

PLAYA LAKES JOINT VENTURE

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



PLAYA LAKES
JOINT VENTURE

April 2008

APPROVALS


By adopting this plan, PLJV Nebraska partners signify:

- Conservation actions resulting from this plan will be voluntary and incentive-based.
- 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 Nebraska partners.

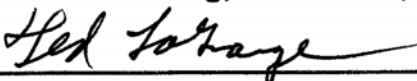
PLJV Management Board Chairperson

 _____ Date April 28, 2008

State Management Board Representative

 _____ Date 4-29-08

State Monitoring, Evaluation, and Research Team Representative

 _____ Date 4-29-08

CONTACTS

Ted LaGrange
Nebraska Game and Parks Commission
P. O. Box 30370
Lincoln, NE 68503
Tel. 402-471-5436
ted.lagrange@ngpc.ne.gov

Mike Carter
Playa Lakes Joint Venture
103 E. Simpson St.
Lafayette, CO 80026
Tel. 303-926-0777
mike.carter@pljv.org

TABLE OF CONTENTS

APPROVALS	2
CONTACTS	3
EXECUTIVE SUMMARY	5
BACKGROUND AND INTRODUCTION	7
Goal, Purpose, and Intended Audience	7
Plan Format	7
General Planning Approach	8
Implementation Timeframe	8
Decision Support Tools	8
Relationship of this Plan to other PLJV Biological Planning Reports	9
Plan Updates	9
NONBREEDING BIRDS	9
Waterfowl	9
Shorebirds – Wetland Guild	10
Waterbirds	11
BREEDING BIRDS	12
Grassland Guild	12
Riparian Guild	16
Habitat Generalists	17
INTEGRATED BIRD HABITAT RECOMMENDATIONS	17
Badlands/Cliffs/Outcrops	17
Cropland	17
CRP	18
Forest/Woodland (upland)	18
Juniper	18
Mixed Grass	18
Other	19
Other Wetlands	19
Playa	19
Ponderosa Pine	19
Reservoirs, Lakes, and Ponds	20
Riverine Systems	20
Sand Sage	20
Sandhills Wetlands	20
Shortgrass	21
NEXT STEPS	21
RECOMMENDED READING	22
GUIDELINES FOR INTERPRETING THE TABLES	22
Table 1	25
Table 2	28
Table 3	38
Figure 1	39

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 Nebraska. The goal of this plan is to **“Determine the quantity, quality, and distribution of habitat needed to maintain bird numbers at levels that will help to satisfy the population goals identified in the four North American bird plans.”** The priority species were identified in the four North American bird plans that include the *North American Waterfowl Management Plan*, *U. S. Shorebird Conservation Plan*, *Waterbird Conservation for the Americas*, and *Partners in Flight*. Bird population goals from these plans were scaled down to the Shortgrass Prairie Bird Conservation Region of Nebraska for this Area Implementation Plan.

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 conservation actions resulting from this plan will be voluntary and incentive based. The primary audience for this plan is habitat program managers and field delivery staff.

The following recommendations represent the major habitat actions (i.e., conversion, restoration, management) needed to bring priority birds to goal 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 2,007,376 acres of mixed grass prairie for relatively taller (mid-shin) grass heights (**Grasshopper Sparrow, Short-eared Owl**)
- Manage 1,147,285 acres of mixed grass prairie to contribute to large blocks of habitat (**Long-billed Curlew**)
- Restore 385,938 acres of sand sage (**Cassin’s and Brewer’s Sparrow**)
- Manage 473,462 acres of sand sage for relatively taller (mid-shin) grass heights (**Grasshopper Sparrow**)
- Manage 436,307 acres of shortgrass contributing to large blocks of habitat (**Long-billed Curlew**)
- Manage 765,886 acres of shortgrass prairie for relatively taller (mid-shin) grass heights (**Lark Bunting**)
- Manage 65,841 acres of prairie-dogs to make large blocks of habitat (**Long-billed Curlew**)
- Maintain 1,083,727 acres of wheat and 169,779 acres of alfalfa (**Ring-necked Pheasant**)
- Add 150,000 acres of CRP (**Ring-necked Pheasant, Grasshopper Sparrow, Lark Bunting**)

- Establish and maintain an additional 149,926 acres of fallow fields for breeding **Mountain Plover**
- Maintain 86,698 acres of wheat fields in a condition appropriate for breeding **Mountain Plover**
- Maintain the quantity and quality of the remaining natural habitat associations to prevent bird populations from falling below the level needed

Other important actions to preserve the function of existing habitats also are needed, and are recommended in this Plan. These recommendations are intended for implementation over a 30-year timeframe (2008-2038). Implementing these actions within this timeframe will be a major undertaking, requiring greater commitments of human and fiscal resources in the future than has occurred in the past. PLJV partners intend to work cooperatively with landowners through voluntary, incentive-based approaches, and to gain acceptance by all affected parties for the land use changes recommended. By adopting these objectives, 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 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*).

Goal, Purpose, and Intended Audience

The goal of this plan is consistent with the goal of PLJV biological planning: ***“Determine the quantity, quality, and distribution of habitat needed to maintain bird numbers at levels that will help to satisfy the population goals identified in the four North American bird plans”***. 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 audience for this plan is habitat program managers and field delivery staff.

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:

$$\text{Birds}^{\text{A}} = \text{Acres of habitat} * \text{habitat availability factor} * \text{habitat suitability factor} * \text{large block factor} * \text{bird density}$$

^ANumber of breeding birds (individuals) or nonbreeding bird use-days.

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 carry capacity relative to desired carrying capacity, which allows crafting specific habitat acreage recommendations to bring a species to plan goal levels.

Habitat recommendations herein are only as good as the model inputs used to develop them. 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).

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. PLJV staff is available to work with partners to develop spatial models and maps (“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:

- *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.

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

This Area is primarily important to migrating and wintering waterfowl. 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.

Priority waterfowl species for this Area include Northern Pintail, Mallard, and Canada Goose (Shortgrass Prairie Population) for the nonbreeding seasons only. However, 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 78,000 ducks and 23,000 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. – Feb.), and spring (Mar. – Apr.) Use-day targets are approximately 0.7 million for fall, 20.6 million for winter, and 4.1 million for spring.

The top three wetland foraging habitats are emergent marshes (estimated 16,951 acres), Sandhills wetlands (estimated 3,459 acres), and floodplain marshes (estimated 2,364 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 recommends maintaining the quality and quantity of the various wetland habitat associations important to this guild.

Shorebirds – Wetland Guild

Migratory shorebirds use this Area primarily from July through October for fall migration, and from April through May for spring migration. 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).

Priority shorebirds in this guild include American Avocet, Long-billed Curlew, Least Sandpiper, White-rumped Sandpiper, Baird’s Sandpiper, Pectoral Sandpiper, Stilt Sandpiper, Long-billed Dowitcher, and other less common species. However, 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 253,000 use-days, which includes abundance increases recommended in the U. S. Shorebird Conservation Plan. The top three shorebird foraging habitats are emergent marsh (estimated 16,951 acres), playas (estimated 16,699 acres), and reservoirs (estimated 25,990

acres) (Table 1). Habitat assessments and bioenergetics modeling suggested there is sufficient habitat to support the use-day objective (Table 1). Therefore, this Plan recommends maintaining the quality and quantity of the various wetland habitat associations important to this guild.

Waterbirds

Priority nonbreeding waterbirds include Eared Grebe, Western Grebe, American White Pelican, Sandhill Crane, Franklin's Gull, Forster's Tern, and Black Tern. There are a few records of Whooping Cranes in the BCR 18 portion of Nebraska, but they have not been in the area often enough to model as a priority species. 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. 54,000 use-days in fall and 262,000 in spring.

In this Area, the most important wetland types for cranes are wet meadows, emergent marshes, and floodplain marshes (Table 1). Sandhill cranes also use playa wetlands, especially in the fall, and have been observed roosting on the playas. Wet meadows (estimated 104,974 acres) provide important crane foraging habitat. However, the quality of existing wet meadows has likely been diminished due to reductions in hydroperiod (reduced stream flows caused by water impoundments and diversions, irrigation, infestations of exotic hydrophytes, etc.). Emergent and floodplain marshes (estimated 16,951 and 2,364 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 woody plants (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 water management capabilities) if necessary. For other wetland types, restoration and protection actions should be considered.

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.

BREEDING BIRDS

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. Secondly, we assumed that appropriate breeding habitat was the primary limiting factor for breeding birds. The planning approach assigned a density to each condition of every habitat that a priority species occupied, developed an estimation 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 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. For this Area, species with significant negative trends greater than 2.3% per year are Short-eared Owl, Mountain Plover, Long-billed Curlew, Brewer's Sparrow, and Grasshopper Sparrow.

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 data quality increases for any non-significantly declining species in the future, the trend will be utilized to determine a population goal at that time.

For some species when data dictated an abundance goal greater than twice the current estimated numbers, a provisional goal of doubling was utilized, following recommendations in the Partners in Flight Continental Plan (PIF) (Rich et al. 2004).

Three priority species were not modeled to meet abundance targets in this Area after habitat recommendations contained herein are implemented. They are Ring-necked Pheasant, Grasshopper Sparrow and Lark Bunting (see Table 2). Regardless, we recommend implementing toward the acreage goals in this Plan while partners determine what further habitat work is possible and the models and assumptions are further evaluated.

Grassland Guild

Grasslands are the largest single native habitat type found in this Area and support priority species such as Greater Prairie-Chicken, Swainson's Hawk, Mountain Plover, Long-billed Curlew, Burrowing Owl, Western Kingbird, Loggerhead Shrike, 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) and Long-billed Curlew, which requires models to evaluate landscape context.

Threats to grassland habitats include conversion to cropland, 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. Although many agricultural fields are utilized by some priority birds, their utilization tends to be at lower densities. Additionally, the extent to which crop maintenance and harvesting affects productivity has not been well-established for many species. The extent of agricultural conversion on the landscape may be a factor in the decline of Greater Prairie-Chicken across most of its range. The species thrived with small-scale agriculture adjacent to nearby grass/shrub prairie, but in recent decades with larger-scale conversion to agriculture it has declined. Likewise, the extent to which unutilized agricultural lands are maintained or converted back to grasses (and the types of grass/forb mixes used) will have an effect on some species, though these effects have not been well quantified in Nebraska.

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 and structural composition greatly influences the bird community utilizing those fields. Programs which may allow increased management of CRP fields, such as burning, light disking, 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:

Long-billed Curlew has declined in the last 30 years at an average rate of 4.3% per year across BCR 18, meaning more than 50% of the population has been lost. 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 1,147,285 acres of mixed grass prairie for few shrubs, about equally split between low (ankle height) and high (mid-shin height) grass, providing 1,113 birds; 2) Manage 436,307 acres of shortgrass for few shrubs (about equally split between low and high grass), providing 600 birds; 3) Manage both sets of acreages to conform to the large block model for the curlew. Currently the PLJV estimates that 600,472 acres of mixed grass and 150,165 acres of shortgrass contribute to large block models; and 4) Configure 65,841 acres of prairie-dogs to make large blocks of habitat, providing 85 birds. Currently the PLJV estimates that 25,233 acres 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 one mile of a water source. The current model for Curlew habitat requires 1,650 acres of prairie with no more than 220 acres of shrubs or woodland and less than 51 acres of roads, all of which is close to a water source. To configure grassland acres to conform to the model, we need to ensure that the prairie acreage within approximately one mile of the water source has areas of both high and low grass.

We acknowledge the uncertainty regarding factors that limit Long-billed Curlew populations in this Area. Should information become available indicating that breeding habitat is not an important limiting factor, these recommendations will be revised accordingly.

Short-eared Owl has declined in the last 30 years at an average rate of 4.6%/yr across the survey area of the BBS, meaning more than 50% of the population has been lost. 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 for high grass on 802,000 additional acres of mixed grass prairie, providing 401 birds. Currently the PLJV estimates that 1,338,250 acres are in this condition. This will bring the species up to goal.

Grasshopper Sparrow has declined in the last 30 years at an average rate of 3.3% per year across BCR 18, meaning more than 50% of the population has been lost. 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 mixed grass prairie so that 2,007,376 acres have high grass, providing an additional 189,362 birds. Currently the PLJV estimates that 1,338,250 acres of mixed grass is managed in this way; 2) Manage shortgrass prairie so that 765,886 acres have high grass, providing an additional 78,562 birds. Currently the PLJV estimates that 489,776 acres of shortgrass is managed in this way; 3) Add 150,000 acres of CRP and convert all existing CRP to native species mixes, providing 17,010 additional birds; 4) Restore 385,938 acres of sand sage from agricultural lands. Manage the resultant 526,069 acres so that 473,462 acres maintain high grasses. This will provide 68,653 additional birds; 5) Maintain the current estimated acreages of wheat and alfalfa when reducing cropland acreages. Currently those acreages are 1,083,727 and 169,779 acres, respectively. These recommendations, fully implemented, are modeled to meet only 69% 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 in the last thirty years at an average rate of 2.3% per year across BCR 18. Recommended actions are: 1) Restore 385,938 acres of sand sage from agricultural lands. Manage the resultant acreage (526,069 acres) so that 473,462 acres maintain high grasses. This will provide 8,254 additional birds; 2) Manage mixed grass prairie so that 2,007,376 acres have high grass, providing an additional 22,730 birds. Currently the PLJV estimates that 1,338,250 acres of mixed grass is managed in this way; 3) Manage shortgrass prairie so that 765,886 acres have high grass, providing an additional 10,658 birds. Currently the PLJV estimates that 489,776 acres of shortgrass is managed in this way; 4) Add 150,000 acres of CRP and convert all existing CRP to native species mixes, providing 44,700 additional birds; and 5) Maintain the current estimated acreages of wheat and alfalfa when reducing cropland acreages. Currently those acreages are 1,083,727 and 169,779 acres, respectively. These recommendations, fully implemented, are modeled to meet only 55% 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.

Grassland birds which utilize prairie-dog colonies include Burrowing Owl, which has a stable trend and therefore the goal is to maintain the current carrying capacity. While Mountain Plover utilizes prairie-dog colonies in other areas (CDOW 2003) they are only modeled as occurring in

cropland in this Area (Nebraska Partnership for All-Bird Conservation Science Advisory Workgroup, *pers. comm.*, Sharpe et al. 2001).

Lark Buntings, and to a lesser degree Greater Prairie-chickens, Swainson's Hawks, Loggerhead Shrikes, Lark Sparrows, Grasshopper Sparrows, heavily utilize croplands in southwest Nebraska, especially wheat fallow, sunflower fallow, corn planted into standing wheat stubble (ecofallow) or sunflower stubble, and of course alfalfa and even some use in beans (soy beans and edible beans).

Specific recommendations are:

Mountain Plover has declined in the last 30 years at an average rate of 3.0% per year across BCR 18, meaning more than 50% of the population has been lost. 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) Ensure that 149,926 additional acres of fields stay fallow and/or maintained in a condition that allows Mountain Plovers to breed within Kimball and perhaps Banner and Cheyenne counties; 2) Maintain the number of wheat fields which are planted late and/or otherwise maintained to allow Mountain Plovers to breed, currently the PLJV estimates at 86,698 acres. This will provide 2,024 birds, bringing the species to goal.

Sustaining Mountain Plovers in Nebraska may depend upon determination of whether agriculture is compatible with breeding plovers. It may very well be, but sustaining plover numbers on agricultural habitat does not address the complexity of dealing with a highly disturbed anthropogenic habitat. Ensuring that fields are screened for Mountain Plover prior to planting and then avoiding disturbance to nests will help maintain numbers. Moreover, it may be more desirable to research methods to restore areas where Mountain Plovers currently occur to native prairie and/or manage for appropriate condition. For instance, CRP in much of the southwest Panhandle is currently unsuitable for plovers, but some management (burning, grazing) could change that.

We acknowledge the uncertainty regarding factors that limit Mountain Plover populations in this Area. Should information become available indicating that breeding habitat is not an important limiting factor, these recommendations will be revised accordingly.

Shrubland Guild

Sand sage shrublands comprises less than 2% of the landscape in this Area. Nevertheless this shrubland is critical to a number of priority species including Greater Prairie-Chicken and Cassin's and Brewer's Sparrow. Shrub-associated priority species with statistically significant declining BBS trends in BCR 18 include Cassin's and Brewer's Sparrow.

Threats to this habitat include conversion to agriculture. Sometimes, this habitat type is not seen as productive to bird conservation. While some priority species will utilize agricultural fields to some extent, no species that are shrub-dependent do so. The USDA has stopped cost-sharing on

the spraying of sage brush, and this should result in an increase in sand sage habitat in the coming years.

Specific recommendations are:

Cassin's Sparrow has declined in the last 30 years at an average rate of 0.9% per year in BCR 18. Recommended actions are: 1) Restore 21,040 acres of sand sage with the range of Cassin's Sparrow in southwestern Nebraska. This will bring the species up to goal.

Brewer's Sparrow has declined in the last 30 years at an average rate of 5.5% per year in BCR 18, meaning more than 50% of the population has been lost. 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) Restore 385,938 acres of sage from agricultural lands in the western portion of the Area, primarily in Sioux, Scotts Bluff, and Banner counties, but also in Cheyenne and Kimball counties where possible. This will bring the species up to goal.

Currently the PLJV has not yet determined whether enough cropland exists along the western edges of these counties to support this recommendation. There may not be enough cropland in soils suitable for sagebrush prairie restoration, and if that is determined, these recommendations will be revised.

Riparian Guild

Riparian areas comprise less than 2% of the landscape. Riparian forest and shrublands are important to priority species such as Bell's Vireo and Bullock's Oriole and are critical to Northern Bobwhite and Red-headed Woodpecker in this Area. Wet meadow supports priority species such as Short-eared Owl and Ring-necked Pheasant. 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.

Current PLJV GIS cannot distinguish exotic versus native riparian shrubland. We know that exotic riparian shrubland, consisting primarily of Russian olive, comprises a portion of much riparian shrubland and wet meadow in the Area. In order to maintain a species such as Bell's Vireo, exotic riparian shrubland should be converted to native riparian shrubland. There are no specific habitat recommendations for riparian habitat beyond this. Habitat recommendations in the integrated sections provide general management recommendations which are appropriate for maintaining other riparian breeding birds in this Area.

Woodland/Forest Guild

Woodlands and forests within the Area are at the western fringes of the Great Plains in Nebraska and comprise less than 2% of the landscape. Ponderosa pine is the dominant type. These habitats are critical to a few priority species which are on the eastern edge of their range in the United States (Lewis's Woodpecker and Pinyon Jay). Neither of these two species has statistically significant declining trends in BCR 18, though Pinyon Jay shows a strong national decline. Therefore the abundance goals are to maintain the current estimated carrying capacity. Habitat recommendations are for appropriate management only.

Habitat Generalists

Ring-necked Pheasant has declined in the last 30 years at an average rate of 1.8% per year across BCR 18. Specific recommendations are: 1) Convert approximately 150,000 acres of cropland to CRP with appropriate early-succession management. This will provide 3,600 birds; 2) Despite reducing overall cropland acreage, maintain current acreages of wheat and alfalfa. The PLJV estimates these at 1,083,727 and 169,779 acres, respectively. Planting grass corners (as in the Farm Bill program CP-33) on irrigated cropland may improve carrying capacity for this species in cropland, reducing the need for crop conversion, however, this has not been measured and we are unaware of breeding pheasant density differences in croplands with and without crop corners planted to grass.

These recommendations, fully implemented, are modeled to meet only 61% 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.

INTEGRATED BIRD HABITAT RECOMMENDATIONS

(By Association)

Badlands/Cliffs/Outcrops

There are no PLJV priority species modeled as utilizing this habitat, though this habitat is critical for some nesting raptors. Maintain all acres of this habitat.

Cropland

Convert 150,000 acres of cropland to CRP and 385,938 acres of cropland to sand sage to support Cassin's and Brewer's Sparrow.

For Mountain Plover, within Kimball and perhaps Banner and Cheyenne counties, ensure that 149,926 additional acres of fields stay fallow to allow Mountain Plovers to breed successfully. Currently the PLJV estimates that 63,246 acres are within Mountain Plover range.

Maintain the number of wheat fields within Mountain Plover range, which are planted late and/or maintained in a condition that allows Mountain Plovers to breed successfully. Currently the PLJV estimates these acres at 86,698. Ensure that all fields are screened for Mountain Plover nesting prior to planting.

Maintain current acreages of wheat (1,083,727 acres) and alfalfa (169,779 acres).

CRP

Convert 150,000 acres of cropland to CRP, with appropriate early succession management, to support Ring-necked Pheasant, Grasshopper Sparrow and Lark Bunting.

Work to encourage the planting of only native grass and forb mixes in CRP fields. Where CRP has been planted to non-native grasses, develop programs to reseed. Interseeding with native legumes and shrubs has been shown to increase populations of Sharp-tailed Grouse and Greater Prairie-Chicken.

Forest/Woodland (upland)

There are very few acres of this habitat type on the landscape and we have no habitat recommendations for this habitat. These acres consist primarily of shelterbelts and do support Bullock's Oriole and Western Kingbird. However, we do not recommend the planting of additional shelterbelts and especially discourage their placement within grasslands that are not near houses or other structures already on the landscape.

Juniper

There are very few acres of this habitat type estimated on the landscape in this Area. This habitat can support Pinyon Jay where they occur so the maintenance of this habitat type on slopes and within drainages is an appropriate goal.

Mixed Grass

Maintain all current estimated 2,676,500 acres of mixed grass prairie.

Manage 1,147,285 acres of mixed grass prairie for few shrubs and a heterogeneous mix of grass heights. Configure these acres on the landscape so that they contribute to large blocks of habitat following the Long-billed Curlew model. Currently the PLJV estimates that 600,472 acres of mixed grass contribute to large blocks.

Manage 2,007,376 acres of mixed grass for high grass for Grasshopper Sparrow and Short-eared Owl. Currently the PLJV estimates that 1,338,250 acres of mixed grass is managed in this way.

Other

PLJV estimates that approximately 127,719 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. 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. Note that this is the only habitat in which the PLJV recommends planting trees.

Other Wetlands

Ensure no loss or degradation of these wetlands, which include emergent marshes (estimated 16,951 acres) and moist-soil units (estimated 32 acres). These wetlands support waterfowl, shorebirds, and waterbirds.

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

Playa

Protect playas (estimated 16,699 acres) from further sedimentation by installing best management practices (including 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 in grassland to manage livestock grazing.

Ponderosa Pine

Maintain this forest habitat with all age class trees but dominated by larger trees, few stems per acre and a predominately grassy understory with scattered shrubs for Lewis's Woodpecker. This habitat condition can be maintained through regular, low intensity fires. Some thinning will likely be necessary.

Reservoirs, Lakes, and Ponds

Maintain reservoir (estimated 25,990 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 sandy or muddy shoreline with little emergent vegetation. Maintaining sandy beaches at Lake McConaughy will support Piping Plover.

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

Riverine Systems

Restore all exotic riparian shrubland to wet meadow and/or lowland prairie. Current PLJV estimates are that 489 acres of exotic riparian shrubland exist, but this habitat condition has not been well-evaluated by current GIS.

Restore and enhance wet meadows (currently estimated at 104,974 acres) and floodplain marshes (estimated 2,364 acres) by controlling exotic hydrophytes, 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, waterbirds and breeding species such as Ring-necked Pheasant, Upland Sandpiper, and Short-eared Owl.

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

Sand Sage

This habitat is critical to Cassin's Sparrow. Maintain all currently estimated 140,131 acres of sand sage. Restore 21,040 acres of sand sage with the range of Cassin's Sparrow in southwestern Nebraska.

Restore 385,938 acres of sagebrush prairie from agricultural lands. Manage the resultant 526,069 acres so that 473,462 acres maintain high grasses during the breeding season for Grasshopper Sparrow. The USDA has stopped cost-sharing on the spraying of sage brush, and this should result in an increase in sand sage habitat in the coming years.

Sandhills Wetlands

Ensure no loss or degradation of Sandhills wetlands (estimated 3,459 acres); they support wetland birds.

Shortgrass

Maintain all current shortgrass prairie acres, currently estimated at 1,061,961 acres.

Manage 436,307 acres of shortgrass for few shrubs and a heterogeneous mix of grass heights. Configure these acres to make large blocks of habitat for Long-billed Curlew. Currently the PLJV estimates that 150,165 acres of shortgrass contribute to large blocks.

Maintain current prairie-dog colony acreages (82,302) while configuring 65,841 acres of prairie-dog colonies to make large blocks of habitat for Long-billed Curlew. Currently the PLJV estimates that 25,233 acres contribute to large blocks of habitat.

Manage 765,886 acres for high grass to support Lark Bunting. Currently the PLJV estimates that 489,776 acres of shortgrass is managed in this way.

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.
- Evaluate the accuracy of current habitat acreage estimates from GIS; these estimates are important parameters for carrying capacity models used to develop habitat recommendations.

RECOMMENDED READING

- Colorado Division of Wildlife (CDOW). 2003. Conservation Plan for Grassland Species in Colorado. 205 pp. <http://wildlife.state.co.us/WildlifeSpecies/GrasslandSpecies/>
- PLJV. 2005. Waterfowl team report, v. 1.0. Technical companion document to the PLJV Implementation Planning Guide. 34pp.
- PLJV. 2006a. PLJV master plan, v. 2.4. 31pp.
- PLJV. 2006b. Waterbird team report, v. 1.0. Technical companion document to the PLJV Implementation Planning Guide. 17pp.
- PLJV. 2006c. Habitat assessment procedures, v. 2.0. Technical companion document to the PLJV Implementation Planning Guide. 37pp.
- PLJV. 2007a. PLJV implementation planning guide, v. 2.0. 38pp.
- PLJV. 2007b. Shorebird team report, v. 2.0. Technical companion document to the PLJV Implementation Planning Guide. 52pp.
- PLJV. 2007c. Landbird team report, v.1.0. Technical companion document to the PLJV Implementation Planning Guide.
- Sauer, J. R., J. E. Hines, and J. Fallon. 2005. The North American Breeding Bird Survey, Results and Analysis 1966 - 2005. Version 6.2.2006. [USGS Patuxent Wildlife Research Center](#), Laurel, MD
- Sharpe, R.S., W.R. Silcock, and J.G. Jorgensen. 2001. Birds of Nebraska: their distribution and temporal occurrence. University of Nebraska Press, Lincoln. 520 pp.
- USFWS and USGS. 2006. Strategic habitat conservation. Final report of the National Ecological Assessment Team. 45pp.

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):

$$\text{Carrying Capacity} = \text{Condition Acres} * \text{Availability} * \text{Suitability} * \text{Large Block} * \text{Units}$$

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. Note: Even if the habitat association/condition currently exceeds the goal, it may be very important to conserve the habitat to address potential future losses and to sustain the other functions that the habitat may provide.

<i>Species/Guild Name: Cranes</i>		<i>Season: Fall</i>							
Assoc Name	Condition Name	Condition			Large		CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block	Units			
Other Wetlands	Moist-soil unit	32	1.0000	1.0000	1.00000	1,253.0000	40,431	53,575	75.47%
		32	1.0000	1.0000	1.00000	1,253.0000	40,431	53,575	75.40%
Other Wetlands	Emergent marsh	16,951	1.0000	1.0000	1.00000	396.0000	6,712,490	53,575	12529.15
		16,951	1.0000	1.0000	1.00000	396.0000	6,712,490	53,575	12529.10
Playa	Wet	1,503	0.5000	1.0000	1.00000	127.0000	95,435	53,575	178.13%
		1,503	0.5000	1.0000	1.00000	127.0000	95,435	53,575	178.10%
Riverine Systems	Floodplain marsh	2,364	1.0000	1.0000	1.00000	396.0000	935,974	53,575	1747.03%
		2,364	1.0000	1.0000	1.00000	396.0000	935,974	53,575	1747.00%
Riverine Systems	Wet meadow	104,974	1.0000	1.0000	1.00000	396.0000	41,569,777	53,575	77591.74
		105,476	1.0000	1.0000	1.00000	396.0000	41,768,476	53,575	77962.60
Summary for Fall (6 records)					<i>Pre-planning Sum</i>		49,354,107	92121.52%	
					<i>Post-planning Sum</i>		49,552,806	92492.20%	

<i>Species/Guild Name: Cranes</i>		<i>Season: Spring</i>							
Assoc Name	Condition Name	Condition			Large		CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block	Units			
Other Wetlands	Moist-soil unit	32	1.0000	1.0000	1.00000	1,253.0000	40,431	261,735	15.45%
		32	1.0000	1.0000	1.00000	1,253.0000	40,431	261,735	15.40%
Other Wetlands	Emergent marsh	16,951	1.0000	1.0000	1.00000	396.0000	6,712,490	261,735	2564.61%
		16,951	1.0000	1.0000	1.00000	396.0000	6,712,490	261,735	2564.60%
Playa	Wet	1,503	0.5000	1.0000	1.00000	127.0000	95,435	261,735	36.46%
		1,503	0.5000	1.0000	1.00000	127.0000	95,435	261,735	36.40%
Riverine Systems	Wet meadow	104,974	1.0000	1.0000	1.00000	396.0000	41,569,777	261,735	15882.39
		105,476	1.0000	1.0000	1.00000	396.0000	41,768,476	261,735	15958.30
Riverine Systems	Floodplain marsh	2,364	1.0000	1.0000	1.00000	396.0000	935,974	261,735	357.60%
		2,364	1.0000	1.0000	1.00000	396.0000	935,974	261,735	357.60%
Summary for Spring (6 records)					<i>Pre-planning Sum</i>		49,354,107	18856.52%	
					<i>Post-planning Sum</i>		49,552,806	18932.30%	

<i>Species/Guild Name: Shorebirds-Nonbreeding-Wetland</i>		<i>Season: Nonbreeding</i>							
Assoc Name	Condition Name	Condition			Large		CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block	Units			
Other Wetlands	Moist-soil unit	32	1.0000	0.1500	1.00000	230.0000	1,113	253,335	0.44%
		32	1.0000	0.1500	1.00000	230.0000	1,113	253,335	0.40%
Other Wetlands	Emergent marsh	16,951	1.0000	0.1000	1.00000	230.0000	389,867	253,335	153.89%
		16,951	1.0000	0.1000	1.00000	230.0000	389,867	253,335	153.80%
Playa	Wet	1,503	1.0000	0.1000	1.00000	230.0000	34,567	253,335	13.64%
		1,503	1.0000	0.1000	1.00000	230.0000	34,567	253,335	13.60%
Playa	Wet pit only	1,002	0.5000	0.0010	1.00000	230.0000	115	253,335	0.05%
		1,002	0.5000	0.0010	1.00000	230.0000	115	253,335	0.00%
Reservoirs Lakes Ponds	Stock pond	7,875	1.0000	0.0050	1.00000	230.0000	9,056	253,335	3.57%
		7,875	1.0000	0.0050	1.00000	230.0000	9,056	253,335	3.50%
Reservoirs Lakes Ponds	Freshwater lake	395	1.0000	0.0050	1.00000	230.0000	455	253,335	0.18%
		395	1.0000	0.0050	1.00000	230.0000	455	253,335	0.10%
Reservoirs Lakes Ponds	Reservoir	25,990	1.0000	0.0050	1.00000	230.0000	29,889	253,335	11.80%
		25,990	1.0000	0.0050	1.00000	230.0000	29,889	253,335	11.70%
Reservoirs Lakes Ponds	Lagoon	395	1.0000	0.0050	1.00000	230.0000	455	253,335	0.18%
		395	1.0000	0.0050	1.00000	230.0000	455	253,335	0.10%
Riverine Systems	River channel	11,475	1.0000	0.0100	1.00000	230.0000	26,391	253,335	10.42%
		11,475	1.0000	0.0100	1.00000	230.0000	26,391	253,335	10.40%
Riverine Systems	Floodplain marsh	2,364	1.0000	0.0130	1.00000	230.0000	7,067	253,335	2.79%
		2,364	1.0000	0.0130	1.00000	230.0000	7,067	253,335	2.70%
Sandhills Wetlands	NA	3,459	1.0000	0.1000	1.00000	230.0000	79,557	253,335	31.40%
		3,459	1.0000	0.1000	1.00000	230.0000	79,557	253,335	31.40%
Summary for Nonbreeding (12 records)					<i>Pre-planning Sum</i>		578,532	228.36%	
					<i>Post-planning Sum</i>		578,532	227.70%	

Species/Guild Name: Waterfowl-Nonbreeding

Season: Fall

Assoc Name	Condition Name	Condition			Large		CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block	Units			
Cropland	Corn	836,199	1.0000	0.0000	1.00000	668.0000	0	731,153	0.00%
		723,223	1.0000	0.0000	1.00000	668.0000	0	731,153	0.00%
Cropland	Sorghum	26,577	1.0000	0.0000	1.00000	849.0000	0	731,153	0.00%
		22,987	1.0000	0.0000	1.00000	849.0000	0	731,153	0.00%
Cropland	Wheat	1,083,727	1.0000	0.0000	1.00000	1,336.0000	0	731,153	0.00%
		1,083,737	1.0000	0.0000	1.00000	1,336.0000	0	731,153	0.00%
Other Wetlands	Emergent marsh	16,951	1.0000	1.0000	1.00000	1,336.0000	22,646,178	731,153	3097.32%
		16,951	1.0000	1.0000	1.00000	1,336.0000	22,646,178	731,153	3097.30%
Other Wetlands	Moist-soil unit	32	1.0000	1.0000	1.00000	4,223.0000	136,266	731,153	18.64%
		32	1.0000	1.0000	1.00000	4,223.0000	136,266	731,153	18.60%
Playa	Wet	1,503	0.5000	1.0000	1.00000	428.0000	321,623	731,153	43.99%
		1,503	0.5000	1.0000	1.00000	428.0000	321,623	731,153	43.90%
Reservoirs Lakes Ponds	Reservoir	25,990	1.0000	0.0500	1.00000	225.0000	292,392	731,153	39.99%
		25,990	1.0000	0.0500	1.00000	225.0000	292,392	731,153	39.90%
Reservoirs Lakes Ponds	Freshwater lake	395	1.0000	0.0500	1.00000	225.0000	4,448	731,153	0.61%
		395	1.0000	0.0500	1.00000	225.0000	4,448	731,153	0.60%
Reservoirs Lakes Ponds	Lagoon	395	1.0000	0.4000	1.00000	428.0000	67,688	731,153	9.26%
		395	1.0000	0.4000	1.00000	428.0000	67,688	731,153	9.20%
Reservoirs Lakes Ponds	Stock pond	7,875	1.0000	0.4000	1.00000	225.0000	708,760	731,153	96.94%
		7,875	1.0000	0.4000	1.00000	225.0000	708,760	731,153	96.90%
Riverine Systems	Warmwater slough	66	1.0000	1.0000	1.00000	428.0000	28,257	731,153	3.86%
		66	1.0000	1.0000	1.00000	428.0000	28,257	731,153	3.80%
Riverine Systems	River channel	11,475	1.0000	1.0000	1.00000	50.0000	573,727	731,153	78.47%
		11,475	1.0000	1.0000	1.00000	50.0000	573,727	731,153	78.40%
Riverine Systems	Floodplain marsh	2,364	1.0000	1.0000	1.00000	1,336.0000	3,157,729	731,153	431.88%
		2,364	1.0000	1.0000	1.00000	1,336.0000	3,157,729	731,153	431.80%
Sandhills Wetlands	NA	3,459	1.0000	1.0000	1.00000	1,336.0000	4,621,224	731,153	632.05%
		3,459	1.0000	1.0000	1.00000	1,336.0000	4,621,224	731,153	632.00%
Summary for Fall (15 records)				<i>Pre-planning Sum</i>		32,558,292		4453.00%	
				<i>Post-planning Sum</i>		32,558,292		4452.40%	

Species/Guild Name: Waterfowl-Nonbreeding

Season: Spring

Assoc Name	Condition Name	Condition			Large		CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block	Units			
Cropland	Sorghum	26,577	1.0000	0.0000	1.00000	849.0000	0	4,087,230	0.00%
		22,987	1.0000	0.0000	1.00000	849.0000	0	4,087,230	0.00%
Cropland	Corn	836,199	1.0000	0.0000	1.00000	668.0000	0	4,087,230	0.00%
		723,223	1.0000	0.0000	1.00000	668.0000	0	4,087,230	0.00%
Cropland	Wheat	1,083,727	1.0000	0.0000	1.00000	1,336.0000	0	4,087,230	0.00%
		1,083,737	1.0000	0.0000	1.00000	1,336.0000	0	4,087,230	0.00%
Other Wetlands	Emergent marsh	16,951	1.0000	1.0000	1.00000	1,336.0000	22,646,178	4,087,230	554.07%
		16,951	1.0000	1.0000	1.00000	1,336.0000	22,646,178	4,087,230	554.00%
Other Wetlands	Moist-soil unit	32	1.0000	1.0000	1.00000	4,223.0000	136,266	4,087,230	3.33%
		32	1.0000	1.0000	1.00000	4,223.0000	136,266	4,087,230	3.30%
Playa	Wet	1,503	0.5000	1.0000	1.00000	428.0000	321,623	4,087,230	7.87%
		1,503	0.5000	1.0000	1.00000	428.0000	321,623	4,087,230	7.80%
Reservoirs Lakes Ponds	Lagoon	395	1.0000	0.4000	1.00000	428.0000	67,688	4,087,230	1.66%
		395	1.0000	0.4000	1.00000	428.0000	67,688	4,087,230	1.60%
Reservoirs Lakes Ponds	Stock pond	7,875	1.0000	0.4000	1.00000	225.0000	708,760	4,087,230	17.34%
		7,875	1.0000	0.4000	1.00000	225.0000	708,760	4,087,230	17.30%
Reservoirs Lakes Ponds	Reservoir	25,990	1.0000	0.0500	1.00000	225.0000	292,392	4,087,230	7.15%
		25,990	1.0000	0.0500	1.00000	225.0000	292,392	4,087,230	7.10%
Reservoirs Lakes Ponds	Freshwater lake	395	1.0000	0.0500	1.00000	225.0000	4,448	4,087,230	0.11%
		395	1.0000	0.0500	1.00000	225.0000	4,448	4,087,230	0.10%
Riverine Systems	Floodplain marsh	2,364	1.0000	1.0000	1.00000	1,336.0000	3,157,729	4,087,230	77.26%
		2,364	1.0000	1.0000	1.00000	1,336.0000	3,157,729	4,087,230	77.20%
Riverine Systems	River channel	11,475	1.0000	1.0000	1.00000	50.0000	573,727	4,087,230	14.04%
		11,475	1.0000	1.0000	1.00000	50.0000	573,727	4,087,230	14.00%
Riverine Systems	Warmwater slough	66	1.0000	1.0000	1.00000	428.0000	28,257	4,087,230	0.69%
		66	1.0000	1.0000	1.00000	428.0000	28,257	4,087,230	0.60%
Sandhills Wetlands	NA	3,459	1.0000	1.0000	1.00000	1,336.0000	4,621,224	4,087,230	113.06%
		3,459	1.0000	1.0000	1.00000	1,336.0000	4,621,224	4,087,230	113.00%

Summary for Spring (15 records)	<i>Pre-planning Sum</i>	32,558,292	796.58%
	<i>Post-planning Sum</i>	32,558,292	796.00%

Species/Guild Name: Waterfowl-Nonbreeding

Season: Winter

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Corn	836,199	0.5400	1.0000	1.00000	668.0000	301,633,747	20,548,576	1467.91%
		723,223	0.5400	1.0000	1.00000	668.0000	260,881,142	20,548,576	1269.50%
Cropland	Sorghum	26,577	0.2800	1.0000	1.00000	849.0000	6,318,000	20,548,576	30.75%
		22,987	0.2800	1.0000	1.00000	849.0000	5,464,399	20,548,576	26.50%
Cropland	Wheat	1,083,727	0.4000	1.0000	1.00000	1,336.0000	579,143,578	20,548,576	2818.41%
		1,083,737	0.4000	1.0000	1.00000	1,336.0000	579,149,167	20,548,576	2818.40%
Other Wetlands	Emergent marsh	16,951	0.0000	1.0000	1.00000	1,336.0000	0	20,548,576	0.00%
		16,951	0.0000	1.0000	1.00000	1,336.0000	0	20,548,576	0.00%
Other Wetlands	Moist-soil unit	32	0.0000	1.0000	1.00000	4,223.0000	0	20,548,576	0.00%
		32	0.0000	1.0000	1.00000	4,223.0000	0	20,548,576	0.00%
Playa	Wet	1,503	0.0000	1.0000	1.00000	428.0000	0	20,548,576	0.00%
		1,503	0.0000	1.0000	1.00000	428.0000	0	20,548,576	0.00%
Reservoirs Lakes Ponds	Stock pond	7,875	0.0000	0.4000	1.00000	225.0000	0	20,548,576	0.00%
		7,875	0.0000	0.4000	1.00000	225.0000	0	20,548,576	0.00%
Reservoirs Lakes Ponds	Reservoir	25,990	0.0000	0.0500	1.00000	225.0000	0	20,548,576	0.00%
		25,990	0.0000	0.0500	1.00000	225.0000	0	20,548,576	0.00%
Reservoirs Lakes Ponds	Lagoon	395	0.0000	0.4000	1.00000	428.0000	0	20,548,576	0.00%
		395	0.0000	0.4000	1.00000	428.0000	0	20,548,576	0.00%
Reservoirs Lakes Ponds	Freshwater lake	395	0.0000	0.0500	1.00000	225.0000	0	20,548,576	0.00%
		395	0.0000	0.0500	1.00000	225.0000	0	20,548,576	0.00%
Riverine Systems	Warmwater slough	66	0.0000	1.0000	1.00000	428.0000	0	20,548,576	0.00%
		66	0.0000	1.0000	1.00000	428.0000	0	20,548,576	0.00%
Riverine Systems	Floodplain marsh	2,364	0.0000	1.0000	1.00000	1,336.0000	0	20,548,576	0.00%
		2,364	0.0000	1.0000	1.00000	1,336.0000	0	20,548,576	0.00%
Riverine Systems	River channel	11,475	1.0000	1.0000	1.00000	50.0000	573,727	20,548,576	2.79%
		11,475	1.0000	1.0000	1.00000	50.0000	573,727	20,548,576	2.70%
Sandhills Wetlands	NA	3,459	0.0000	1.0000	1.00000	1,336.0000	0	20,548,576	0.00%
		3,459	0.0000	1.0000	1.00000	1,336.0000	0	20,548,576	0.00%
Summary for Winter (15 records)	<i>Pre-planning Sum</i>	887,669,052	4319.86%						
	<i>Post-planning Sum</i>	846,068,435	4117.10%						

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. Note: Even if the habitat association/condition currently exceeds the goal, it may be very important to conserve the habitat to address future losses and to sustain the other functions that the habitat may provide.

<i>Species/Guild Name: Baltimore Oriole</i>			<i>Season: Breeding</i>						
Assoc Name	Condition Name	Condition			Large	Units	CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block				
Riverine Systems	Riparian canopy - early	1,043	1.0000	0.8000	1.00000	0.0317	26	168	15.48%
	successional w/o understor	1,043	1.0000	0.8000	1.00000	0.0317	26	168	15.48%
Riverine Systems	Riparian canopy - early	1,043	1.0000	0.8000	1.00000	0.0317	26	168	15.48%
	successional w /understory	1,043	1.0000	0.8000	1.00000	0.0317	26	168	15.48%
Riverine Systems	Riparian canopy - late	700	1.0000	0.8000	1.00000	0.1037	58	168	34.52%
	successional w/o understory	700	1.0000	0.8000	1.00000	0.1037	58	168	34.52%
Riverine Systems	Riparian canopy - late	700	1.0000	0.8000	1.00000	0.1037	58	168	34.52%
	successional w/ understory	700	1.0000	0.8000	1.00000	0.1037	58	168	34.52%
Summary for Breeding (4 records)					<i>Pre-planning Sum</i>		168		100.00%
					<i>Post-planning Sum</i>		168		100.00%

<i>Species/Guild Name: Bell's Vireo</i>			<i>Season: Breeding</i>						
Assoc Name	Condition Name	Condition			Large	Units	CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block				
Mixed Grass	Many shrubs/low grass	669,125	0.0500	1.0000	1.00000	0.0008	27	340	7.94%
		267,650	0.0500	1.0000	1.00000	0.0008	11	340	3.24%
Mixed Grass	Few shrubs/ low grass	669,125	0.0500	1.0000	1.00000	0.0008	27	340	7.94%
		401,475	0.0500	1.0000	1.00000	0.0008	16	340	4.71%
Mixed Grass	Few shrubs/high grass	669,125	0.0500	1.0000	1.00000	0.0008	27	340	7.94%
		1,003,688	0.0500	1.0000	1.00000	0.0008	40	340	11.76%
Mixed Grass	Many shrubs/high grass	669,125	0.0500	1.0000	1.00000	0.0008	27	340	7.94%
		1,003,688	0.0500	1.0000	1.00000	0.0008	40	340	11.76%
Riverine Systems	Native riparian shrubland	6,298	0.5000	1.0000	1.00000	0.0721	227	340	66.76%
		6,800	0.5000	1.0000	1.00000	0.0721	245	340	72.06%
Riverine Systems	Riparian canopy - late	700	0.5000	1.0000	1.00000	0.0059	2	340	0.59%
		700	0.5000	1.0000	1.00000	0.0059	2	340	0.59%
Riverine Systems	Riparian canopy - early	1,043	0.5000	1.0000	1.00000	0.0059	3	340	0.88%
		1,043	0.5000	1.0000	1.00000	0.0059	3	340	0.88%
Summary for Breeding (7 records)					<i>Pre-planning Sum</i>		340		100.00%
					<i>Post-planning Sum</i>		357		105.00%

<i>Species/Guild Name: Brewer's Sparrow</i>			<i>Season: Breeding</i>						
Assoc Name	Condition Name	Condition			Large	Units	CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block				
Sand Sage	Low grass	133,124	1.0000	0.9000	1.00000	0.0032	383	2,425	15.79%
		52,607	1.0000	0.9733	1.00000	0.0032	164	2,425	6.76%
Sand Sage	High grass	7,007	1.0000	0.9000	1.00000	0.0032	20	2,425	0.82%
		473,462	1.0000	0.9733	1.00000	0.0032	1,475	2,425	60.82%
Shortgrass	Few shrubs/high grass	244,888	1.0000	0.2000	1.00000	0.0019	93	2,425	3.84%
		382,943	1.0000	0.2000	1.00000	0.0019	146	2,425	6.02%
Shortgrass	Few shrubs/ low grass	244,888	1.0000	0.2000	1.00000	0.0019	93	2,425	3.84%
		165,666	1.0000	0.2000	1.00000	0.0019	63	2,425	2.60%
Shortgrass	Many shrubs/high grass	244,888	1.0000	0.2000	1.00000	0.0066	323	2,425	13.32%
		382,943	1.0000	0.2000	1.00000	0.0066	505	2,425	20.82%
Shortgrass	Many shrubs/low grass	244,888	1.0000	0.2000	1.00000	0.0066	323	2,425	13.32%
		53,735	1.0000	0.2000	1.00000	0.0066	71	2,425	2.93%
Summary for Breeding (6 records)					<i>Pre-planning Sum</i>		1,235		50.93%
					<i>Post-planning Sum</i>		2,424		99.95%

<i>Species/Guild Name: Bullock's Oriole</i>			<i>Season: Breeding</i>						
Assoc Name	Condition Name	Condition			Large	Units	CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block				
Other	Urban/Suburban	17,983	1.0000	1.0000	1.00000	0.1595	2,868	3,708	77.35%
		17,983	1.0000	1.0000	1.00000	0.1595	2,868	3,708	77.35%

Riverine Systems	Riparian canopy - early	1,043	1.0000	1.0000	1.00000	0.0528	55	3,708	1.48%
	successional w/o understor	1,043	1.0000	1.0000	1.00000	0.0528	55	3,708	1.48%
Riverine Systems	Riparian canopy - early	1,043	1.0000	1.0000	1.00000	0.0528	55	3,708	1.48%
	successional w/understory	1,043	1.0000	1.0000	1.00000	0.0528	55	3,708	1.48%
Riverine Systems	Riparian canopy - late	700	1.0000	1.0000	1.00000	0.1728	121	3,708	3.26%
	successional w/ understory	700	1.0000	1.0000	1.00000	0.1728	121	3,708	3.26%
Riverine Systems	Riparian canopy - late	700	1.0000	1.0000	1.00000	0.1728	121	3,708	3.26%
	successional w/o understory	700	1.0000	1.0000	1.00000	0.1728	121	3,708	3.26%
Shortgrass	Many shrubs/low grass	244,888	1.0000	1.0000	1.00000	0.0005	122	3,708	3.29%
		53,735	1.0000	1.0000	1.00000	0.0005	27	3,708	0.73%
Shortgrass	Few shrubs/ low grass	244,888	1.0000	1.0000	1.00000	0.0005	122	3,708	3.29%
		165,666	1.0000	1.0000	1.00000	0.0005	83	3,708	2.24%
Shortgrass	Many shrubs/high grass	244,888	1.0000	1.0000	1.00000	0.0005	122	3,708	3.29%
		382,943	1.0000	1.0000	1.00000	0.0005	191	3,708	5.15%
Shortgrass	Few shrubs/high grass	244,888	1.0000	1.0000	1.00000	0.0005	122	3,708	3.29%
		382,943	1.0000	1.0000	1.00000	0.0005	191	3,708	5.15%
Summary for Breeding (9 records)			<i>Pre-planning Sum</i>				3,708	100.00%	
			<i>Post-planning Sum</i>				3,712	100.11%	

Species/Guild Name: Burrowing Owl

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Badlands/Cliffs/Outcrops		NA	45,197	1.0000	1.0000	0.0011	50	8,410	0.59%
		45,197	1.0000	1.0000	1.00000	0.0011	50	8,410	0.59%
Mixed Grass	Few shrubs/ low grass	669,125	1.0000	1.0000	1.00000	0.0012	803	8,410	9.55%
		401,475	1.0000	1.0000	1.00000	0.0012	482	8,410	5.73%
Shortgrass	PD town	82,302	1.0000	0.4000	1.00000	0.2132	7,019	8,410	83.46%
		82,302	1.0000	1.0000	1.00000	0.2132	17,547	8,410	208.64%
Shortgrass	Few shrubs/ low grass	244,888	1.0000	1.0000	1.00000	0.0011	269	8,410	3.20%
		165,666	1.0000	1.0000	1.00000	0.0011	182	8,410	2.16%
Shortgrass	Many shrubs/low grass	244,888	1.0000	1.0000	1.00000	0.0011	269	8,410	3.20%
		53,735	1.0000	1.0000	1.00000	0.0011	59	8,410	0.70%
Summary for Breeding (5 records)			<i>Pre-planning Sum</i>				8,410	100.00%	
			<i>Post-planning Sum</i>				18,320	217.83%	

Species/Guild Name: Cassin's Sparrow

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Sand Sage	High grass	7,007	1.0000	0.5000	1.00000	0.0125	44	1,139	3.86%
		473,462	1.0000	0.5000	1.00000	0.0125	2,959	1,139	259.79%
Sand Sage	Low grass	133,124	1.0000	0.5000	1.00000	0.0125	832	1,139	73.05%
		52,607	1.0000	0.5000	1.00000	0.0125	329	1,139	28.88%
Summary for Breeding (2 records)			<i>Pre-planning Sum</i>				876	76.91%	
			<i>Post-planning Sum</i>				3,288	288.67%	

Species/Guild Name: Chestnut-collared Longspur

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
CRP	Non-native	329,213	1.0000	0.6000	1.00000	0.0004	79	46,812	0.17%
		0	1.0000	0.6000	1.00000	0.0004	0	46,812	0.00%
CRP	Native	36,579	1.0000	0.6000	1.00000	0.0004	9	46,812	0.02%
		515,792	1.0000	0.6000	1.00000	0.0004	124	46,812	0.26%
Mixed Grass	Many shrubs/high grass	669,125	1.0000	0.6000	1.00000	0.0160	6,424	46,812	13.72%
		1,003,688	1.0000	0.6000	1.00000	0.0160	9,635	46,812	20.58%
Mixed Grass	Many shrubs/low grass	669,125	1.0000	0.6000	1.00000	0.0160	6,424	46,812	13.72%
		267,650	1.0000	0.6000	1.00000	0.0160	2,569	46,812	5.49%
Mixed Grass	Few shrubs/high grass	669,125	1.0000	0.6000	1.00000	0.0266	10,679	46,812	22.81%
		1,003,688	1.0000	0.6000	1.00000	0.0266	16,019	46,812	34.22%
Mixed Grass	Few shrubs/ low grass	669,125	1.0000	0.6000	1.00000	0.0266	10,679	46,812	22.81%
		401,475	1.0000	0.6000	1.00000	0.0266	6,408	46,812	13.69%
Shortgrass	Many shrubs/low grass	244,888	1.0000	0.6000	1.00000	0.0160	2,351	46,812	5.02%
		53,735	1.0000	0.6000	1.00000	0.0160	516	46,812	1.10%
Shortgrass	Few shrubs/high grass	244,888	1.0000	0.6000	1.00000	0.0266	3,908	46,812	8.35%
		382,943	1.0000	0.6000	1.00000	0.0266	6,112	46,812	13.06%
Shortgrass	Few shrubs/ low grass	244,888	1.0000	0.6000	1.00000	0.0266	3,908	46,812	8.35%

		165,666	1.0000	0.6000	1.00000	0.0266	2,644	46,812	5.65%
Shortgrass	Many shrubs/high grass	244,888	1.0000	0.6000	1.00000	0.0160	2,351	46,812	5.02%
		382,943	1.0000	0.6000	1.00000	0.0160	3,676	46,812	7.85%
Summary for Breeding (10 records)									
							<i>Pre-planning Sum</i>	46,812	100.00%
							<i>Post-planning Sum</i>	47,702	101.90%

Species/Guild Name: Dickcissel

Season: Breeding

Assoc Name	Condition Name	Condition			Large		Units	CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block					
Cropland	Wheat	1,083,727	0.5000	1.0000	1.00000	0.0072	3,901	25,524	15.28%	
		1,083,737	0.5000	1.0000	1.00000	0.0072	3,901	25,524	15.28%	
Cropland	Pasture	724,732	0.5000	1.0000	1.00000	0.0392	14,205	25,524	55.65%	
		626,816	0.5000	1.0000	1.00000	0.0392	12,286	25,524	48.14%	
CRP	Native	36,579	0.5000	1.0000	1.00000	0.0204	373	25,524	1.46%	
		515,792	0.5000	1.0000	1.00000	0.0204	5,261	25,524	20.61%	
CRP	Non-native	329,213	0.5000	1.0000	1.00000	0.0204	3,358	25,524	13.16%	
		0	0.5000	1.0000	1.00000	0.0204	0	25,524	0.00%	
Mixed Grass	Few shrubs/ low grass	669,125	0.5000	1.0000	1.00000	0.0050	1,673	25,524	6.55%	
		401,475	0.5000	1.0000	1.00000	0.0050	1,004	25,524	3.93%	
Mixed Grass	Few shrubs/high grass	669,125	0.5000	1.0000	1.00000	0.0050	1,673	25,524	6.55%	
		1,003,688	0.5000	1.0000	1.00000	0.0050	2,509	25,524	9.83%	
Riverine Systems	Wet meadow	104,974	0.5000	1.0000	1.00000	0.0065	341	25,524	1.34%	
		105,476	0.5000	1.0000	1.00000	0.0065	343	25,524	1.34%	
Summary for Breeding (8 records)										
							<i>Pre-planning Sum</i>	25,524	100.00%	
							<i>Post-planning Sum</i>	25,304	99.13%	

Species/Guild Name: Grasshopper Sparrow

Season: Breeding

Assoc Name	Condition Name	Condition			Large		Units	CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block					
Cropland	Alfalfa	169,779	1.0000	1.0000	1.00000	0.0583	9,898	1,877,834	0.53%	
		169,759	1.0000	1.0000	1.00000	0.0583	9,897	1,877,834	0.53%	
Cropland	Pasture	724,732	1.0000	1.0000	1.00000	0.1012	73,343	1,877,834	3.91%	
		626,816	1.0000	1.0000	1.00000	0.1012	63,434	1,877,834	3.38%	
Cropland	Wheat	1,083,727	1.0000	1.0000	1.00000	0.0364	39,448	1,877,834	2.10%	
		1,083,737	1.0000	1.0000	1.00000	0.0364	39,448	1,877,834	2.10%	
CRP	Native	36,579	1.0000	1.0000	1.00000	0.1134	4,148	1,877,834	0.22%	
		515,792	1.0000	1.0000	1.00000	0.1134	58,491	1,877,834	3.12%	
CRP	Non-native	329,213	1.0000	1.0000	1.00000	0.1134	37,333	1,877,834	1.99%	
		0	1.0000	1.0000	1.00000	0.1134	0	1,877,834	0.00%	
Mixed Grass	Few shrubs/high grass	669,125	1.0000	1.0000	1.00000	0.3569	238,811	1,877,834	12.72%	
		1,003,688	1.0000	1.0000	1.00000	0.3569	358,216	1,877,834	19.08%	
Mixed Grass	Few shrubs/ low grass	669,125	1.0000	1.0000	1.00000	0.0739	49,448	1,877,834	2.63%	
		401,475	1.0000	1.0000	1.00000	0.0739	29,669	1,877,834	1.58%	
Mixed Grass	Many shrubs/high grass	669,125	1.0000	1.0000	1.00000	0.3569	238,811	1,877,834	12.72%	
		1,003,688	1.0000	1.0000	1.00000	0.3569	358,216	1,877,834	19.08%	
Mixed Grass	Many shrubs/low grass	669,125	1.0000	1.0000	1.00000	0.0739	49,448	1,877,834	2.63%	
		267,650	1.0000	1.0000	1.00000	0.0739	19,779	1,877,834	1.05%	
Sand Sage	Low grass	133,124	1.0000	1.0000	1.00000	0.0277	3,688	1,877,834	0.20%	
		52,607	1.0000	1.0000	1.00000	0.0277	1,457	1,877,834	0.08%	
Sand Sage	High grass	7,007	1.0000	1.0000	1.00000	0.1342	940	1,877,834	0.05%	
		473,462	1.0000	1.0000	1.00000	0.1342	63,539	1,877,834	3.38%	
Shortgrass	Few shrubs/ low grass	244,888	1.0000	1.0000	1.00000	0.0739	18,097	1,877,834	0.96%	
		165,666	1.0000	1.0000	1.00000	0.0739	12,243	1,877,834	0.65%	
Shortgrass	Many shrubs/low grass	244,888	1.0000	1.0000	1.00000	0.0739	18,097	1,877,834	0.96%	
		53,735	1.0000	1.0000	1.00000	0.0739	3,971	1,877,834	0.21%	
Shortgrass	Many shrubs/high grass	244,888	1.0000	1.0000	1.00000	0.3569	87,401	1,877,834	4.65%	
		382,943	1.0000	1.0000	1.00000	0.3569	136,672	1,877,834	7.28%	
Shortgrass	Few shrubs/high grass	244,888	1.0000	1.0000	1.00000	0.3569	87,401	1,877,834	4.65%	
		382,943	1.0000	1.0000	1.00000	0.3569	136,672	1,877,834	7.28%	
Summary for Breeding (16 records)										
							<i>Pre-planning Sum</i>	956,312	50.92%	
							<i>Post-planning Sum</i>	1,291,704	68.78%	

Species/Guild Name: Greater Prairie-Chicken

Season: Resident

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Mixed Grass	Few shrubs/high grass	669,125	0.3000	1.0000	0.12100	0.0016	39	708	5.51%
		1,003,688	0.3000	1.0000	0.12100	0.0016	58	708	8.19%
Mixed Grass	Many shrubs/high grass	669,125	0.3000	1.0000	0.12100	0.0016	39	708	5.51%
		1,003,688	0.3000	1.0000	0.12100	0.0016	58	708	8.19%
Mixed Grass	Few shrubs/ low grass	669,125	0.3000	1.0000	0.12100	0.0016	39	708	5.51%
		401,475	0.3000	1.0000	0.12100	0.0016	23	708	3.25%
Mixed Grass	Many shrubs/low grass	669,125	1.0000	1.0000	0.12100	0.0016	130	708	18.36%
		267,650	1.0000	1.0000	0.12100	0.0016	52	708	7.34%
Sand Sage	Low grass	133,124	0.3000	1.0000	0.97900	0.0112	438	708	61.86%
		52,607	0.3000	1.0000	0.97900	0.0112	173	708	24.44%
Sand Sage	High grass	7,007	0.3000	1.0000	0.97900	0.0112	23	708	3.25%
		473,462	0.3000	1.0000	0.97900	0.0112	1,557	708	219.92%
Summary for Resident (6 records)					<i>Pre-planning Sum</i>		708		100.00%
					<i>Post-planning Sum</i>		1,921		271.33%

Species/Guild Name: Lark Bunting

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Alfalfa	169,779	1.0000	1.0000	1.00000	0.1263	21,443	2,252,342	0.95%
		169,759	1.0000	1.0000	1.00000	0.1263	21,440	2,252,342	0.95%
Cropland	Fallow	790,581	1.0000	1.0000	1.00000	0.1263	99,850	2,252,342	4.43%
		683,769	1.0000	1.0000	1.00000	0.1263	86,360	2,252,342	3.83%
Cropland	Pasture	724,732	1.0000	1.0000	1.00000	0.1684	122,045	2,252,342	5.42%
		626,816	1.0000	1.0000	1.00000	0.1684	105,556	2,252,342	4.69%
Cropland	Wheat	1,083,727	1.0000	1.0000	1.00000	0.1263	136,875	2,252,342	6.08%
		1,083,737	1.0000	1.0000	1.00000	0.1263	136,876	2,252,342	6.08%
CRP	Non-native	329,213	1.0000	1.0000	1.00000	0.2980	98,105	2,252,342	4.36%
		0	1.0000	1.0000	1.00000	0.2980	0	2,252,342	0.00%
CRP	Native	36,579	1.0000	1.0000	1.00000	0.2980	10,901	2,252,342	0.48%
		515,792	1.0000	1.0000	1.00000	0.2980	153,706	2,252,342	6.82%
Mixed Grass	Many shrubs/high grass	669,125	1.0000	1.0000	1.00000	0.1824	122,048	2,252,342	5.42%
		1,003,688	1.0000	1.0000	1.00000	0.1824	183,073	2,252,342	8.13%
Mixed Grass	Many shrubs/low grass	669,125	1.0000	1.0000	1.00000	0.1511	101,105	2,252,342	4.49%
		267,650	1.0000	1.0000	1.00000	0.1511	40,442	2,252,342	1.80%
Mixed Grass	Few shrubs/ low grass	669,125	1.0000	1.0000	1.00000	0.1643	109,937	2,252,342	4.88%
		401,475	1.0000	1.0000	1.00000	0.1643	65,962	2,252,342	2.93%
Mixed Grass	Few shrubs/high grass	669,125	1.0000	1.0000	1.00000	0.1983	132,688	2,252,342	5.89%
		1,003,688	1.0000	1.0000	1.00000	0.1983	199,031	2,252,342	8.84%
Sand Sage	Low grass	133,124	1.0000	1.0000	1.00000	0.0570	7,588	2,252,342	0.34%
		52,607	1.0000	1.0000	1.00000	0.0570	2,999	2,252,342	0.13%
Sand Sage	High grass	7,007	1.0000	1.0000	1.00000	0.0950	666	2,252,342	0.03%
		473,462	1.0000	1.0000	1.00000	0.0950	44,979	2,252,342	2.00%
Shortgrass	PD town	82,302	1.0000	1.0000	1.00000	0.1643	13,522	2,252,342	0.60%
		82,302	1.0000	1.0000	1.00000	0.1643	13,522	2,252,342	0.60%
Shortgrass	Many shrubs/low grass	244,888	1.0000	1.0000	1.00000	0.1511	37,003	2,252,342	1.64%
		53,735	1.0000	1.0000	1.00000	0.1511	8,119	2,252,342	0.36%
Shortgrass	Few shrubs/high grass	244,888	1.0000	1.0000	1.00000	0.1983	48,561	2,252,342	2.16%
		382,943	1.0000	1.0000	1.00000	0.1983	75,938	2,252,342	3.37%
Shortgrass	Few shrubs/ low grass	244,888	1.0000	1.0000	1.00000	0.1643	40,235	2,252,342	1.79%
		165,666	1.0000	1.0000	1.00000	0.1643	27,219	2,252,342	1.21%
Shortgrass	Many shrubs/high grass	244,888	1.0000	1.0000	1.00000	0.1824	44,668	2,252,342	1.98%
		382,943	1.0000	1.0000	1.00000	0.1824	69,849	2,252,342	3.10%
Summary for Breeding (18 records)					<i>Pre-planning Sum</i>		1,147,240		50.93%
					<i>Post-planning Sum</i>		1,235,071		54.83%

Species/Guild Name: Lark Sparrow

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Pasture	724,732	1.0000	1.0000	1.00000	0.0871	63,124	575,729	10.96%
		626,816	1.0000	1.0000	1.00000	0.0871	54,596	575,729	9.48%
Cropland	Alfalfa	169,779	1.0000	1.0000	1.00000	0.0871	14,788	575,729	2.57%
		169,759	1.0000	1.0000	1.00000	0.0871	14,786	575,729	2.57%

Juniper	NA	2,918	1.0000	1.0000	1.00000	0.1208	352	575,729	0.06%
		2,918	1.0000	1.0000	1.00000	0.1208	352	575,729	0.06%
Mixed Grass	Many shrubs/low grass	669,125	1.0000	1.0000	1.00000	0.1824	122,048	575,729	21.20%
		267,650	1.0000	1.0000	1.00000	0.1824	48,819	575,729	8.48%
Mixed Grass	Few shrubs/ low grass	669,125	1.0000	1.0000	1.00000	0.0916	61,292	575,729	10.65%
		401,475	1.0000	1.0000	1.00000	0.0916	36,775	575,729	6.39%
Mixed Grass	Few shrubs/high grass	669,125	1.0000	1.0000	1.00000	0.0916	61,292	575,729	10.65%
		1,003,688	1.0000	1.0000	1.00000	0.0916	91,938	575,729	15.97%
Mixed Grass	Many shrubs/high grass	669,125	1.0000	1.0000	1.00000	0.1526	102,109	575,729	17.74%
		1,003,688	1.0000	1.0000	1.00000	0.1526	153,163	575,729	26.60%
Other Wetlands	Moist-soil unit	32	1.0000	1.0000	1.00000	0.0340	1	575,729	0.00%
		32	1.0000	1.0000	1.00000	0.0340	1	575,729	0.00%
Riverine Systems	Riparian canopy - early successional w /understory	1,043	1.0000	1.0000	1.00000	0.1221	127	575,729	0.02%
		1,043	1.0000	1.0000	1.00000	0.1221	127	575,729	0.02%
Riverine Systems	Native riparian shrubland	6,298	1.0000	1.0000	1.00000	0.1221	769	575,729	0.13%
		6,800	1.0000	1.0000	1.00000	0.1221	830	575,729	0.14%
Riverine Systems	Wet meadow	104,974	1.0000	1.0000	1.00000	0.1221	12,817	575,729	2.23%
		105,476	1.0000	1.0000	1.00000	0.1221	12,879	575,729	2.24%
Riverine Systems	Riparian canopy - late successional w/ understory	700	1.0000	1.0000	1.00000	0.1221	85	575,729	0.01%
		700	1.0000	1.0000	1.00000	0.1221	85	575,729	0.01%
Riverine Systems	Riparian canopy - early successional w/o understor	1,043	1.0000	1.0000	1.00000	0.1221	127	575,729	0.02%
		1,043	1.0000	1.0000	1.00000	0.1221	127	575,729	0.02%
Riverine Systems	Riparian canopy - late successional w/o understory	700	1.0000	1.0000	1.00000	0.1221	85	575,729	0.01%
		700	1.0000	1.0000	1.00000	0.1221	85	575,729	0.01%
Sand Sage	High grass	7,007	1.0000	1.0000	1.00000	0.1221	855	575,729	0.15%
		473,462	1.0000	1.0000	1.00000	0.1221	57,810	575,729	10.04%
Sand Sage	Low grass	133,124	1.0000	1.0000	1.00000	0.1221	16,254	575,729	2.82%
		52,607	1.0000	1.0000	1.00000	0.1221	6,423	575,729	1.12%
Shortgrass	Few shrubs/ low grass	244,888	1.0000	1.0000	1.00000	0.0916	22,432	575,729	3.90%
		165,666	1.0000	1.0000	1.00000	0.0916	15,175	575,729	2.64%
Shortgrass	Many shrubs/high grass	244,888	1.0000	1.0000	1.00000	0.1526	37,370	575,729	6.49%
		382,943	1.0000	1.0000	1.00000	0.1526	58,437	575,729	10.15%
Shortgrass	Many shrubs/low grass	244,888	1.0000	1.0000	1.00000	0.1526	37,370	575,729	6.49%
		53,735	1.0000	1.0000	1.00000	0.1526	8,200	575,729	1.42%
Shortgrass	Few shrubs/high grass	244,888	1.0000	1.0000	1.00000	0.0916	22,432	575,729	3.90%
		382,943	1.0000	1.0000	1.00000	0.0916	35,078	575,729	6.09%
Summary for Breeding (21 records)					<i>Pre-planning Sum</i>		575,729		99.99%
					<i>Post-planning Sum</i>		595,686		103.46%

Species/Guild Name: Lewis's Woodpecker

Season: Breeding

Assoc Name	Condition Name	Condition	Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Ponderosa Pine	Few larger trees, grassy understory	38,588	1.0000	1.0000	1.0000	1.00000	0.0032	123	123	100.00%
		38,588	1.0000	1.0000	1.0000	1.00000	0.0032	123	123	100.00%
Summary for Breeding (1 record)					<i>Pre-planning Sum</i>		123		100.00%	
					<i>Post-planning Sum</i>		123		100.00%	

Species/Guild Name: Loggerhead Shrike

Season: Breeding

Assoc Name	Condition Name	Condition	Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Badlands/Cliffs/Outcrops		NA	45,197	1.0000	1.0000	1.00000	0.0048	217	18,778	1.16%
			45,197	1.0000	1.0000	1.00000	0.0048	217	18,778	1.16%
Cropland	Alfalfa		169,779	1.0000	1.0000	1.00000	0.0016	272	18,778	1.45%
			169,759	1.0000	1.0000	1.00000	0.0016	272	18,778	1.45%
Cropland	Pasture		724,732	1.0000	1.0000	1.00000	0.0016	1,160	18,778	6.18%
			626,816	1.0000	1.0000	1.00000	0.0016	1,003	18,778	5.34%
Juniper	NA		2,918	1.0000	1.0000	1.00000	0.0048	14	18,778	0.07%
			2,918	1.0000	1.0000	1.00000	0.0048	14	18,778	0.07%
Mixed Grass	Many shrubs/low grass		669,125	1.0000	1.0000	1.00000	0.0056	3,747	18,778	19.95%
			267,650	1.0000	1.0000	1.00000	0.0056	1,499	18,778	7.98%
Mixed Grass	Few shrubs/high grass		669,125	1.0000	1.0000	1.00000	0.0034	2,275	18,778	12.12%
			1,003,688	1.0000	1.0000	1.00000	0.0034	3,413	18,778	18.18%
Mixed Grass	Few shrubs/ low grass		669,125	1.0000	1.0000	1.00000	0.0034	2,275	18,778	12.12%
			401,475	1.0000	1.0000	1.00000	0.0034	1,365	18,778	7.27%
Mixed Grass	Many shrubs/high grass		669,125	1.0000	1.0000	1.00000	0.0056	3,747	18,778	19.95%

		1,003,688	1.0000	1.0000	1.00000	0.0056	5,621	18,778	29.93%
Riverine Systems	Native riparian shrubland	6,298	1.0000	1.0000	1.00000	0.0045	28	18,778	0.15%
		6,800	1.0000	1.0000	1.00000	0.0045	31	18,778	0.17%
Riverine Systems	Riparian canopy - early successional w/o understory	1,043	1.0000	1.0000	1.00000	0.0045	5	18,778	0.03%
		1,043	1.0000	1.0000	1.00000	0.0045	5	18,778	0.03%
Riverine Systems	Riparian canopy - late successional w/o understory	700	1.0000	1.0000	1.00000	0.0045	3	18,778	0.02%
		700	1.0000	1.0000	1.00000	0.0045	3	18,778	0.02%
Riverine Systems	Riparian canopy - late successional w/ understory	700	1.0000	1.0000	1.00000	0.0045	3	18,778	0.02%
		700	1.0000	1.0000	1.00000	0.0045	3	18,778	0.02%
Riverine Systems	Riparian canopy - early successional w/ understory	1,043	1.0000	1.0000	1.00000	0.0045	5	18,778	0.03%
		1,043	1.0000	1.0000	1.00000	0.0045	5	18,778	0.03%
Sand Sage	High grass	7,007	1.0000	1.0000	1.00000	0.0016	11	18,778	0.06%
		473,462	1.0000	1.0000	1.00000	0.0016	758	18,778	4.04%
Sand Sage	Low grass	133,124	1.0000	1.0000	1.00000	0.0016	213	18,778	1.13%
		52,607	1.0000	1.0000	1.00000	0.0016	84	18,778	0.45%
Shortgrass	Few shrubs/high grass	244,888	1.0000	1.0000	1.00000	0.0034	833	18,778	4.44%
		382,943	1.0000	1.0000	1.00000	0.0034	1,302	18,778	6.93%
Shortgrass	Many shrubs/high grass	244,888	1.0000	1.0000	1.00000	0.0056	1,371	18,778	7.30%
		382,943	1.0000	1.0000	1.00000	0.0056	2,144	18,778	11.42%
Shortgrass	PD town	82,302	1.0000	1.0000	1.00000	0.0048	395	18,778	2.10%
		82,302	1.0000	1.0000	1.00000	0.0048	395	18,778	2.10%
Shortgrass	Few shrubs/ low grass	244,888	1.0000	1.0000	1.00000	0.0034	833	18,778	4.44%
		165,666	1.0000	1.0000	1.00000	0.0034	563	18,778	3.00%
Shortgrass	Many shrubs/low grass	244,888	1.0000	1.0000	1.00000	0.0056	1,371	18,778	7.30%
		53,735	1.0000	1.0000	1.00000	0.0056	301	18,778	1.60%
Summary for Breeding (21 records)							18,778		99.99%
							18,998		101.16%

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	669,125	1.0000	0.7000	0.64100	0.0021	630	3,705	17.00%
		401,475	1.0000	1.0000	0.90000	0.0021	759	3,705	20.49%
Mixed Grass	Few shrubs/high grass	669,125	1.0000	0.7000	0.64100	0.0021	630	3,705	17.00%
		1,003,688	1.0000	1.0000	0.77500	0.0021	1,634	3,705	44.10%
Playa	Dry	14,194	1.0000	0.5000	0.00900	0.0021	0	3,705	0.00%
		14,194	1.0000	1.0000	0.01000	0.0021	0	3,705	0.00%
Riverine Systems	Wet meadow	104,974	1.0000	1.0000	0.30300	0.0081	258	3,705	6.96%
		105,476	1.0000	1.0000	0.30300	0.0081	259	3,705	6.99%
Shortgrass	Few shrubs/ low grass	244,888	1.0000	0.7000	0.43800	0.0021	158	3,705	4.26%
		165,666	1.0000	1.0000	0.90000	0.0021	313	3,705	8.45%
Shortgrass	PD town	82,302	1.0000	0.7000	0.43800	0.0021	53	3,705	1.43%
		82,302	1.0000	1.0000	0.80000	0.0021	138	3,705	3.72%
Shortgrass	Few shrubs/high grass	244,888	1.0000	0.7000	0.43800	0.0021	158	3,705	4.26%
		382,943	1.0000	1.0000	0.75000	0.0021	603	3,705	16.28%
Summary for Breeding (7 records)							1,887		50.93%
							3,706		100.02%

Species/Guild Name: McCown's Longspur

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Pasture	724,732	1.0000	0.5000	1.00000	0.0038	1,377	3,393	40.58%
		626,816	1.0000	0.5000	1.00000	0.0038	1,191	3,393	35.10%
Shortgrass	PD town	82,302	1.0000	0.5000	1.00000	0.0038	156	3,393	4.60%
		82,302	1.0000	0.5000	1.00000	0.0038	156	3,393	4.60%
Shortgrass	Few shrubs/high grass	244,888	1.0000	0.5000	1.00000	0.0047	575	3,393	16.95%
		382,943	1.0000	0.5000	1.00000	0.0047	900	3,393	26.53%
Shortgrass	Many shrubs/low grass	244,888	1.0000	0.5000	1.00000	0.0029	355	3,393	10.46%
		53,735	1.0000	0.5000	1.00000	0.0029	78	3,393	2.30%
Shortgrass	Few shrubs/ low grass	244,888	1.0000	0.5000	1.00000	0.0047	575	3,393	16.95%
		165,666	1.0000	0.7391	1.00000	0.0047	575	3,393	16.95%
Shortgrass	Many shrubs/high grass	244,888	1.0000	0.5000	1.00000	0.0029	355	3,393	10.46%
		382,943	1.0000	0.5000	1.00000	0.0029	555	3,393	16.36%
Summary for Breeding (6 records)							3,393		100.00%
							3,455		101.82%

Species/Guild Name: Mountain Plover

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Condition		Large		Units	CC	Goal	% of Goal
			Avail.	Suit.	Block					
Cropland	Wheat	1,083,727	1.0000	0.0800	1.00000	0.0135	1,170	3,974	29.44%	
		1,083,737	1.0000	0.0800	1.00000	0.0135	1,170	3,974	29.44%	
Cropland	Fallow	790,581	1.0000	0.0800	1.00000	0.0135	854	3,974	21.49%	
		683,769	1.0000	0.3118	1.00000	0.0135	2,878	3,974	72.42%	
Summary for Breeding (2 records)					<i>Pre-planning Sum</i>		2,024		50.93%	
					<i>Post-planning Sum</i>		4,048		101.86%	

Species/Guild Name: Northern Bobwhite

Season: Resident

Assoc Name	Condition Name	Condition Acres	Condition		Large		Units	CC	Goal	% of Goal
			Avail.	Suit.	Block					
Cropland	Corn	836,199	0.2000	1.0000	1.00000	0.0002	33	3,225	1.02%	
		723,223	0.2000	1.0000	1.00000	0.0002	29	3,225	0.90%	
Cropland	Soybeans	39,668	1.0000	1.0000	1.00000	0.0002	8	3,225	0.25%	
		34,309	1.0000	1.0000	1.00000	0.0002	7	3,225	0.22%	
Cropland	Sunflowers	46,808	1.0000	1.0000	1.00000	0.0002	9	3,225	0.28%	
		40,484	1.0000	1.0000	1.00000	0.0002	8	3,225	0.25%	
Cropland	Wheat	1,083,727	0.2000	1.0000	1.00000	0.0002	43	3,225	1.33%	
		1,083,737	0.2000	1.0000	1.00000	0.0002	43	3,225	1.33%	
Cropland	Sorghum	26,577	0.2000	1.0000	1.00000	0.0002	1	3,225	0.03%	
		22,987	0.2000	1.0000	1.00000	0.0002	1	3,225	0.03%	
CRP	Native	36,579	0.2000	1.0000	1.00000	0.0011	8	3,225	0.25%	
		515,792	0.2000	1.0000	1.00000	0.0011	114	3,225	3.52%	
CRP	Non-native	329,213	0.2000	1.0000	1.00000	0.0011	72	3,225	2.23%	
		0	0.2000	1.0000	1.00000	0.0011	0	3,225	0.00%	
Other Wetlands	Moist-soil unit	32	0.7000	1.0000	1.00000	0.0340	1	3,225	0.03%	
		32	0.7000	1.0000	1.00000	0.0340	1	3,225	0.03%	
Riverine Systems	Wet meadow	104,974	0.7000	1.0000	1.00000	0.0340	2,498	3,225	77.46%	
		105,476	0.7000	1.0000	1.00000	0.0340	2,510	3,225	77.83%	
Riverine Systems	Riparian canopy - late successional w/ understory	700	0.7000	1.0000	1.00000	0.0980	48	3,225	1.49%	
		700	0.7000	1.0000	1.00000	0.0980	48	3,225	1.49%	
Riverine Systems	Riparian canopy - early successional w/ understory	1,043	0.7000	1.0000	1.00000	0.0980	72	3,225	2.23%	
		1,043	0.7000	1.0000	1.00000	0.0980	72	3,225	2.23%	
Riverine Systems	Native riparian shrubland	6,298	0.7000	1.0000	1.00000	0.0980	432	3,225	13.40%	
		6,800	0.7000	1.0000	1.00000	0.0980	466	3,225	14.45%	
Summary for Resident (12 records)					<i>Pre-planning Sum</i>		3,225		100.00%	
					<i>Post-planning Sum</i>		3,298		102.26%	

Species/Guild Name: Pinyon Jay

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Condition		Large		Units	CC	Goal	% of Goal
			Avail.	Suit.	Block					
Juniper	NA	2,918	1.0000	1.0000	1.00000	0.0047	14	195	7.18%	
		2,918	1.0000	1.0000	1.00000	0.0047	14	195	7.18%	
Ponderosa Pine	Few larger trees, grassy	38,588	1.0000	1.0000	1.00000	0.0047	181	195	92.82%	
		38,588	1.0000	1.0000	1.00000	0.0047	181	195	92.82%	
Summary for Breeding (2 records)					<i>Pre-planning Sum</i>		195		100.00%	
					<i>Post-planning Sum</i>		195		100.00%	

Species/Guild Name: Red-headed Woodpecker

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Condition		Large		Units	CC	Goal	% of Goal
			Avail.	Suit.	Block					
Riverine Systems	Riparian canopy - late successional w/o understory	700	1.0000	1.0000	1.00000	0.1142	80	160	50.00%	
		700	1.0000	1.0000	1.00000	0.1142	80	160	50.00%	
Riverine Systems	Riparian canopy - late successional w/ understory	700	1.0000	1.0000	1.00000	0.1142	80	160	50.00%	
		700	1.0000	1.0000	1.00000	0.1142	80	160	50.00%	
Summary for Breeding (2 records)					<i>Pre-planning Sum</i>		160		100.00%	
					<i>Post-planning Sum</i>		160		100.00%	

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

Assoc Name	Condition Name	Condition		Large			Units	CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block	Block				
Cropland	Wheat	1,083,727	1.0000	1.0000	1.00000	0.0084	9,103	88,671	10.27%	
		1,083,737	1.0000	1.0000	1.00000	0.0084	9,103	88,671	10.27%	
Cropland	Pasture	724,732	1.0000	1.0000	1.00000	0.0084	6,088	88,671	6.87%	
		626,816	1.0000	1.0000	1.00000	0.0084	5,265	88,671	5.94%	
Cropland	Fallow	790,581	1.0000	1.0000	1.00000	0.0084	6,641	88,671	7.49%	
		683,769	1.0000	1.0000	1.00000	0.0084	5,744	88,671	6.48%	
Cropland	Alfalfa	169,779	1.0000	1.0000	1.00000	0.0300	5,093	88,671	5.74%	
		169,759	1.0000	1.0000	1.00000	0.0300	5,093	88,671	5.74%	
CRP	Non-native	329,213	1.0000	1.0000	1.00000	0.0240	7,901	88,671	8.91%	
		0	1.0000	1.0000	1.00000	0.0240	0	88,671	0.00%	
CRP	Native	36,579	1.0000	1.0000	1.00000	0.0240	878	88,671	0.99%	
		515,792	1.0000	1.0000	1.00000	0.0240	12,379	88,671	13.96%	
Mixed Grass	Few shrubs/ low grass	669,125	1.0000	1.0000	1.00000	0.0019	1,271	88,671	1.43%	
		401,475	1.0000	1.0000	1.00000	0.0019	763	88,671	0.86%	
Mixed Grass	Few shrubs/high grass	669,125	1.0000	1.0000	1.00000	0.0019	1,271	88,671	1.43%	
		1,003,688	1.0000	1.0000	1.00000	0.0019	1,907	88,671	2.15%	
Other Wetlands	Moist-soil unit	32	1.0000	1.0000	1.00000	0.1101	4	88,671	0.00%	
		32	1.0000	1.0000	1.00000	0.1101	4	88,671	0.00%	
Playa	Dry	14,194	1.0000	1.0000	1.00000	0.1101	1,563	88,671	1.76%	
		14,194	1.0000	1.0000	1.00000	0.1101	1,563	88,671	1.76%	
Riverine Systems	Wet meadow	104,974	1.0000	1.0000	1.00000	0.1101	11,558	88,671	13.03%	
		105,476	1.0000	1.0000	1.00000	0.1101	11,613	88,671	13.10%	
Riverine Systems	Native riparian shrubland	6,298	1.0000	1.0000	1.00000	0.0097	61	88,671	0.07%	
		6,800	1.0000	1.0000	1.00000	0.0097	66	88,671	0.07%	
Shortgrass	Few shrubs/ low grass	244,888	1.0000	1.0000	1.00000	0.0019	465	88,671	0.52%	
		165,666	1.0000	1.0000	1.00000	0.0019	315	88,671	0.36%	
Shortgrass	Few shrubs/high grass	244,888	1.0000	1.0000	1.00000	0.0019	465	88,671	0.52%	
		382,943	1.0000	1.0000	1.00000	0.0019	728	88,671	0.82%	
Summary for Resident (15 records)				Pre-planning Sum			52,362		59.05%	
				Post-planning Sum			54,543		61.51%	

Species/Guild Name: Sharp-tailed Grouse**Season: Resident**

Assoc Name	Condition Name	Condition		Large			Units	CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block	Block				
CRP	Non-native	329,213	1.0000	1.0000	1.00000	0.0016	527	37,040	1.42%	
		0	1.0000	1.0000	1.00000	0.0016	0	37,040	0.00%	
CRP	Native	36,579	1.0000	1.0000	1.00000	0.0016	59	37,040	0.16%	
		515,792	1.0000	1.0000	1.00000	0.0016	825	37,040	2.23%	
Mixed Grass	Many shrubs/low grass	669,125	1.0000	1.0000	1.00000	0.0016	1,071	37,040	2.89%	
		267,650	1.0000	1.0000	1.00000	0.0016	428	37,040	1.16%	
Mixed Grass	Few shrubs/high grass	669,125	1.0000	1.0000	1.00000	0.0243	16,260	37,040	43.90%	
		1,003,688	1.0000	1.0000	1.00000	0.0243	24,390	37,040	65.85%	
Mixed Grass	Few shrubs/ low grass	669,125	1.0000	1.0000	1.00000	0.0016	1,071	37,040	2.89%	
		401,475	1.0000	1.0000	1.00000	0.0016	642	37,040	1.73%	
Mixed Grass	Many shrubs/high grass	669,125	1.0000	1.0000	1.00000	0.0243	16,260	37,040	43.90%	
		1,003,688	1.0000	1.0000	1.00000	0.0243	24,390	37,040	65.85%	
Sand Sage	Low grass	133,124	1.0000	1.0000	1.00000	0.0016	213	37,040	0.58%	
		52,607	1.0000	1.0000	1.00000	0.0016	84	37,040	0.23%	
Sand Sage	High grass	7,007	1.0000	1.0000	1.00000	0.0016	11	37,040	0.03%	
		473,462	1.0000	1.0000	1.00000	0.0016	758	37,040	2.05%	
Shortgrass	Few shrubs/ low grass	244,888	1.0000	1.0000	1.00000	0.0016	392	37,040	1.06%	
		165,666	1.0000	1.0000	1.00000	0.0016	265	37,040	0.72%	
Shortgrass	Few shrubs/high grass	244,888	1.0000	1.0000	1.00000	0.0016	392	37,040	1.06%	
		382,943	1.0000	1.0000	1.00000	0.0016	613	37,040	1.65%	
Shortgrass	Many shrubs/high grass	244,888	1.0000	1.0000	1.00000	0.0016	392	37,040	1.06%	
		382,943	1.0000	1.0000	1.00000	0.0016	613	37,040	1.65%	
Shortgrass	Many shrubs/low grass	244,888	1.0000	1.0000	1.00000	0.0016	392	37,040	1.06%	
		53,735	1.0000	1.0000	1.00000	0.0016	86	37,040	0.23%	
Summary for Resident (12 records)				Pre-planning Sum			37,040		100.00%	
				Post-planning Sum			53,095		143.34%	

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

Assoc Name	Condition Name	Condition Acres	Condition		Large		Units	CC	Goal	% of Goal
			Avail.	Suit.	Block	Block				
Mixed Grass	Many shrubs/high grass	669,125	1.0000	0.5000	1.00000	0.0005	167	787	21.22%	
		1,003,688	1.0000	0.7328	1.00000	0.0005	368	787	46.76%	
Mixed Grass	Few shrubs/high grass	669,125	1.0000	0.5000	1.00000	0.0005	167	787	21.22%	
		1,003,688	1.0000	0.7328	1.00000	0.0005	368	787	46.76%	
Other Wetlands	Emergent marsh	16,951	1.0000	1.0000	1.00000	0.0005	8	787	1.02%	
		16,951	1.0000	1.0000	1.00000	0.0005	8	787	1.02%	
Other Wetlands	Moist-soil unit	32	1.0000	1.0000	1.00000	0.0005	0	787	0.00%	
		32	1.0000	1.0000	1.00000	0.0005	0	787	0.00%	
Playa	Dry	14,194	1.0000	1.0000	1.00000	0.0005	7	787	0.89%	
		14,194	1.0000	1.0000	1.00000	0.0005	7	787	0.89%	
Riverine Systems	Wet meadow	104,974	1.0000	1.0000	1.00000	0.0005	52	787	6.61%	
		105,476	1.0000	1.0000	1.00000	0.0005	53	787	6.73%	
Summary for Breeding (6 records)					Pre-planning Sum		401		50.95%	
					Post-planning Sum		804		102.16%	

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

Assoc Name	Condition Name	Condition Acres	Condition		Large		Units	CC	Goal	% of Goal
			Avail.	Suit.	Block	Block				
Cropland	Wheat	1,083,727	1.0000	1.0000	1.00000	0.0013	1,409	11,094	12.70%	
		1,083,737	1.0000	1.0000	1.00000	0.0013	1,409	11,094	12.70%	
Cropland	Fallow	790,581	1.0000	1.0000	1.00000	0.0016	1,265	11,094	11.40%	
		683,769	1.0000	1.0000	1.00000	0.0016	1,094	11,094	9.86%	
Cropland	Pasture	724,732	1.0000	1.0000	1.00000	0.0016	1,160	11,094	10.46%	
		626,816	1.0000	1.0000	1.00000	0.0016	1,003	11,094	9.04%	
Cropland	Alfalfa	169,779	1.0000	1.0000	1.00000	0.0016	272	11,094	2.45%	
		169,759	1.0000	1.0000	1.00000	0.0016	272	11,094	2.45%	
Juniper	NA	2,918	1.0000	1.0000	1.00000	0.0018	5	11,094	0.05%	
		2,918	1.0000	1.0000	1.00000	0.0018	5	11,094	0.05%	
Mixed Grass	Few shrubs/high grass	669,125	1.0000	1.0000	1.00000	0.0018	1,204	11,094	10.85%	
		1,003,688	1.0000	1.0000	1.00000	0.0018	1,807	11,094	16.29%	
Mixed Grass	Few shrubs/ low grass	669,125	1.0000	1.0000	1.00000	0.0018	1,204	11,094	10.85%	
		401,475	1.0000	1.0000	1.00000	0.0018	723	11,094	6.52%	
Mixed Grass	Many shrubs/low grass	669,125	1.0000	1.0000	1.00000	0.0018	1,204	11,094	10.85%	
		267,650	1.0000	1.0000	1.00000	0.0018	482	11,094	4.34%	
Mixed Grass	Many shrubs/high grass	669,125	1.0000	1.0000	1.00000	0.0018	1,204	11,094	10.85%	
		1,003,688	1.0000	1.0000	1.00000	0.0018	1,807	11,094	16.29%	
Riverine Systems	Riparian canopy - late successional w/ understory	700	1.0000	1.0000	1.00000	0.0018	1	11,094	0.01%	
		700	1.0000	1.0000	1.00000	0.0018	1	11,094	0.01%	
Riverine Systems	Riparian canopy - late successional w/o understory	700	1.0000	1.0000	1.00000	0.0018	1	11,094	0.01%	
		700	1.0000	1.0000	1.00000	0.0018	1	11,094	0.01%	
Sand Sage	High grass	7,007	1.0000	1.0000	1.00000	0.0018	13	11,094	0.12%	
		473,462	1.0000	1.0000	1.00000	0.0018	852	11,094	7.68%	
Sand Sage	Low grass	133,124	1.0000	1.0000	1.00000	0.0018	240	11,094	2.16%	
		52,607	1.0000	1.0000	1.00000	0.0018	95	11,094	0.86%	
Shortgrass	Many shrubs/low grass	244,888	1.0000	1.0000	1.00000	0.0018	441	11,094	3.98%	
		53,735	1.0000	1.0000	1.00000	0.0018	97	11,094	0.87%	
Shortgrass	Few shrubs/high grass	244,888	1.0000	1.0000	1.00000	0.0018	441	11,094	3.98%	
		382,943	1.0000	1.0000	1.00000	0.0018	689	11,094	6.21%	
Shortgrass	PD town	82,302	1.0000	1.0000	1.00000	0.0018	148	11,094	1.33%	
		82,302	1.0000	1.0000	1.00000	0.0018	148	11,094	1.33%	
Shortgrass	Few shrubs/ low grass	244,888	1.0000	1.0000	1.00000	0.0018	441	11,094	3.98%	
		165,666	1.0000	1.0000	1.00000	0.0018	298	11,094	2.69%	
Shortgrass	Many shrubs/high grass	244,888	1.0000	1.0000	1.00000	0.0018	441	11,094	3.98%	
		382,943	1.0000	1.0000	1.00000	0.0018	689	11,094	6.21%	
Summary for Breeding (19 records)					Pre-planning Sum		11,094		99.99%	
					Post-planning Sum		11,472		103.40%	

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

Assoc Name	Condition Name	Condition Acres	Condition		Large		Units	CC	Goal	% of Goal
			Avail.	Suit.	Block	Block				
Cropland	Alfalfa	169,779	1.0000	1.0000	1.00000	0.0040	679	17,928	3.79%	
		169,759	1.0000	1.0000	1.00000	0.0040	679	17,928	3.79%	

Cropland	Pasture	724,732	1.0000	1.0000	1.00000	0.0040	2,899	17,928	16.17%
		626,816	1.0000	1.0000	1.00000	0.0040	2,507	17,928	13.98%
Cropland	Wheat	1,083,727	1.0000	1.0000	1.00000	0.0040	4,335	17,928	24.18%
		1,083,737	1.0000	1.0000	1.00000	0.0040	4,335	17,928	24.18%
Mixed Grass	Few shrubs/high grass	669,125	1.0000	1.0000	1.00000	0.0017	1,138	17,928	6.35%
		1,003,688	1.0000	1.0000	1.00000	0.0017	1,706	17,928	9.52%
Mixed Grass	Many shrubs/high grass	669,125	1.0000	1.0000	1.00000	0.0017	1,138	17,928	6.35%
		1,003,688	1.0000	1.0000	1.00000	0.0017	1,706	17,928	9.52%
Other Wetlands	Moist-soil unit	32	1.0000	1.0000	1.00000	0.0737	2	17,928	0.01%
		32	1.0000	1.0000	1.00000	0.0737	2	17,928	0.01%
Riverine Systems	Wet meadow	104,974	1.0000	1.0000	1.00000	0.0737	7,737	17,928	43.16%
		105,476	1.0000	1.0000	1.00000	0.0737	7,774	17,928	43.36%
Summary for Breeding (8 records)							<i>Pre-planning Sum</i>	17,928	100.00%
							<i>Post-planning Sum</i>	18,709	104.35%

Species/Guild Name: Western Kingbird

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Badlands/Cliffs/Outcrops		45,197	1.0000	1.0000	1.00000	0.0337	1,523	173,565	0.88%
		45,197	1.0000	1.0000	1.00000	0.0337	1,523	173,565	0.88%
Cropland	Alfalfa	169,779	1.0000	1.0000	1.00000	0.0368	6,248	173,565	3.60%
		169,759	1.0000	1.0000	1.00000	0.0368	6,247	173,565	3.60%
Cropland	Wheat	1,083,727	1.0000	1.0000	1.00000	0.0368	39,881	173,565	22.98%
		1,083,737	1.0000	1.0000	1.00000	0.0368	39,882	173,565	22.98%
Mixed Grass	Few shrubs/high grass	669,125	1.0000	1.0000	1.00000	0.0363	24,289	173,565	13.99%
		1,003,688	1.0000	1.0000	1.00000	0.0363	36,434	173,565	20.99%
Mixed Grass	Many shrubs/high grass	669,125	1.0000	1.0000	1.00000	0.0259	17,330	173,565	9.98%
		1,003,688	1.0000	1.0000	1.00000	0.0259	25,996	173,565	14.98%
Mixed Grass	Many shrubs/low grass	669,125	1.0000	1.0000	1.00000	0.0259	17,330	173,565	9.98%
		267,650	1.0000	1.0000	1.00000	0.0259	6,932	173,565	3.99%
Mixed Grass	Few shrubs/ low grass	669,125	1.0000	1.0000	1.00000	0.0363	24,289	173,565	13.99%
		401,475	1.0000	1.0000	1.00000	0.0363	14,574	173,565	8.40%
Other	small roads	105,470	1.0000	1.0000	1.00000	0.0368	3,881	173,565	2.24%
		105,470	1.0000	1.0000	1.00000	0.0368	3,881	173,565	2.24%
Other	Urban/Suburban	17,983	1.0000	1.0000	1.00000	0.2575	4,631	173,565	2.67%
		17,983	1.0000	1.0000	1.00000	0.2575	4,631	173,565	2.67%
Riverine Systems	Riparian canopy - early successional w /understory	1,043	1.0000	1.0000	1.00000	0.0337	35	173,565	0.02%
		1,043	1.0000	1.0000	1.00000	0.0337	35	173,565	0.02%
Riverine Systems	Riparian canopy - early successional w/o understor	1,043	1.0000	1.0000	1.00000	0.0337	35	173,565	0.02%
		1,043	1.0000	1.0000	1.00000	0.0337	35	173,565	0.02%
Sand Sage	Low grass	133,124	1.0000	1.0000	1.00000	0.0259	3,448	173,565	1.99%
		52,607	1.0000	1.0000	1.00000	0.0259	1,363	173,565	0.79%
Sand Sage	High grass	7,007	1.0000	1.0000	1.00000	0.0259	181	173,565	0.10%
		473,462	1.0000	1.0000	1.00000	0.0259	12,263	173,565	7.07%
Shortgrass	Few shrubs/ low grass	244,888	1.0000	1.0000	1.00000	0.0363	8,889	173,565	5.12%
		165,666	1.0000	1.0000	1.00000	0.0363	6,014	173,565	3.46%
Shortgrass	Few shrubs/high grass	244,888	1.0000	1.0000	1.00000	0.0363	8,889	173,565	5.12%
		382,943	1.0000	1.0000	1.00000	0.0363	13,901	173,565	8.01%
Shortgrass	Many shrubs/high grass	244,888	1.0000	1.0000	1.00000	0.0259	6,343	173,565	3.65%
		382,943	1.0000	1.0000	1.00000	0.0259	9,918	173,565	5.71%
Shortgrass	Many shrubs/low grass	244,888	1.0000	1.0000	1.00000	0.0259	6,343	173,565	3.65%
		53,735	1.0000	1.0000	1.00000	0.0259	1,392	173,565	0.80%
Summary for Breeding (18 records)							<i>Pre-planning Sum</i>	173,565	99.99%
							<i>Post-planning Sum</i>	185,021	106.59%

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%).

<u>Association Name</u>	<u>Condition Name</u>	<u>Pre- Condition Acres</u>	<u>Post Condition Acres</u>	<u>Net Change</u>
Badlands/Cliffs/Outcrops	NA	45,197	45,197	0
Cropland	Sorghum	26,577	22,987	-3,590
Cropland	Sunflowers	46,808	40,484	-6,324
Cropland	Pasture	724,732	626,816	-97,916
Cropland	Fallow	790,581	683,769	-106,812
Cropland	Alfalfa	169,779	169,759	-20
Cropland	Other	247,924	214,428	-33,496
Cropland	Soybeans	39,668	34,309	-5,359
Cropland	Wheat	1,083,727	1,083,737	10
Cropland	Sod farm	793	686	-107
Cropland	Corn	836,199	723,223	-112,976
CRP	Native	36,579	515,792	479,213
CRP	Non-native	329,213	0	-329,213
Forest/Woodland (upland)	Shelterbelts	8,881	8,881	0
Juniper	NA	2,918	2,918	0
Mixed Grass	Many shrubs/high grass	669,125	1,003,688	334,563
Mixed Grass	Few shrubs/high grass	669,125	1,003,688	334,563
Mixed Grass	Many shrubs/low grass	669,125	267,650	-401,475
Mixed Grass	Few shrubs/ low grass	669,125	401,475	-267,650
Other	Urban/Suburban	17,983	17,983	0
Other	4-lane roads	4,266	4,266	0
Other	small roads	105,470	105,470	0
Other Wetlands	Emergent marsh	16,951	16,951	0
Other Wetlands	Moist-soil unit	32	32	0
Pinyon/Juniper	NA	324	324	0
Playa	Wet	1,503	1,503	0
Playa	Dry	14,194	14,194	0
Playa	Wet pit only	1,002	1,002	0
Ponderosa Pine	Many small trees, no	90,338	90,338	0
Ponderosa Pine	Few larger trees, grassy	38,588	38,588	0
Reservoirs Lakes Ponds	Stock pond	7,875	7,875	0
Reservoirs Lakes Ponds	Reservoir	25,990	25,990	0
Reservoirs Lakes Ponds	Lagoon	395	395	0
Reservoirs Lakes Ponds	Freshwater lake	395	395	0
Reservoirs Lakes Ponds	Pit	1,287	1,287	0
Riverine Systems	Native riparian shrubland	6,298	6,298	0
Riverine Systems	Floodplain marsh	2,364	2,364	0
Riverine Systems	Riparian canopy - late	700	700	0
Riverine Systems	Riparian canopy - early	1,043	1,043	0
Riverine Systems	Exotic riparian shrubland	489	0	-489
Riverine Systems	Riparian canopy - early	1,043	1,043	0
Riverine Systems	Wet meadow	104,974	105,476	502
Riverine Systems	Unvegetated sandbar	2,879	2,879	0
Riverine Systems	River channel	11,475	11,475	0
Riverine Systems	Warmwater slough	66	66	0
Riverine Systems	Riparian canopy - late	700	700	0
Sand Sage	High grass	7,007	473,462	466,455
Sand Sage	Low grass	133,124	52,607	-80,517
Sandhills Wetlands	NA	3,459	3,459	0
Shortgrass	Many shrubs/low grass	244,888	53,735	-191,153
Shortgrass	Few shrubs/ low grass	244,888	165,666	-79,222
Shortgrass	Few shrubs/high grass	244,888	382,943	138,055
Shortgrass	PD town	82,302	82,302	0
Shortgrass	Many shrubs/high grass	244,888	382,943	138,055
	Sum	8,890,827	8,744,558	

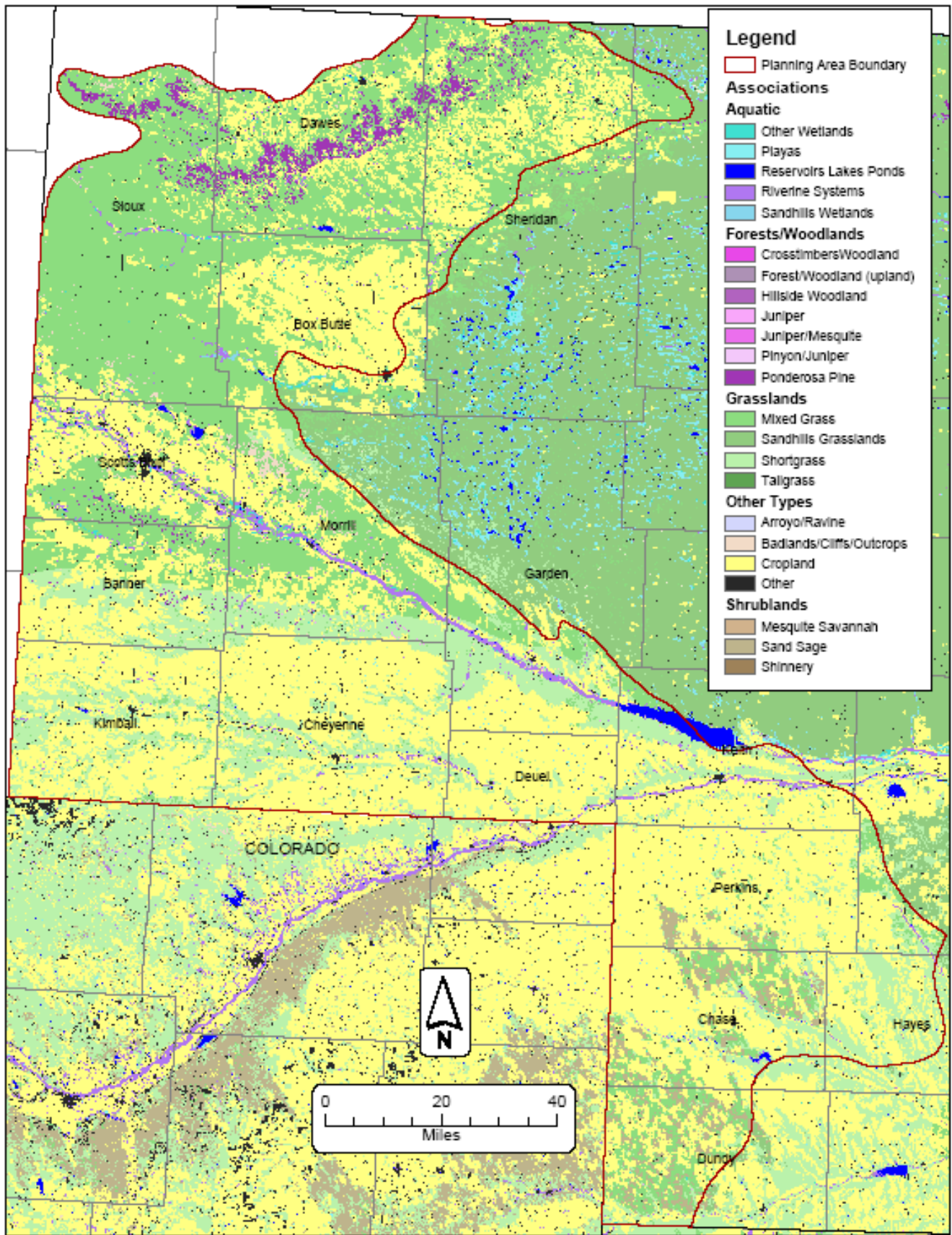


Figure 1. Bird habitat associations for the Shortgrass Prairie Bird Conservation Region of Nebraska.