1.00000	0.0008	126	3,784	3.33%
Shortgrass	Many shrubs/low grass	2,241,944	0.1500	1.0000	1.00000	0.0030	1,009	3,784	26.66%
		1,050,054	0.1500	1.0000	1.00000	0.0030	473	3,784	12.50%
Summary for Breeding (11 records)					***Pre-planning Sum***		**3,784**		**99.99%**
					Post-planning Sum		**3,784**		**99.99%**

Species/Guild Name: Dickcissel ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Pasture	0	1.0000	1.0000	1.00000	0.0032	0	23,950	0.00%
		0	1.0000	1.0000	1.00000	0.0032	0	23,950	0.00%
CRP	Non-native	2,133,266	1.0000	1.0000	1.00000	0.0060	12,800	23,950	53.44%
		277,030	1.0000	1.0000	1.00000	0.0060	1,662	23,950	6.94%
CRP	Native	237,030	1.0000	1.0000	1.00000	0.0060	1,422	23,950	5.94%
		2,493,266	1.0000	1.0000	1.00000	0.0060	14,960	23,950	62.46%
Mixed Grass	Few shrubs/high grass	7,558	1.0000	1.0000	1.00000	0.0043	32	23,950	0.13%
		7,558	1.0000	1.0000	1.00000	0.0043	32	23,950	0.13%
Mixed Grass	Many shrubs/high grass	7,558	1.0000	1.0000	1.00000	0.0043	32	23,950	0.13%
		7,558	1.0000	1.0000	1.00000	0.0043	32	23,950	0.13%
Other Wetlands	Moist-soil unit	1,272	1.0000	1.0000	1.00000	0.0043	5	23,950	0.02%
		1,272	1.0000	1.0000	1.00000	0.0043	5	23,950	0.02%
Riverine Systems	Wet meadow	298,127	1.0000	1.0000	1.00000	0.0324	9,659	23,950	40.33%
		370,281	1.0000	1.0000	1.00000	0.0324	11,997	23,950	50.09%
Summary for Breeding (7 records)					***Pre-planning Sum***		**23,950**		**100.00%**
					Post-planning Sum		**28,688**		**119.78%**

Species/Guild Name: Grasshopper Sparrow ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Wheat	1,466,607	1.0000	0.1000	1.00000	0.0425	6,233	1,282,771	0.49%
		1,466,555	1.0000	0.1000	1.00000	0.0425	6,233	1,282,771	0.49%
Cropland	Pasture	0	1.0000	0.1000	1.00000	0.0272	0	1,282,771	0.00%
		0	1.0000	0.1000	1.00000	0.0272	0	1,282,771	0.00%
Cropland	Alfalfa	228,869	1.0000	0.1000	1.00000	0.0425	973	1,282,771	0.08%
		3,018,131	1.0000	0.1000	1.00000	0.0425	12,827	1,282,771	1.00%
Cropland	Hay	103,658	1.0000	0.1000	1.00000	0.0272	282	1,282,771	0.02%
		99,618	1.0000	0.1000	1.00000	0.0272	271	1,282,771	0.02%
CRP	Non-native	2,133,266	1.0000	0.8000	1.00000	0.1957	333,984	1,282,771	26.04%
		277,030	1.0000	0.8288	1.00000	0.1957	44,933	1,282,771	3.50%
CRP	Native	237,030	1.0000	0.8000	1.00000	0.1957	37,109	1,282,771	2.89%
		2,493,266	1.0000	0.8288	1.00000	0.1957	404,398	1,282,771	31.53%
Mixed Grass	Few shrubs/low grass	7,558	1.0000	1.0000	1.00000	0.0136	103	1,282,771	0.01%
		7,558	1.0000	1.0000	1.00000	0.0136	103	1,282,771	0.01%
Mixed Grass	Many shrubs/low grass	7,558	1.0000	1.0000	1.00000	0.0136	103	1,282,771	0.01%
		7,558	1.0000	1.0000	1.00000	0.0136	103	1,282,771	0.01%
Mixed Grass	Many shrubs/high grass	7,558	1.0000	1.0000	1.00000	0.0660	499	1,282,771	0.04%
		7,558	1.0000	1.0000	1.00000	0.0660	499	1,282,771	0.04%
Mixed Grass	Few shrubs/high grass	7,558	1.0000	1.0000	1.00000	0.0660	499	1,282,771	0.04%
		7,558	1.0000	1.0000	1.00000	0.0660	499	1,282,771	0.04%
Riverine Systems	Wet meadow	298,127	1.0000	1.0000	1.00000	0.0793	23,641	1,282,771	1.84%
		370,281	1.0000	1.0000	1.00000	0.0793	29,363	1,282,771	2.29%
Shortgrass	Few shrubs/low grass	2,241,944	1.0000	0.7000	1.00000	0.0136	21,343	1,282,771	1.66%
		1,050,054	1.0000	0.7000	1.00000	0.0136	9,997	1,282,771	0.78%
Shortgrass	Many shrubs/high grass	2,241,944	1.0000	0.7000	1.00000	0.0660	103,578	1,282,771	8.07%
		3,433,833	1.0000	1.0000	1.00000	0.0660	226,633	1,282,771	17.67%
Shortgrass	Many shrubs/low grass	2,241,944	1.0000	0.7000	1.00000	0.0136	21,343	1,282,771	1.66%
		1,050,054	1.0000	0.7000	1.00000	0.0136	9,997	1,282,771	0.78%
Shortgrass	Few shrubs/high grass	2,241,944	1.0000	0.7000	1.00000	0.0660	103,578	1,282,771	8.07%
		3,433,833	1.0000	1.0000	1.00000	0.0660	226,633	1,282,771	17.67%
Summary for Breeding (15 records)					***Pre-planning Sum***		**653,268**		**50.92%**
					Post-planning Sum		**972,489**		**75.81%**

Species/Guild Name: Greater Prairie-Chicken ***Season: Resident***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
CRP	Native	237,030	1.0000	1.0000	0.03100	0.0224	165	3,057	5.40%
		2,493,266	1.0000	1.0000	0.03100	0.0224	1,731	3,057	56.62%
CRP	Non-native	2,133,266	1.0000	1.0000	0.03100	0.0224	1,481	3,057	48.45%
		277,030	1.0000	1.0000	0.03100	0.0224	192	3,057	6.28%
Mixed Grass	Many shrubs/high grass	7,558	1.0000	1.0000	0.34500	0.0224	58	3,057	1.90%
		7,558	1.0000	1.0000	0.34500	0.0224	58	3,057	1.90%
Mixed Grass	Many shrubs/low grass	7,558	1.0000	1.0000	0.34500	0.0224	58	3,057	1.90%
		7,558	1.0000	1.0000	0.34500	0.0224	58	3,057	1.90%
Mixed Grass	Few shrubs/high grass	7,558	1.0000	1.0000	0.34500	0.0224	58	3,057	1.90%
		7,558	1.0000	1.0000	0.34500	0.0224	58	3,057	1.90%
Sand Sage	High grass	106,207	0.1250	1.0000	0.20800	0.0224	62	3,057	2.03%
		1,911,731	0.1250	1.0000	0.20800	0.0224	1,113	3,057	36.41%
Sand Sage	Low grass	2,017,939	0.1250	1.0000	0.20800	0.0224	1,175	3,057	38.44%
		212,415	0.1250	1.0000	0.20800	0.0224	124	3,057	4.06%
Summary for Resident (7 records)					***Pre-planning Sum***		**3,057**		**100.00%**
					Post-planning Sum		**3,334**		**109.06%**

Species/Guild Name: Lark Bunting ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Pasture	0	1.0000	1.0000	1.00000	0.2037	0	6,640,821	0.00%
		0	1.0000	1.0000	1.00000	0.2037	0	6,640,821	0.00%
Cropland	Wheat	1,466,607	1.0000	1.0000	1.00000	0.1525	223,658	6,640,821	3.37%
		1,466,555	1.0000	1.0000	1.00000	0.1525	223,650	6,640,821	3.37%
Cropland	Hay	103,658	1.0000	1.0000	1.00000	0.2037	21,115	6,640,821	0.32%
		99,618	1.0000	1.0000	1.00000	0.2037	20,292	6,640,821	0.31%

Cropland	Alfalfa	228,869	1.0000	1.0000	1.00000	0.1525	34,902	6,640,821	0.53%
		3,018,131	1.0000	1.0000	1.00000	0.1525	460,265	6,640,821	6.93%
Cropland	Fallow	0	1.0000	1.0000	1.00000	0.1525	0	6,640,821	0.00%
		0	1.0000	1.0000	1.00000	0.1525	0	6,640,821	0.00%
CRP	Native	237,030	1.0000	1.0000	1.00000	0.3443	81,609	6,640,821	1.23%
		2,493,266	1.0000	1.0000	1.00000	0.3443	858,431	6,640,821	12.93%
CRP	Non-native	2,133,266	1.0000	1.0000	1.00000	0.3443	734,483	6,640,821	11.06%
		277,030	1.0000	1.0000	1.00000	0.3443	95,381	6,640,821	1.44%
Mixed Grass	Many shrubs/low grass	7,558	1.0000	1.0000	1.00000	0.1828	1,382	6,640,821	0.02%
		7,558	1.0000	1.0000	1.00000	0.1828	1,382	6,640,821	0.02%
Mixed Grass	Many shrubs/high grass	7,558	1.0000	1.0000	1.00000	0.2207	1,668	6,640,821	0.03%
		7,558	1.0000	1.0000	1.00000	0.2207	1,668	6,640,821	0.03%
Mixed Grass	Few shrubs/low grass	7,558	1.0000	1.0000	1.00000	0.2216	1,675	6,640,821	0.03%
		7,558	1.0000	1.0000	1.00000	0.2216	1,675	6,640,821	0.03%
Mixed Grass	Few shrubs/high grass	7,558	1.0000	1.0000	1.00000	0.2400	1,814	6,640,821	0.03%
		7,558	1.0000	1.0000	1.00000	0.2400	1,814	6,640,821	0.03%
Sand Sage	Low grass	2,017,939	1.0000	1.0000	1.00000	0.0983	198,363	6,640,821	2.99%
		212,415	1.0000	1.0000	1.00000	0.0983	20,880	6,640,821	0.31%
Sand Sage	High grass	106,207	1.0000	1.0000	1.00000	0.1186	12,596	6,640,821	0.19%
		1,911,731	1.0000	1.0000	1.00000	0.1186	226,731	6,640,821	3.41%
Shortgrass	Few shrubs/low grass	2,241,944	1.0000	1.0000	1.00000	0.2216	496,815	6,640,821	7.48%
		1,050,054	1.0000	1.0000	1.00000	0.2216	232,692	6,640,821	3.50%
Shortgrass	Many shrubs/high grass	2,241,944	1.0000	1.0000	1.00000	0.2207	494,797	6,640,821	7.45%
		3,433,833	1.0000	1.0000	1.00000	0.2207	757,847	6,640,821	11.41%
Shortgrass	Many shrubs/low grass	2,241,944	1.0000	1.0000	1.00000	0.1828	409,827	6,640,821	6.17%
		1,050,054	1.0000	1.0000	1.00000	0.1828	191,950	6,640,821	2.89%
Shortgrass	Few shrubs/high grass	2,241,944	1.0000	1.0000	1.00000	0.2400	538,066	6,640,821	8.10%
		3,433,833	1.0000	1.0000	1.00000	0.2400	824,120	6,640,821	12.41%
Shortgrass	PD town	582,834	1.0000	1.0000	1.00000	0.2216	129,156	6,640,821	1.94%
		582,834	1.0000	1.0000	1.00000	0.2216	129,156	6,640,821	1.94%
Summary for Breeding (18 records)					***Pre-planning Sum***		**3,381,926**		**50.92%**
					Post-planning Sum		**4,047,934**		**60.95%**

Species/Guild Name: Lark Sparrow ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Mixed Grass	Few shrubs/high grass	7,558	1.0000	1.0000	1.00000	0.0715	540	1,693,050	0.03%
		7,558	1.0000	1.0000	1.00000	0.0715	540	1,693,050	0.03%
Mixed Grass	Many shrubs/low grass	7,558	1.0000	1.0000	1.00000	0.1632	1,233	1,693,050	0.07%
		7,558	1.0000	1.0000	1.00000	0.1632	1,233	1,693,050	0.07%
Mixed Grass	Many shrubs/high grass	7,558	1.0000	1.0000	1.00000	0.1632	1,233	1,693,050	0.07%
		7,558	1.0000	1.0000	1.00000	0.1632	1,233	1,693,050	0.07%
Mixed Grass	Few shrubs/low grass	7,558	1.0000	1.0000	1.00000	0.0715	540	1,693,050	0.03%
		7,558	1.0000	1.0000	1.00000	0.0715	540	1,693,050	0.03%
Pinyon/Juniper	NA	765,363	1.0000	1.0000	1.00000	0.4361	333,775	1,693,050	19.71%
		765,363	1.0000	1.0000	1.00000	0.4361	333,775	1,693,050	19.71%
Riverine Systems	Riparian canopy - late successional w/o understory	11,051	1.0000	1.0000	1.00000	0.0016	18	1,693,050	0.00%
		11,051	1.0000	1.0000	1.00000	0.0016	18	1,693,050	0.00%
Riverine Systems	Riparian canopy - late successional w/ understory	11,051	1.0000	1.0000	1.00000	0.0016	18	1,693,050	0.00%
		11,051	1.0000	1.0000	1.00000	0.0016	18	1,693,050	0.00%
Riverine Systems	Native riparian shrubland	157,159	1.0000	1.0000	1.00000	0.0016	251	1,693,050	0.01%
		157,159	1.0000	1.0000	1.00000	0.0016	251	1,693,050	0.01%
Riverine Systems	Riparian canopy - early successional w/ understory	16,577	1.0000	1.0000	1.00000	0.0016	27	1,693,050	0.00%
		16,577	1.0000	1.0000	1.00000	0.0016	27	1,693,050	0.00%
Riverine Systems	Riparian canopy - early successional w/o understor	16,577	1.0000	1.0000	1.00000	0.0016	27	1,693,050	0.00%
		16,577	1.0000	1.0000	1.00000	0.0016	27	1,693,050	0.00%
Sand Sage	High grass	106,207	1.0000	1.0000	1.00000	0.1420	15,081	1,693,050	0.89%
		1,911,731	1.0000	1.0000	1.00000	0.1420	271,466	1,693,050	16.03%
Sand Sage	Low grass	2,017,939	1.0000	1.0000	1.00000	0.1420	286,547	1,693,050	16.92%
		212,415	1.0000	1.0000	1.00000	0.1420	30,163	1,693,050	1.78%
Shortgrass	Few shrubs/low grass	2,241,944	1.0000	1.0000	1.00000	0.0715	160,299	1,693,050	9.47%
		1,050,054	1.0000	1.0000	1.00000	0.0715	75,079	1,693,050	4.43%
Shortgrass	Many shrubs/low grass	2,241,944	1.0000	1.0000	1.00000	0.1632	365,885	1,693,050	21.61%
		1,050,054	1.0000	1.0000	1.00000	0.1632	171,369	1,693,050	10.12%
Shortgrass	Few shrubs/high grass	2,241,944	1.0000	1.0000	1.00000	0.0715	160,299	1,693,050	9.47%
		3,433,833	1.0000	1.0000	1.00000	0.0715	245,519	1,693,050	14.50%

Shortgrass	Many shrubs/high grass	2,241,944	1.0000	1.0000	1.00000	0.1632	365,885	1,693,050	21.61%
		3,433,833	1.0000	1.0000	1.00000	0.1632	560,402	1,693,050	33.10%
Summary for Breeding (16 records)					***Pre-planning Sum***		**1,691,658**		**99.91%**
					Post-planning Sum		**1,691,660**		**99.91%**

Species/Guild Name: Lesser Prairie-Chicken ***Season: Resident***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Mixed Grass	Many shrubs/high grass	7,558	1.0000	1.0000	0.00600	0.0015	0	853	0.00%
		7,558	1.0000	1.0000	0.00600	0.0015	0	853	0.00%
Mixed Grass	Many shrubs/low grass	7,558	1.0000	1.0000	0.00600	0.0015	0	853	0.00%
		7,558	1.0000	1.0000	0.00600	0.0015	0	853	0.00%
Mixed Grass	Few shrubs/high grass	7,558	1.0000	1.0000	0.00600	0.0015	0	853	0.00%
		7,558	1.0000	1.0000	0.00600	0.0015	0	853	0.00%
Mixed Grass	Few shrubs/low grass	7,558	1.0000	1.0000	0.00600	0.0015	0	853	0.00%
		7,558	1.0000	1.0000	0.00600	0.0015	0	853	0.00%
Sand Sage	High grass	106,207	1.0000	1.0000	0.16900	0.0019	34	853	3.99%
		1,911,731	1.0000	1.0000	0.21137	0.0019	768	853	90.04%
Sand Sage	Low grass	2,017,939	1.0000	1.0000	0.16900	0.0019	648	853	75.97%
		212,415	1.0000	1.0000	0.21137	0.0019	85	853	9.97%
Summary for Resident (6 records)					***Pre-planning Sum***		**682**		**79.96%**
					Post-planning Sum		**853**		**100.01%**

Species/Guild Name: Lewis's Woodpecker ***Season: Resident***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Pinyon/Juniper	NA	765,363	1.0000	1.0000	1.00000	0.0030	2,296	2,793	82.21%
		765,363	1.0000	1.0000	1.00000	0.0030	2,296	2,793	82.21%
Ponderosa Pine	Many small trees, no grassy	111,760	1.0000	1.0000	1.00000	0.0030	335	2,793	11.99%
	understory	70,705	1.0000	1.0000	1.00000	0.0030	212	2,793	7.59%
Ponderosa Pine	Few larger trees, grassy understory	2,281	1.0000	1.0000	1.00000	0.0323	74	2,793	2.65%
		43,336	1.0000	1.0000	1.00000	0.0323	1,400	2,793	50.13%
Riverine Systems	Riparian canopy - late	11,051	0.5000	1.0000	1.00000	0.0080	44	2,793	1.58%
	successional w/o understory	11,051	0.5000	1.0000	1.00000	0.0080	44	2,793	1.58%
Riverine Systems	Riparian canopy - late	11,051	0.5000	1.0000	1.00000	0.0080	44	2,793	1.58%
	successional w/ understory	11,051	0.5000	1.0000	1.00000	0.0080	44	2,793	1.58%
Summary for Resident (5 records)					***Pre-planning Sum***		**2,793**		**100.00%**
					Post-planning Sum		**3,996**		**143.07%**

Species/Guild Name: Loggerhead Shrike ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Hay	103,658	1.0000	1.0000	1.00000	0.0044	456	114,594	0.40%
		99,618	1.0000	1.0000	1.00000	0.0044	438	114,594	0.38%
Cropland	Pasture	0	1.0000	1.0000	1.00000	0.0044	0	114,594	0.00%
		0	1.0000	1.0000	1.00000	0.0044	0	114,594	0.00%
CRP	Non-native	2,133,266	1.0000	1.0000	1.00000	0.0039	8,320	114,594	7.26%
		277,030	1.0000	1.0000	1.00000	0.0039	1,080	114,594	0.94%
CRP	Native	237,030	1.0000	1.0000	1.00000	0.0039	924	114,594	0.81%
		2,493,266	1.0000	1.0000	1.00000	0.0039	9,724	114,594	8.49%
Mixed Grass	Few shrubs/high grass	7,558	1.0000	1.0000	1.00000	0.0012	9	114,594	0.01%
		7,558	1.0000	1.0000	1.00000	0.0012	9	114,594	0.01%
Mixed Grass	Many shrubs/low grass	7,558	1.0000	1.0000	1.00000	0.0162	122	114,594	0.11%
		7,558	1.0000	1.0000	1.00000	0.0162	122	114,594	0.11%
Mixed Grass	Many shrubs/high grass	7,558	1.0000	1.0000	1.00000	0.0162	122	114,594	0.11%
		7,558	1.0000	1.0000	1.00000	0.0162	122	114,594	0.11%
Mixed Grass	Few shrubs/low grass	7,558	1.0000	1.0000	1.00000	0.0012	9	114,594	0.01%
		7,558	1.0000	1.0000	1.00000	0.0012	9	114,594	0.01%
Sand Sage	High grass	106,207	1.0000	1.0000	1.00000	0.0122	1,296	114,594	1.13%
		1,911,731	1.0000	1.0000	1.00000	0.0122	23,323	114,594	20.35%
Sand Sage	Low grass	2,017,939	1.0000	1.0000	1.00000	0.0122	24,619	114,594	21.48%
		212,415	1.0000	1.0000	1.00000	0.0122	2,591	114,594	2.26%
Shortgrass	Few shrubs/low grass	2,241,944	1.0000	1.0000	1.00000	0.0012	2,690	114,594	2.35%
		1,050,054	1.0000	1.0000	1.00000	0.0012	1,260	114,594	1.10%

Shortgrass	Few shrubs/high grass	2,241,944	1.0000	1.0000	1.00000	0.0012	2,690	114,594	2.35%
		3,433,833	1.0000	1.0000	1.00000	0.0012	4,121	114,594	3.60%
Shortgrass	Many shrubs/low grass	2,241,944	1.0000	1.0000	1.00000	0.0162	36,319	114,594	31.69%
		1,050,054	1.0000	1.0000	1.00000	0.0162	17,011	114,594	14.84%
Shortgrass	PD town	582,834	1.0000	1.0000	1.00000	0.0012	699	114,594	0.61%
		582,834	1.0000	1.0000	1.00000	0.0012	699	114,594	0.61%
Shortgrass	Many shrubs/high grass	2,241,944	1.0000	1.0000	1.00000	0.0162	36,319	114,594	31.69%
		3,433,833	1.0000	1.0000	1.00000	0.0162	55,628	114,594	48.54%
Summary for Breeding (15 records)					***Pre-planning Sum***		**114,594**		**99.99%**
					Post-planning Sum		**116,137**		**101.34%**

Species/Guild Name: Long-billed Curlew ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Mixed Grass	Few shrubs/low grass	7,558	1.0000	1.0000	0.12800	0.0005	0	2,847	0.00%
		7,558	1.0000	1.0000	0.12800	0.0005	0	2,847	0.00%
Mixed Grass	Few shrubs/high grass	7,558	1.0000	1.0000	0.12800	0.0005	0	2,847	0.00%
		7,558	1.0000	1.0000	0.12800	0.0005	0	2,847	0.00%
Playa	Dry	54,769	1.0000	1.0000	0.15100	0.0005	4	2,847	0.14%
		54,769	1.0000	1.0000	0.50000	0.0005	14	2,847	0.49%
Shortgrass	PD town	582,834	1.0000	1.0000	0.57100	0.0005	166	2,847	5.83%
		582,834	1.0000	1.0000	1.00000	0.0005	291	2,847	10.22%
Shortgrass	Few shrubs/high grass	2,241,944	1.0000	1.0000	0.57100	0.0005	640	2,847	22.48%
		3,433,833	1.0000	1.0000	1.00000	0.0005	1,717	2,847	60.31%
Shortgrass	Few shrubs/low grass	2,241,944	1.0000	1.0000	0.57100	0.0005	640	2,847	22.48%
		1,050,054	1.0000	1.0000	1.00000	0.0005	525	2,847	18.44%
Summary for Breeding (6 records)					***Pre-planning Sum***		**1,450**		**50.93%**
					Post-planning Sum		**2,547**		**89.46%**

Species/Guild Name: McCown's Longspur ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Shortgrass	Many shrubs/high grass	2,241,944	0.1000	1.0000	1.00000	0.0047	1,054	8,086	13.03%
		3,433,833	0.1000	1.0000	1.00000	0.0047	1,614	8,086	19.96%
Shortgrass	Many shrubs/low grass	2,241,944	0.1000	1.0000	1.00000	0.0047	1,054	8,086	13.03%
		1,050,054	0.1000	1.0000	1.00000	0.0047	494	8,086	6.11%
Shortgrass	Few shrubs/low grass	2,241,944	0.1000	1.0000	1.00000	0.0118	2,645	8,086	32.71%
		1,050,054	0.1000	1.0000	1.00000	0.0118	1,239	8,086	15.32%
Shortgrass	Few shrubs/high grass	2,241,944	0.1000	1.0000	1.00000	0.0118	2,645	8,086	32.71%
		3,433,833	0.1000	1.0000	1.00000	0.0118	4,052	8,086	50.11%
Shortgrass	PD town	582,834	0.1000	1.0000	1.00000	0.0118	688	8,086	8.51%
		582,834	0.1000	1.0000	1.00000	0.0118	688	8,086	8.51%
Summary for Breeding (5 records)					***Pre-planning Sum***		**8,086**		**100.00%**
					Post-planning Sum		**8,087**		**100.01%**

Species/Guild Name: Mississippi Kite ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Other	Urban/Suburban	522,770	0.1000	1.0000	1.00000	0.0031	162	166	97.59%
		522,770	0.1000	1.0000	1.00000	0.0031	162	166	97.59%
Riverine Systems	Riparian canopy - late successional w/ understory	11,051	0.0500	0.4000	1.00000	0.0031	1	166	0.60%
		11,051	0.0500	1.0000	1.00000	0.0031	2	166	1.20%
Riverine Systems	Riparian canopy - early successional w/o understor	16,577	0.0500	0.4000	1.00000	0.0031	1	166	0.60%
		16,577	0.0500	1.0000	1.00000	0.0031	3	166	1.81%
Riverine Systems	Riparian canopy - early successional w/ understory	16,577	0.0500	0.4000	1.00000	0.0031	1	166	0.60%
		16,577	0.0500	1.0000	1.00000	0.0031	3	166	1.81%
Riverine Systems	Riparian canopy - late successional w/o understory	11,051	0.0500	0.4000	1.00000	0.0031	1	166	0.60%
		11,051	0.0500	1.0000	1.00000	0.0031	2	166	1.20%
Summary for Breeding (5 records)					***Pre-planning Sum***		**166**		**100.00%**
					Post-planning Sum		**172**		**103.61%**

Species/Guild Name: Mountain Plover ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Shortgrass	Few shrubs/low grass	2,241,944	1.0000	0.0100	1.00000	0.0135	303	4,779	6.34%
		2,241,944	1.0000	0.0100	1.00000	0.0135	303	4,779	6.34%
Shortgrass	PD town	582,834	1.0000	0.3000	1.00000	0.0256	4,476	4,779	93.66%
		582,834	1.0000	0.3000	1.00000	0.0256	4,476	4,779	93.66%
Summary for Breeding (2 records)				***Pre-planning Sum***			**4,779**		**100.00%**
				Post-planning Sum			**4,779**		**100.00%**

Species/Guild Name: Northern Bobwhite ***Season: Resident***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Wheat	1,466,607	1.0000	1.0000	1.00000	0.0021	3,080	8,897	34.62%
		1,466,555	1.0000	1.0000	1.00000	0.0021	3,080	8,897	34.62%
Cropland	Pasture	0	1.0000	1.0000	1.00000	0.0018	0	8,897	0.00%
		0	1.0000	1.0000	1.00000	0.0018	0	8,897	0.00%
Cropland	Hay	103,658	1.0000	1.0000	1.00000	0.0018	187	8,897	2.10%
		99,618	1.0000	1.0000	1.00000	0.0018	179	8,897	2.01%
Cropland	Corn	716,369	1.0000	1.0000	1.00000	0.0021	1,504	8,897	16.90%
		688,449	1.0000	1.0000	1.00000	0.0021	1,446	8,897	16.25%
Cropland	Fallow	0	1.0000	1.0000	1.00000	0.0021	0	8,897	0.00%
		0	1.0000	1.0000	1.00000	0.0021	0	8,897	0.00%
Cropland	Alfalfa	228,869	1.0000	1.0000	1.00000	0.0021	481	8,897	5.41%
		3,018,131	1.0000	1.0000	1.00000	0.0021	6,338	8,897	71.24%
Cropland	Soybeans	0	1.0000	1.0000	1.00000	0.0021	0	8,897	0.00%
		0	1.0000	1.0000	1.00000	0.0021	0	8,897	0.00%
Cropland	Sorghum	329,448	1.0000	1.0000	1.00000	0.0021	692	8,897	7.78%
		316,608	1.0000	1.0000	1.00000	0.0021	665	8,897	7.47%
Cropland	Sunflowers	86,211	1.0000	1.0000	1.00000	0.0021	181	8,897	2.03%
		82,851	1.0000	1.0000	1.00000	0.0021	174	8,897	1.96%
Riverine Systems	Riparian canopy - late successional w/ understory	11,051	1.0000	1.0000	1.00000	0.0150	166	8,897	1.87%
		11,051	1.0000	1.0000	1.00000	0.0150	166	8,897	1.87%
Riverine Systems	Native riparian shrubland	157,159	1.0000	1.0000	1.00000	0.0150	2,357	8,897	26.49%
		157,159	1.0000	1.0000	1.00000	0.0150	2,357	8,897	26.49%
Riverine Systems	Riparian canopy - early successional w/ understory	16,577	1.0000	1.0000	1.00000	0.0150	249	8,897	2.80%
		16,577	1.0000	1.0000	1.00000	0.0150	249	8,897	2.80%
Summary for Resident (12 records)				***Pre-planning Sum***			**8,897**		**100.00%**
				Post-planning Sum			**14,654**		**164.70%**

Species/Guild Name: Pinyon Jay ***Season: Resident***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Pinyon/Juniper	NA	765,363	1.0000	1.0000	1.00000	0.0095	7,271	7,271	100.00%
		765,363	1.0000	1.0000	1.00000	0.0095	7,271	7,271	100.00%
Summary for Resident (1 record)				***Pre-planning Sum***			**7,271**		**100.00%**
				Post-planning Sum			**7,271**		**100.00%**

Species/Guild Name: Piping Plover ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Other Wetlands	Saline	0	1.0000	1.0000	1.00000	0.0097	0	40	0.00%
		0	1.0000	1.0000	1.00000	0.0097	0	40	0.00%
Reservoirs Lakes Ponds	Reservoir	110,488	0.1000	0.0500	1.00000	0.0097	5	40	12.50%
		110,488	0.1000	0.1000	1.00000	0.0097	11	40	27.50%
Riverine Systems	Unvegetated sandbar	8,738	1.0000	0.2000	1.00000	0.0097	17	40	42.50%
		8,738	1.0000	0.3415	1.00000	0.0097	29	40	72.50%
Summary for Breeding (3 records)				***Pre-planning Sum***			**22**		**55.00%**
				Post-planning Sum			**40**		**100.00%**

Species/Guild Name: Red-headed Woodpecker ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Riverine Systems	Riparian canopy - late successional w/o understory	11,051	1.0000	1.0000	1.00000	0.0381	421	842	50.00%
		11,051	1.0000	1.0000	1.00000	0.0381	421	842	50.00%
Riverine Systems	Riparian canopy - late successional w/ understory	11,051	1.0000	1.0000	1.00000	0.0381	421	842	50.00%
		11,051	1.0000	1.0000	1.00000	0.0381	421	842	50.00%
Summary for Breeding (2 records)					***Pre-planning Sum***		**842**		**100.00%**
					Post-planning Sum		**842**		**100.00%**

Species/Guild Name: Ring-necked Pheasant ***Season: Resident***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Wheat	1,466,607	1.0000	1.0000	1.00000	0.0121	17,746	101,889	17.42%
		1,466,555	1.0000	1.0000	1.00000	0.0121	17,745	101,889	17.42%
Cropland	Fallow	0	1.0000	1.0000	1.00000	0.0121	0	101,889	0.00%
		0	1.0000	1.0000	1.00000	0.0121	0	101,889	0.00%
Cropland	Hay	103,658	1.0000	1.0000	1.00000	0.0011	114	101,889	0.11%
		99,618	1.0000	1.0000	1.00000	0.0011	110	101,889	0.11%
Cropland	Alfalfa	228,869	1.0000	1.0000	1.00000	0.0121	2,769	101,889	2.72%
		3,018,131	1.0000	1.0000	1.00000	0.0121	36,519	101,889	35.84%
Cropland	Pasture	0	1.0000	1.0000	1.00000	0.0011	0	101,889	0.00%
		0	1.0000	1.0000	1.00000	0.0011	0	101,889	0.00%
CRP	Native	237,030	1.0000	1.0000	1.00000	0.0094	2,228	101,889	2.19%
		2,493,266	1.0000	1.0000	1.00000	0.0094	23,437	101,889	23.00%
CRP	Non-native	2,133,266	1.0000	1.0000	1.00000	0.0094	20,053	101,889	19.68%
		277,030	1.0000	1.0000	1.00000	0.0094	2,604	101,889	2.56%
Other Wetlands	Moist-soil unit	1,272	1.0000	1.0000	1.00000	0.0550	70	101,889	0.07%
		1,272	1.0000	1.0000	1.00000	0.0550	70	101,889	0.07%
Playa	Dry	54,769	1.0000	0.5000	1.00000	0.0013	36	101,889	0.04%
		54,769	1.0000	0.5000	1.00000	0.0013	36	101,889	0.04%
Riverine Systems	Native riparian shrubland	157,159	1.0000	1.0000	1.00000	0.0048	754	101,889	0.74%
		157,159	1.0000	1.0000	1.00000	0.0048	754	101,889	0.74%
Riverine Systems	Wet meadow	298,127	1.0000	1.0000	1.00000	0.0550	16,397	101,889	16.09%
		370,281	1.0000	1.0000	1.00000	0.0550	20,365	101,889	19.99%
Summary for Resident (11 records)					***Pre-planning Sum***		**60,167**		**59.05%**
					Post-planning Sum		**101,640**		**99.75%**

Species/Guild Name: Scaled Quail ***Season: Resident***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Mixed Grass	Many shrubs/low grass	7,558	0.5000	1.0000	1.00000	0.0233	88	134,623	0.07%
		7,558	0.5000	1.0000	1.00000	0.0233	88	134,623	0.07%
Mixed Grass	Few shrubs/low grass	7,558	0.5000	1.0000	1.00000	0.0217	82	134,623	0.06%
		7,558	0.5000	1.0000	1.00000	0.0217	82	134,623	0.06%
Mixed Grass	Few shrubs/high grass	7,558	0.5000	1.0000	1.00000	0.0217	82	134,623	0.06%
		7,558	0.5000	1.0000	1.00000	0.0217	82	134,623	0.06%
Mixed Grass	Many shrubs/high grass	7,558	0.5000	1.0000	1.00000	0.0233	88	134,623	0.07%
		7,558	0.5000	1.0000	1.00000	0.0233	88	134,623	0.07%
Pinyon/Juniper	NA	765,363	0.5000	1.0000	1.00000	0.0226	8,649	134,623	6.42%
		765,363	0.5000	1.0000	1.00000	0.0226	8,649	134,623	6.42%
Sand Sage	Low grass	2,017,939	0.5000	1.0000	1.00000	0.0233	23,509	134,623	17.46%
		212,415	0.5000	1.0000	1.00000	0.0233	2,475	134,623	1.84%
Sand Sage	High grass	106,207	0.5000	1.0000	1.00000	0.0233	1,237	134,623	0.92%
		1,911,731	0.5000	1.0000	1.00000	0.0233	22,272	134,623	16.54%
Shortgrass	Few shrubs/low grass	2,241,944	0.5000	1.0000	1.00000	0.0217	24,325	134,623	18.07%
		1,050,054	0.5000	1.0000	1.00000	0.0217	11,393	134,623	8.46%
Shortgrass	Few shrubs/high grass	2,241,944	0.5000	1.0000	1.00000	0.0217	24,325	134,623	18.07%
		3,433,833	0.5000	1.0000	1.00000	0.0217	37,257	134,623	27.68%
Shortgrass	Many shrubs/low grass	2,241,944	0.5000	1.0000	1.00000	0.0233	26,119	134,623	19.40%
		1,050,054	0.5000	1.0000	1.00000	0.0233	12,233	134,623	9.09%
Shortgrass	Many shrubs/high grass	2,241,944	0.5000	1.0000	1.00000	0.0233	26,119	134,623	19.40%
		3,433,833	0.5000	1.0000	1.00000	0.0233	40,004	134,623	29.72%
Summary for Resident (11 records)					***Pre-planning Sum***		**134,623**		**99.99%**
					Post-planning Sum		**134,623**		**99.99%**

Species/Guild Name: Short-eared Owl ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
CRP	Non-native	2,133,266	1.0000	0.0500	1.00000	0.0005	53	328	16.16%
		277,030	1.0000	0.0500	1.00000	0.0005	7	328	2.13%
CRP	Native	237,030	1.0000	0.0500	1.00000	0.0005	6	328	1.83%
		2,493,266	1.0000	0.0500	1.00000	0.0005	62	328	18.90%
Mixed Grass	Few shrubs/high grass	7,558	1.0000	1.0000	1.00000	0.0005	4	328	1.22%
		7,558	1.0000	1.0000	1.00000	0.0005	4	328	1.22%
Mixed Grass	Many shrubs/high grass	7,558	1.0000	1.0000	1.00000	0.0005	4	328	1.22%
		7,558	1.0000	1.0000	1.00000	0.0005	4	328	1.22%
Other Wetlands	Moist-soil unit	1,272	1.0000	0.5000	1.00000	0.0005	0	328	0.00%
		1,272	1.0000	0.5000	1.00000	0.0005	0	328	0.00%
Playa	Dry	54,769	1.0000	0.5000	1.00000	0.0005	14	328	4.27%
		54,769	1.0000	0.5000	1.00000	0.0005	14	328	4.27%
Riverine Systems	Wet meadow	298,127	1.0000	0.5000	1.00000	0.0005	75	328	22.87%
		370,281	1.0000	0.7420	1.00000	0.0005	137	328	41.77%
Shortgrass	Few shrubs/high grass	2,241,944	1.0000	0.0100	1.00000	0.0005	11	328	3.35%
		3,433,833	1.0000	0.0977	1.00000	0.0005	168	328	51.22%
Summary for Breeding (8 records)				***Pre-planning Sum***			**167**		**50.91%**
				Post-planning Sum			**396**		**120.73%**

Species/Guild Name: Snowy Plover ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Other Wetlands	Saline	0	0.5000	1.0000	1.00000	0.0585	0	102	0.00%
		0	0.5000	1.0000	1.00000	0.0585	0	102	0.00%
Riverine Systems	Unvegetated sandbar	8,738	0.2000	1.0000	1.00000	0.0585	102	102	100.00%
		8,738	0.2000	1.0000	1.00000	0.0585	102	102	100.00%
Summary for Breeding (2 records)				***Pre-planning Sum***			**102**		**100.00%**
				Post-planning Sum			**102**		**100.00%**

Species/Guild Name: Swainson's Hawk ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Pasture	0	1.0000	1.0000	1.00000	0.0063	0	90,441	0.00%
		0	1.0000	1.0000	1.00000	0.0063	0	90,441	0.00%
Cropland	Wheat	1,466,607	1.0000	1.0000	1.00000	0.0012	1,760	90,441	1.95%
		1,466,555	1.0000	1.0000	1.00000	0.0012	1,760	90,441	1.95%
Cropland	Alfalfa	228,869	1.0000	1.0000	1.00000	0.0012	275	90,441	0.30%
		3,018,131	1.0000	1.0000	1.00000	0.0012	3,622	90,441	4.00%
Cropland	Fallow	0	1.0000	1.0000	1.00000	0.0012	0	90,441	0.00%
		0	1.0000	1.0000	1.00000	0.0012	0	90,441	0.00%
Cropland	Hay	103,658	1.0000	1.0000	1.00000	0.0063	653	90,441	0.72%
		99,618	1.0000	1.0000	1.00000	0.0063	628	90,441	0.69%
CRP	Native	237,030	1.0000	1.0000	1.00000	0.0063	1,493	90,441	1.65%
		2,493,266	1.0000	1.0000	1.00000	0.0063	15,708	90,441	17.37%
CRP	Non-native	2,133,266	1.0000	1.0000	1.00000	0.0063	13,440	90,441	14.86%
		277,030	1.0000	1.0000	1.00000	0.0063	1,745	90,441	1.93%
Mixed Grass	Few shrubs/low grass	7,558	1.0000	1.0000	1.00000	0.0083	63	90,441	0.07%
		7,558	1.0000	1.0000	1.00000	0.0083	63	90,441	0.07%
Mixed Grass	Few shrubs/high grass	7,558	1.0000	1.0000	1.00000	0.0083	63	90,441	0.07%
		7,558	1.0000	1.0000	1.00000	0.0083	63	90,441	0.07%
Mixed Grass	Many shrubs/high grass	7,558	1.0000	1.0000	1.00000	0.0044	33	90,441	0.04%
		7,558	1.0000	1.0000	1.00000	0.0044	33	90,441	0.04%
Mixed Grass	Many shrubs/low grass	7,558	1.0000	1.0000	1.00000	0.0044	33	90,441	0.04%
		7,558	1.0000	1.0000	1.00000	0.0044	33	90,441	0.04%
Riverine Systems	Riparian canopy - late successional w/o understory	11,051	1.0000	1.0000	1.00000	0.0063	70	90,441	0.08%
		11,051	1.0000	1.0000	1.00000	0.0063	70	90,441	0.08%
Riverine Systems	Riparian canopy - late successional w/ understory	11,051	1.0000	1.0000	1.00000	0.0063	70	90,441	0.08%
		11,051	1.0000	1.0000	1.00000	0.0063	70	90,441	0.08%
Sand Sage	High grass	106,207	1.0000	1.0000	1.00000	0.0044	467	90,441	0.52%
		1,911,731	1.0000	1.0000	1.00000	0.0044	8,412	90,441	9.30%
Sand Sage	Low grass	2,017,939	1.0000	1.0000	1.00000	0.0044	8,879	90,441	9.82%
		212,415	1.0000	1.0000	1.00000	0.0044	935	90,441	1.03%

Shortgrass	PD town	582,834	1.0000	1.0000	1.00000	0.0083	4,838	90,441	5.35%
		582,834	1.0000	1.0000	1.00000	0.0083	4,838	90,441	5.35%
Shortgrass	Few shrubs/high grass	2,241,944	1.0000	1.0000	1.00000	0.0083	18,608	90,441	20.57%
		3,433,833	1.0000	1.0000	1.00000	0.0083	28,501	90,441	31.51%
Shortgrass	Many shrubs/low grass	2,241,944	1.0000	1.0000	1.00000	0.0044	9,865	90,441	10.91%
		1,050,054	1.0000	1.0000	1.00000	0.0044	4,620	90,441	5.11%
Shortgrass	Many shrubs/high grass	2,241,944	1.0000	1.0000	1.00000	0.0044	9,865	90,441	10.91%
		3,433,833	1.0000	1.0000	1.00000	0.0044	15,109	90,441	16.71%
Shortgrass	Few shrubs/low grass	2,241,944	1.0000	1.0000	1.00000	0.0083	18,608	90,441	20.57%
		1,050,054	1.0000	1.0000	1.00000	0.0083	8,715	90,441	9.64%
Summary for Breeding (20 records)				***Pre-planning Sum***			**89,083**		**98.49%**
				Post-planning Sum			**94,925**		**104.95%**

Species/Guild Name: Upland Sandpiper ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
CRP	Native	237,030	0.2000	1.0000	1.00000	0.0016	76	517	14.70%
		2,493,266	0.2000	1.0000	1.00000	0.0016	798	517	154.35%
Mixed Grass	Few shrubs/high grass	7,558	0.5000	1.0000	1.00000	0.0016	6	517	1.16%
		7,558	0.5000	1.0000	1.00000	0.0016	6	517	1.16%
Mixed Grass	Many shrubs/high grass	7,558	0.5000	1.0000	1.00000	0.0016	6	517	1.16%
		7,558	0.5000	1.0000	1.00000	0.0016	6	517	1.16%
Riverine Systems	Wet meadow	298,127	0.2000	1.0000	1.00000	0.0072	429	517	82.98%
		370,281	0.2000	1.0000	1.00000	0.0072	533	517	103.09%
Summary for Breeding (4 records)				***Pre-planning Sum***			**517**		**100.00%**
				Post-planning Sum			**1,343**		**259.77%**

Species/Guild Name: Western Kingbird ***Season: Breeding***

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Alfalfa	228,869	0.0500	1.0000	1.00000	0.0721	825	880,074	0.09%
		3,018,131	0.0500	1.0000	1.00000	0.0721	10,880	880,074	1.24%
Cropland	Wheat	1,466,607	1.0000	1.0000	1.00000	0.0721	105,742	880,074	12.02%
		1,466,555	1.0000	1.0000	1.00000	0.0721	105,739	880,074	12.01%
Cropland	Pasture	0	1.0000	1.0000	1.00000	0.0549	0	880,074	0.00%
		0	1.0000	1.0000	1.00000	0.0549	0	880,074	0.00%
Cropland	Hay	103,658	1.0000	1.0000	1.00000	0.0549	5,691	880,074	0.65%
		99,618	1.0000	1.0000	1.00000	0.0549	5,469	880,074	0.62%
Cropland	Fallow	0	1.0000	1.0000	1.00000	0.0721	0	880,074	0.00%
		0	1.0000	1.0000	1.00000	0.0721	0	880,074	0.00%
CRP	Non-native	2,133,266	1.0000	1.0000	1.00000	0.0550	117,330	880,074	13.33%
		277,030	1.0000	1.0000	1.00000	0.0550	15,237	880,074	1.73%
CRP	Native	237,030	1.0000	1.0000	1.00000	0.0550	13,037	880,074	1.48%
		2,493,266	1.0000	1.0000	1.00000	0.0550	137,130	880,074	15.58%
Mixed Grass	Many shrubs/high grass	7,558	1.0000	1.0000	1.00000	0.0440	333	880,074	0.04%
		7,558	1.0000	1.0000	1.00000	0.0440	333	880,074	0.04%
Mixed Grass	Few shrubs/high grass	7,558	1.0000	1.0000	1.00000	0.0550	416	880,074	0.05%
		7,558	1.0000	1.0000	1.00000	0.0550	416	880,074	0.05%
Mixed Grass	Many shrubs/low grass	7,558	1.0000	1.0000	1.00000	0.0440	333	880,074	0.04%
		7,558	1.0000	1.0000	1.00000	0.0440	333	880,074	0.04%
Mixed Grass	Few shrubs/low grass	7,558	1.0000	1.0000	1.00000	0.0550	416	880,074	0.05%
		7,558	1.0000	1.0000	1.00000	0.0550	416	880,074	0.05%
Other	small roads	402,622	1.0000	1.0000	1.00000	0.0549	22,104	880,074	2.51%
		402,622	1.0000	1.0000	1.00000	0.0549	22,104	880,074	2.51%
Pinyon/Juniper	NA	765,363	1.0000	1.0000	1.00000	0.0440	33,676	880,074	3.83%
		765,363	1.0000	1.0000	1.00000	0.0440	33,676	880,074	3.83%
Riverine Systems	Riparian canopy - late successional w/o understory	11,051	1.0000	1.0000	1.00000	0.0550	608	880,074	0.07%
		11,051	1.0000	1.0000	1.00000	0.0550	608	880,074	0.07%
Riverine Systems	Riparian canopy - early successional w/o understor	16,577	1.0000	1.0000	1.00000	0.0550	912	880,074	0.10%
		16,577	1.0000	1.0000	1.00000	0.0550	912	880,074	0.10%
Riverine Systems	Riparian canopy - early successional w/ understory	16,577	1.0000	1.0000	1.00000	0.0550	912	880,074	0.10%
		16,577	1.0000	1.0000	1.00000	0.0550	912	880,074	0.10%
Riverine Systems	Riparian canopy - late successional w/ understory	11,051	1.0000	1.0000	1.00000	0.0550	608	880,074	0.07%
		11,051	1.0000	1.0000	1.00000	0.0550	608	880,074	0.07%
Riverine Systems	Wet meadow	298,127	1.0000	1.0000	1.00000	0.0550	16,397	880,074	1.86%

		370,281	1.0000	1.0000	1.00000	0.0550	20,365	880,074	2.31%
Sand Sage	High grass	106,207	1.0000	1.0000	1.00000	0.0550	5,841	880,074	0.66%
		1,911,731	1.0000	1.0000	1.00000	0.0550	105,145	880,074	11.95%
Sand Sage	Low grass	2,017,939	1.0000	1.0000	1.00000	0.0550	110,987	880,074	12.61%
		212,415	1.0000	1.0000	1.00000	0.0550	11,683	880,074	1.33%
Shortgrass	Many shrubs/low grass	2,241,944	1.0000	1.0000	1.00000	0.0440	98,646	880,074	11.21%
		1,050,054	1.0000	1.0000	1.00000	0.0440	46,202	880,074	5.25%
Shortgrass	Few shrubs/low grass	2,241,944	1.0000	1.0000	1.00000	0.0550	123,307	880,074	14.01%
		1,050,054	1.0000	1.0000	1.00000	0.0550	57,753	880,074	6.56%
Shortgrass	Few shrubs/high grass	2,241,944	1.0000	1.0000	1.00000	0.0550	123,307	880,074	14.01%
		3,433,833	1.0000	1.0000	1.00000	0.0550	188,861	880,074	21.46%
Shortgrass	Many shrubs/high grass	2,241,944	1.0000	1.0000	1.00000	0.0440	98,646	880,074	11.21%
		3,433,833	1.0000	1.0000	1.00000	0.0440	151,089	880,074	17.17%
Summary for Breeding (24 records)					***Pre-planning Sum***		**880,074**		**99.99%**
					Post-planning Sum		**915,871**		**104.06%**

Table 3. Estimated current acreage and desired future acreage of important bird habitats. Sums may not equal due to rounding errors in database calculations (discrepancies <5%).

Association Name	Condition Name	Pre-Condition Acres	Post Condition Acres	Net Change
Badlands/Cliffs/Outcrops	NA	20,784	20,784	0
Cropland	Alfalfa	228,869	3,018,131	2,789,262
Cropland	Peanuts	0	0	0
Cropland	Hay	103,658	99,618	-4,040
Cropland	Soybeans	0	0	0
Cropland	Wheat	1,466,607	1,466,555	-52
Cropland	Sod farm	3,079	2,959	-120
Cropland	Other	7,328,932	4,188,002	-3,140,930
Cropland	Sorghum	329,448	316,608	-12,840
Cropland	Corn	716,369	688,449	-27,920
Cropland	Pasture	0	0	0
Cropland	Fallow	0	0	0
Cropland	Sunflowers	86,211	82,851	-3,360
CRP	Native	237,030	2,493,266	2,256,236
CRP	Non-native	2,133,266	277,030	-1,856,236
Mixed Grass	Few shrubs/high grass	7,558	7,558	0
Mixed Grass	Many shrubs/low grass	7,558	7,558	0
Mixed Grass	Many shrubs/high grass	7,558	7,558	0
Mixed Grass	Few shrubs/low grass	7,558	7,558	0
Other	Other	982,854	982,854	0
Other	Urban/Suburban	522,770	522,770	0
Other	4-lane roads	26,506	26,506	0
Other	small roads	402,622	402,622	0
Other Wetlands	Saline	0	0	0
Other Wetlands	Moist-soil unit	1,272	1,272	0
Other Wetlands	Emergent marsh	1,345	1,345	0
Pinyon/Juniper	NA	765,363	765,363	0
Playa	Wet	5,799	5,799	0
Playa	Dry	54,769	54,769	0
Playa	Wet pit only	3,866	3,866	0
Ponderosa Pine	Few larger trees, grassy	2,281	43,336	41,055
Ponderosa Pine	Many small trees, no	111,760	70,705	-41,055
Reservoirs Lakes Ponds	Freshwater lake	1,489	1,489	0
Reservoirs Lakes Ponds	Stock pond	48,409	48,409	0
Reservoirs Lakes Ponds	Reservoir	110,488	110,488	0
Reservoirs Lakes Ponds	Lagoon	151	151	0
Reservoirs Lakes Ponds	Pit	6,794	6,794	0
Riverine Systems	Warmwater slough	1,349	1,349	0
Riverine Systems	Riparian canopy - late	11,051	11,051	0
Riverine Systems	Native riparian shrubland	157,159	157,159	0
Riverine Systems	Floodplain marsh	23,516	23,516	0
Riverine Systems	Riparian canopy - late	11,051	11,051	0
Riverine Systems	Riparian canopy - early	16,577	16,577	0
Riverine Systems	Unvegetated sandbar	8,738	8,738	0
Riverine Systems	Riparian canopy - early	16,577	16,577	0
Riverine Systems	Wet meadow	298,127	370,281	72,154
Riverine Systems	Exotic riparian shrubland	72,154	0	-72,154
Riverine Systems	River channel	26,022	26,022	0
Sand Sage	Low grass	2,017,939	212,415	-1,805,524
Sand Sage	High grass	106,207	1,911,731	1,805,524
Shortgrass	Many shrubs/high grass	2,241,944	3,433,833	1,191,889
Shortgrass	Few shrubs/low grass	2,241,944	1,050,054	-1,191,890
Shortgrass	PD town	582,834	582,834	0
Shortgrass	Many shrubs/low grass	2,241,944	1,050,054	-1,191,890
Shortgrass	Few shrubs/high grass	2,241,944	3,433,833	1,191,889
	Sum	28,050,098	28,050,100	

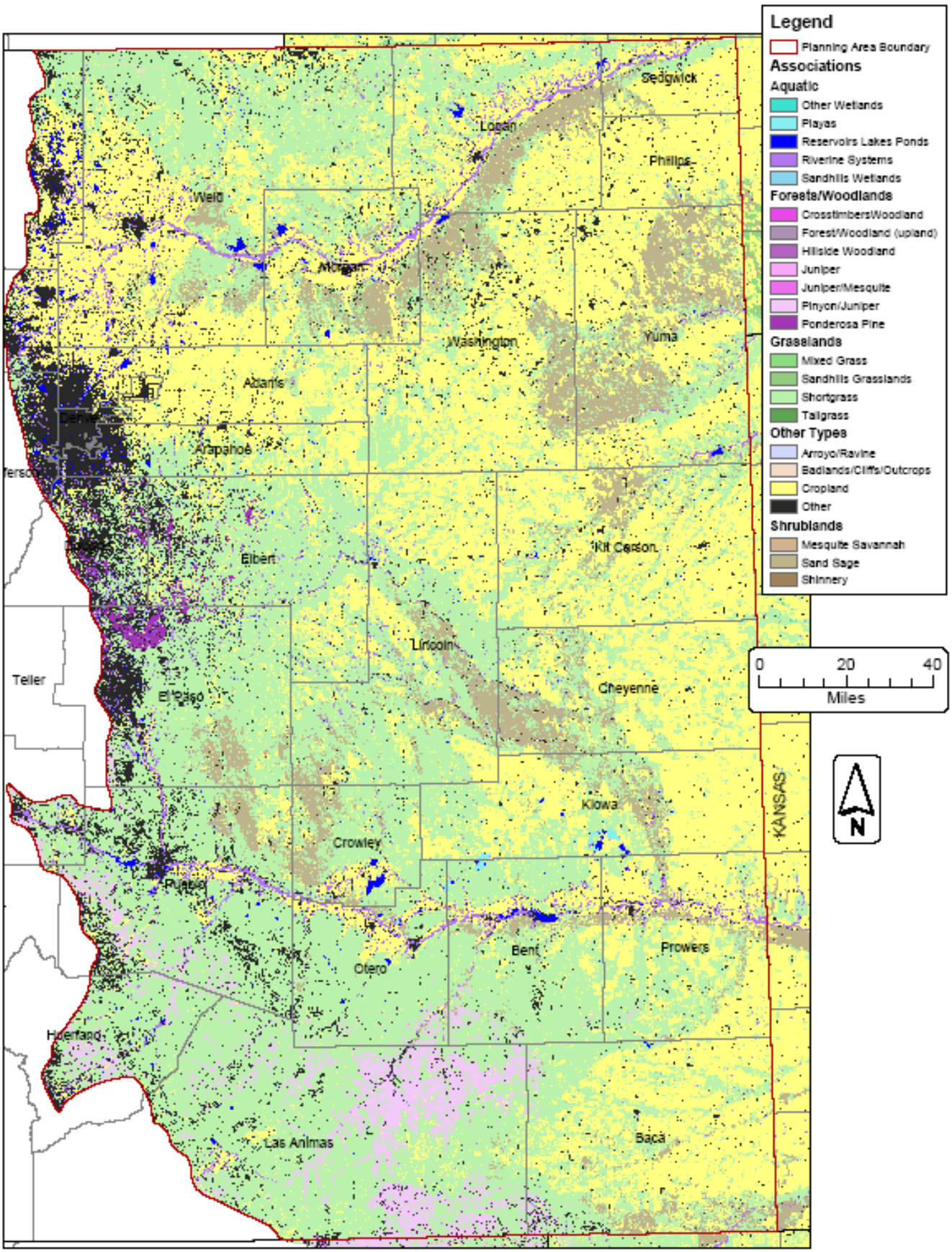

Figure 1. Bird habitat associations for the Shortgrass Prairie Bird Conservation Region of Colorado.