

PLAYA LAKES JOINT VENTURE

***Area Implementation Plan
for the
Central Mixed-grass Prairie
Bird Conservation Region (19)
of Oklahoma***



PLAYA LAKES
JOINT VENTURE

***Date* 2008
(draft April 18, 2008)**

APPROVALS

By adopting this plan, PLJV Oklahoma partners signify:

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

PLJV Management Board Chairperson

_____ Date _____

State Management Board Representative

_____ Date _____

State Monitoring, Evaluation, and Research Team Representative

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EXECUTIVE SUMMARY

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

The following represent the major habitat conservation actions (i.e., conversion, restoration, management) recommended. Priority bird species that are expected to benefit as a result of the actions are shown in parentheses.

- 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.
- Restore 8,757 acres of wetlands (ideally from converted cropland) and manage with moist-soil techniques (**waterfowl**, shorebirds)
- Focus CRP placement so that 184,399 acres of shinnery contribute to large blocks of habitat (**Lesser Prairie-Chicken**)
- Focus CRP placement so that 1,154,656 acres of sand sage contribute to large blocks of habitat (**Lesser Prairie-Chicken**)
- Add 300,000 acres of CRP within or near (**Lesser Prairie-Chicken**) range
- Convert 559,291 acres of CRP native mixed grass species (**Lesser Prairie-Chicken**)
- Increase native riparian shrubland by 53,095 acres (**Bell’s Vireo**)
- Increase late successional riparian forest by 110,379 acres (**Mississippi Kite**)
- Convert 398,236 acres of mesquite shrubland to mesquite savannah (grassland birds)
- Increase hillside woodland by 7,717 acres (**Black-capped Vireo**)
- Convert 434,000 acres of eastern redcedar to mixed grass prairie (grassland birds)
- Manage 3,945,675 acres of mixed grass prairie for many shrubs (**Loggerhead Shrike, Lark Sparrow**)
- Manage 42,897 acres of shortgrass prairie within the panhandle portion of BCR 19 for relatively taller grass height (**Lark Bunting**)

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. Adoption of these general habitat conservation recommendations is intended to help PLJV partners focus bird habitat conservation and management activities where they are most needed in Oklahoma’s Bird Conservation Region 19.

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

Plan Format

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

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

General Planning Approach

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

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

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

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

Habitat recommendations herein are only as good as the model inputs used to develop them. 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. Priority waterfowl species can best meet energetic and nutritional needs through a combination of native foods provided in wetland habitats and use of

cropland. Agricultural habitats are especially important when wetlands are unavailable due to drought, ice cover, etc.

Priority waterfowl species for this Area include Northern Pintail, Mallard, and the Tall Grass Prairie Population (TGP) of Canada geese 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 207,000 ducks and 42,000 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. – Nov.), winter (Dec. – mid-Feb.), and spring (mid-Feb – Apr.) Use-day targets are approximately 57 million for fall, 25 million for winter, and 91 million for spring.

The primary wetland foraging habitats for ducks are reservoirs and lakes, managed moist-soil units, stock ponds, palustrine emergent type wetlands associated with rivers and streams, including beaver pond type wetlands and seasonal depressional wetlands (Table 1). Agricultural crop fields are also especially important foraging habitat for some ducks, including Mallards, Northern Pintails, American Wigeon, and American Green-winged Teal. Agricultural habitats such as winter wheat and small grain fields like sorghum and corn provide the primary foraging habitat for geese. Habitat assessments and bioenergetics modeling suggested that this Area can support the foraging use-day objectives for fall and winter but not spring. For spring, we estimated the Area can support about 64% of the use-day objective (approx. 33 million use-day deficit).

This Area needs additional wetland foraging habitat, especially during spring, to support its waterfowl abundance targets. To accomplish this, we recommend restoring 8,757 acres of wetlands and managing them using moist-soil techniques. This strategy is proven to sharply increase the foraging carrying capacity of wetlands for waterfowl compared to unmanaged wetlands. Management should ensure that this entire acreage is flooded in spring and available to waterfowl. This will provide approximately 37 million additional waterfowl use-days and will bring the Area to desired carrying capacity for waterfowl.

Stock ponds currently provide substantial duck foraging habitat in the Area. Although the quantity and quality of this habitat are believed to be increasing or stable, fencing stock ponds can reduce the impact of livestock on water quality of ponds, and trampling and grazing of emergent plants important to ducks for food and cover.

Shorebirds – Wetland Guild

Migratory shorebirds use this Area 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 Snowy Plover, Piping Plover, American Avocet, Long-billed Curlew, Hudsonian Godwit, Semipalmated Sandpiper, Least Sandpiper, White-rumped Sandpiper, Baird's Sandpiper, Pectoral Sandpiper, Stilt Sandpiper, and Long-billed Dowitcher. 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 6.1 million use-days, which includes abundance increases recommended in the U. S. Shorebird Conservation Plan. Reservoirs, ponds, saline wetlands, moist-soil units, and river channels are the most important shorebird foraging habitats in the Area (Table 1). Habitat assessments and bioenergetics modeling suggested that existing wetland habitats in this Area can support only about 60% of this abundance target (approx. 2.5 million use-day deficit).

This Area needs additional wetland foraging habitat to support its migrant shorebird objectives. To accomplish this, we recommend restoring 3,915 acres of wetlands and managing them using moist-soil techniques. This strategy is proven to sharply increase the invertebrate production of wetlands compared to unmanaged sites. Mowing and/or grazing should be used (prior to flooding with very shallow water) to reduce vegetative cover and provide optimum habitat suitability. This will provide approximately 3.2 million additional shorebird use-days and will bring the Area to desired carrying capacity. This acreage could be managed in a combined program for shorebirds and waterfowl (see Waterfowl section).

Others actions recommended to benefit shorebirds include maintaining the quantity and quality of saline wetlands, and restoring or enhancing river channel flows by controlling exotic brush, minimizing or restoring water diversions, and protecting or improving ground water levels.

Shorebirds - Upland Guild

Two priority shorebird species, American Golden-Plover and Buff-breasted Sandpiper, forage in wetlands during migration, but also forage extensively in upland habitats (short-stature grasslands and cropland). These species are relatively uncommon which is reflected in the relatively low abundance target of approx. 27,000 use-days. Still, this Area ranks second in importance within the PLJV (only BCR19-KS has higher abundance targets). Important upland habitats for these species include croplands (alfalfa, pasture, and sod farms), CRP, and short- and mixed-grass prairie. Although the proportion of these habitats estimated to be suitable for these species was low, there are large acreages within this Area. Carrying capacity modeling

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

Waterbirds

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

The Area is important to migrating and wintering Sandhill Cranes, and a relatively large proportion of the Whooping Crane population uses the Area during migration (e.g., 30+ birds at Salt Plains National Wildlife Refuge). Abundance targets for cranes were developed by stepping down objectives from existing plans (*Central Flyway Plan* for Sandhill Cranes and the *International Recovery Plan* for Whooping Cranes). Sandhill Crane abundance targets are approximately 1.1 million use-days in fall, 1.4 million use-days during winter, and 452,000 use-days in spring. The Whooping Crane abundance target is 2,739 use-days in both fall and spring.

In this Area, the most important wetland types and sites for crane roosting are river channels, moist-soil units, and Salt Plains NWR. Cranes rely primarily on cropland for foraging to meet nutritional and energetic demands. However, moist-soil units and saline wetlands (estimated acreage approximately 7,000 and 11,000, respectively) also provide additional foraging sites.

Habitat assessments and bioenergetics modeling suggested that this Area could support the use-day objectives for cranes during all seasons (Table 1). However, the limited quantity, quality and distribution of wetlands required by cranes, especially for critical roosting habitat, calls for restoration and protection efforts. Key stretches of river channels, especially the Red River and its tributaries in Oklahoma should be restored by controlling hydrophytes (exotic and native) and increasing in-stream flows (e.g., through water use and management policies) where possible. For other wetlands, restoration and protection recommendations described above for waterfowl and shorebirds also apply for cranes.

For other priority waterbird species (grebes, pelicans, gulls, and terns), we lacked any meaningful information to relate abundance and/or vital rates to habitat conditions. Therefore, we defer developing abundance targets and habitat objectives for these species until such information becomes available. However, we note that conservation recommendations were made for wetland habitats used by these species during the PLJV planning process for nonbreeding waterfowl, shorebirds, and cranes. Until more explicit planning can be conducted, we assume that fulfilling habitat needs for waterfowl, shorebirds, and cranes will also fulfill habitat needs for other nonbreeding waterbirds.

BREEDING BIRDS

In tackling the needs of priority landbirds for this Area, the PLJV assumed that providing the habitat needs for breeding landbirds would also provide the habitat needs for migrant and wintering landbirds in the Area. Secondly, we assumed that appropriate breeding habitat was the primary limiting factor for breeding grassland birds. The planning approach assigned a density to each condition of every habitat that a priority species occupied, developed an 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. 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 100% of the current estimated numbers, a goal of doubling was utilized. For this Area, the species with trends greater than -2.3% per year were Mississippi Kite, Swainson's Hawk, Short-eared Owl, Western Kingbird, Bell's Vireo, Loggerhead Shrike, Cassin's Sparrow, Lark Bunting, Lark Sparrow and Bullock's Oriole. The abundance goal for Lesser Prairie-Chicken was determined by the Oklahoma representative to the Lesser Prairie-Chicken Interstate Working Group (R. Horton, *pers. comm.*). The abundance goal for the Black-capped Vireo, which has no BBS trend for the BCR, has been adapted from the Recovery Plan.

Grassland Guild

Grasslands comprise the largest portion of the remaining native habitat acreage in this Area. Grasslands here support priority species such as Swainson's Hawk, Western Kingbird, Loggerhead Shrike, Cassin's, Lark and Grasshopper Sparrow, Lark Bunting and Eastern Meadowlark. 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. The species that drive this Area's mixed grass prairie needs are those that reach their highest densities with higher shrub cover within grassland, such as Loggerhead Shrike and Lark Sparrow. However, this comes at the cost of species which reach higher densities in grasslands with between 1-3% shrubs. Should state partners decide that managing grasslands for fewer shrubs is preferable, the recommendations in this plan will change. Note that the recommendations for increasing the percentage of shrubs within mixed grass prairie in particular, will also decrease the numbers of Upland Sandpipers which have a goal of maintaining the current estimated carrying capacity.

Threats to grassland habitats overall include fire suppression which permits the encroachment of eastern redcedar. This has had a deleterious effect on those species which require grasslands

with little tall woody structure. Other threats include conversion to agriculture, although many agricultural fields are utilized by some priority birds to some extent. The extent of agricultural conversion on the landscape may be a factor, as Lesser Prairie-Chicken thrived with small-scale agriculture adjacent to nearby grass/shrub prairie, but in more recent decades with large-scale conversion to agriculture it has declined. Likewise, the extent to which unutilized agricultural lands are kept or converted back to native grasses will have an effect on some species, such as Ring-necked Pheasant, Northern Bobwhite or Dickcissel, though these effects have not been well quantified.

A number of grassland priority species are not modeled to meet goal in this Area. These are Swainson's Hawk, Western Kingbird, Scissor-tailed Flycatcher, Loggerhead Shrike, Lark Sparrow and Eastern Meadowlark. Regardless of not meeting carrying capacity goals, we recommend implementing toward all the acreage goals contained in this plan while partners determine what further habitat work is possible and the models and assumptions are further evaluated.

The advent of CRP in the 1985 Farm Bill has helped to increase numbers of many grassland birds. Recent literature has shown that the seed mixtures used in various CRP fields and the ultimate field species composition greatly influences the bird community utilizing those fields. Programs which may allow increased management of CRP fields, such as burning or short-term grazing, as well as interseeding with forbs or native shrubs may greatly increase use by priority grassland birds. CRP acreage recommendations in the Area are being driven by the needs of Lesser Prairie-Chicken. Further, the placement of CRP near smaller shrub patches (700 – 900 acres) can render those patches suitable for prairie-chickens. CRP planted to native grass mixtures helps to create appropriate patches that are greater than 2,000 acres which fits the PLJV model for Lesser Prairie-Chicken. Model constraints are: 1) at least 1,000 acres of sand sage or shinnery, 2) no more than 2,000 acres of cropland, 3) no more than 50 acres of trees and 4) no more than 50 acres of smaller roads. Reducing cropland and planting to grass helps to create larger blocks of habitat appropriate for Lesser Prairie-Chicken. The PLJV can help target placement of additional CRP on the landscape for maximum benefit to these birds.

Tallgrass prairie, estimated at 493,952 acres, is important to species such as Eastern Meadowlark and Upland Sandpiper. Shortgrass acreage is estimated at 285,982 acres and thus provides little of the overall objectives for most grassland birds in BCR 19-OK. However, it provides habitat for Cassin's Sparrow and Lark Bunting in this Area.

Swainson's Hawk has declined in the last 30 years at an average rate of 4.0% per year across BCR 19, 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) Convert 398,236 acres of mesquite shrubland to mesquite savannah through burning and other land management techniques. Change the habitat so that there are few mesquite per acre (preferably providing less than 3% total mesquite canopy cover), rather than the greater than 25% cover in mesquite shrubland. PLJV currently estimates that 102,312 acres of mesquite habitat are in this condition. This will add 89 birds; 2) Restore 177,000 acres of sand sage in or near the eastern panhandle, providing 177 birds. These recommendations, fully implemented,

are modeled to meet only 49% of the goal. We recommend implementing toward these acreage goals while partners determine what further habitat work is possible and the models and assumptions are further evaluated.

Loggerhead Shrike has declined in the last 30 years at an average rate of 3.9% per year across BCR 19, 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) Convert 398,236 acres of mesquite shrubland to mesquite savannah through burning and other land management techniques. Change the habitat so that there are few mesquite per acre (preferably providing less than 3% total mesquite canopy cover), rather than the greater than 25% cover in mesquite shrubland. PLJV currently estimates that 102,312 acres of mesquite habitat are in this condition. This will add 6,916 birds; 2) Convert 151,848 acres of eastern redcedar within the eastern panhandle to mixed grass prairie. This would provide 3,102 additional birds; 3) Manage 3,945,675 acres of mixed grass prairie for many shrubs (~10% shrub cover), providing 13,036 additional birds. Currently the PLJV estimates that 2,173,746 acres are managed for this condition. These recommendations, fully implemented, are modeled to meet only 70% of the goal. We recommend implementing toward these acreage goals while partners determine what further habitat work is possible and the models and assumptions are further evaluated.

Scissor-tailed Flycatcher has declined over the last 30 years at an average rate of 2.3% per year in BCR 19. This rate of decline requires a doubling of the population. Recommended actions are: 1) Convert 398,236 acres of mesquite shrubland to mesquite savannah through burning and other land management techniques. Change the habitat so that there are few mesquite per acre (preferably providing less than 3% total mesquite canopy cover), rather than the greater than 25% cover as in mesquite shrubland. PLJV currently estimates that 102,312 acres of mesquite habitat are in this condition. This will add 18,484 birds; 2) Increase the acreage of late successional riparian forest by 110,379 acres for a total of 132,673 acres. This will add 4,415 birds. These recommendations, and all others in this Plan if fully implemented, are modeled to meet only 58% of the goal. 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 Sparrow has declined in the last 30 years at an average rate of 2.5% per year across BCR 19, 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) Convert 398,236 acres of mesquite shrubland to mesquite savannah through burning and other land management techniques. Change the habitat so that there are few mesquite per acre (preferably providing less than 3% total mesquite canopy cover), rather than the greater than 25% cover in mesquite shrubland. PLJV currently estimates that 102,312 acres of mesquite habitat are in this condition. This will add 42,334 birds; 2) Convert 434,994 acres of eastern redcedar to mixed grass prairie and manage 3,945,675 acres of mixed grass prairie for many shrubs (~10% shrub cover). This will provide 214,552 additional birds. Currently the PLJV estimates that 2,173,746 acres are managed for this condition; 3) Restore 177,000 acres of sand

sage in or near the eastern panhandle, providing 25,134 birds. These aggressive recommendations, fully implemented, are modeled to meet only 71% of the goal. We recommend implementing toward these acreage goals while partners determine what further habitat work is possible and the models and assumptions are further evaluated.

Western Kingbird has declined in the last 30 years at an average rate of 2.4% per year across BCR 19, 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) Convert 434,994 acres of eastern redcedar to mixed grass prairie, this will add 7,182 birds; 2) Add 300,000 acres of CRP, providing 6,000 additional birds; 3) Restore 177,000 acres of sand sage, providing 2,708 birds; 4) Convert 398,236 acres of mesquite shrubland to mesquite savannah through burning and other land management techniques. Change the habitat so that there are few mesquite per acre (preferably providing less than 3% total mesquite canopy cover), rather than the greater than 25% cover in mesquite shrubland. PLJV currently estimates that 102,312 acres of mesquite habitat are in this condition. This will add 1,848 birds; 5) Restore 177,000 acres of sand sage in or near the panhandle, providing 2,708 birds. These aggressive recommendations, fully implemented, are modeled to meet only 54% of the goal. We recommend implementing toward these acreage goals while partners determine what further habitat work is possible and the models and assumptions are further evaluated.

Grasshopper Sparrow has declined in the last 30 years at an average rate of 1.4%/yr in BCR 19. Recommended actions are: 1) Convert 434,994 acres of eastern redcedar to mixed grass prairie, providing an additional 57,994 birds; 2) Manage 3,425,006 acres of the resultant mixed grass acres for relatively higher grass heights during the breeding season, providing an additional 206,368 birds. Currently PLJV estimates that 2,173,746 acres are managed in this manner; 3) manage 782,125 acres of sand sage habitat so that there is relatively higher grass during the breeding season, providing an additional 99,501 birds. Currently the PLJV estimates that this occurs on 48,883 acres of sand sage; 4) Convert 300,000 acres of cropland to CRP or a CRP-like habitat, providing an additional 34,590 birds; 5) Manage 85,794 acres of shortgrass prairie (for a total of 228,786 acres) so that there is relatively higher grass during the breeding season, providing an additional 16,766 birds. Currently the PLJV estimates that 142,992 acres of shortgrass is managed for this condition. These aggressive recommendations, fully implemented, are modeled to meet only 72% of the goal. 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 30 years at an average rate of 5.7% per year across BCR 19, 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) Convert 151,848 acres of eastern redcedar within the panhandle to mixed grass prairie. Manage for few shrubs and relatively higher grass, which will provide an additional 3,595 birds; 2) Manage 42,897 acres of shortgrass prairie within the panhandle so that there is relatively higher grass during the breeding season will provide an additional 609 birds. Currently the PLJV estimates that this management occurs on 142,992 acres of shortgrass; 3) Restore 177,000 acres

of sand sage in or near the eastern panhandle, providing 3,204 birds; 4) Manage 274,692 acres of sand sage for higher grass in or near the eastern panhandle, providing an additional 301 birds. Currently the PLJV estimates that this occurs on 48,883 acres of sand sage. These recommendations should bring the species up to goal.

Eastern Meadowlark has declined over the last 30 years at an average rate of 1.1% /yr. in BCR 19. Recommended actions are: 1) Convert 434,994 acres of eastern redcedar to mixed grass prairie, providing an additional 11,708 birds; 2) Manage 2,082,146 acres of mixed grass prairie for few shrubs and higher grass, providing 27,882 birds. Currently the PLJV estimates that 1,086,873 acres are managed for this condition; 3) Convert 348,181 acres of mesquite shrubland to mesquite savannah, providing 4,248 birds. Through burning and other land management techniques, change the habitat so that there are only a few mesquite per acre (preferably less than 3% total mesquite canopy cover). PLJV currently estimates that 102,312 acres of mesquite habitat are in this condition; 4) Add 300,000 acres of CRP or CRP-like programs, providing an additional 55,440 birds. These aggressive recommendations, fully implemented, are modeled to meet only 67% of the goal. We recommend implementing toward these acreage goals while partners determine what further habitat work is possible and the models and assumptions are further evaluated.

Shrubland Guild

Shrublands of sand sage and shinnery comprise little of the land area. However, these shrublands are important to priority species such as Lesser Prairie-Chicken, Scaled Quail, Cassin's Sparrow, Lark Bunting, and Lark Sparrow. Shrubland acreage recommendations are driven by both Lesser Prairie-Chicken and Cassin's Sparrow.

Threats to sand sage are that it is relatively easily converted to cropland and not seen as highly productive wildlife habitat. However, even though agricultural lands are utilized by some priority birds to some extent, sand sage is critical to the maintenance of species such as Cassin's Sparrow and Scaled Quail in the Area.

There is high concern about past Lesser Prairie-Chicken declines (Davis et al 2007). Recommended actions are: 1) Increase the amount of CRP (or CRP-like habitat) within or near Lesser Prairie-Chicken range by 300,000 acres. Ensure that this is all placed to create large blocks of habitat. This will provide 699 birds; 2) Convert (or maintain) at least 90% of the resultant CRP acreage within Lesser Prairie-Chicken range (or 559,291 acres) to native mixed grass species, interseeded with forbs and legumes. This will provide 2,983 birds; 3) Target new CRP field additions within Lesser Prairie-Chicken range so that 479,392 acres contribute to large blocks of habitat, providing 1,700 birds. Currently it is estimated that 29,939 acres do so; 4) Restore 177,000 acres of sand sage, providing 2,761 birds; 5) Target CRP placement near sand sage prairie so that 1,154,656 acres of sand sage contributes to large blocks of habitat, providing 8,434 birds. Currently it is estimated that 437,012 acres do so; 6) Target CRP placement near shinnery so that 184,399 acres contribute to large blocks of habitat, providing 1,148 birds. Currently it is estimated that 110,823 acres contribute. This will bring the species to goal.

The PLJV is currently unsure whether these habitat recommendations can all be accomplished within Lesser Prairie-Chicken current or historic range.

Cassin's Sparrow has declined in the last 30 years at an average rate of 3.6% per year across BCR 19, 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) Convert 177,000 acres of cropland to sand sage in the western portion of the Area, providing 10,484 additional birds. Currently the PLJV estimates that there are 261,322 acres of sand sage; and 2) Manage shortgrass prairie so that 46,417 additional acres have many shrubs (this does not include eastern redcedar), providing an additional 924 birds. PLJV estimates that 232,084 acres are in this condition currently. This will bring the species up to goal.

Riparian Guild

Riparian areas, estimated at 1,362,594 acres, comprise a little over 5% of the total area; they are important to priority species such as Mississippi Kite, Red-headed Woodpecker, Bell's Vireo, Painted Bunting, and Baltimore and Bullock's Oriole. Of the breeding riparian-associated landbirds with statistically significant declining trends in BCR 19, Bell's Vireo and Baltimore Oriole are driving habitat recommendations.

Habitat goals are to increase the amount of late successional riparian forest by 110,379 acres and to increase native riparian shrubland by 53,095 acres. Riparian recommendations are being driven by Mississippi Kite and Bell's Vireo. The current recommendations require converting wet meadow to riparian shrubland and forest. This however, does come at the cost of reducing the carrying capacity for Upland Sandpiper below goal.

However, current PLJV GIS has not evaluated native riparian shrubland that has been invaded by eastern redcedar, salt cedar (tamarisk), or Russian olive. In order to maintain a species such as Bell's Vireo or Painted Bunting at objective levels, invasive riparian shrubland should be converted to riparian shrubland comprised of willow and other beneficial riparian shrubs.

Mississippi Kite has declined in the last 30 years at an average rate of 2.9% per year across BCR 19, 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) Increase late successional riparian forest by 110,379 acres for a total of 132,673 acres. This will add 30,628 birds, bringing the species to goal. Note that increasing the number of large trees capable of supporting Kite nests, especially native cottonwoods, within towns and cities in areas such as greenbelts and backyard trees, will help to increase populations, reducing the need for more riparian forest. Only one or two large trees per acre are needed.

Bell's Vireo has declined in the last 30 years at an average rate of 3.9% per year across BCR 19, 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) Increase native riparian shrubland, especially along the Canadian and Red Rivers by 53,095 acres, providing 76,983 birds and bringing the bird up to goal (note there are other potential habitat manipulations that could help reach goal for this species). Promoting land management practices in prairies which ensure that dense shrub patches increase within drainages and especially near water sources, will support increased numbers of these birds.

Baltimore Oriole has declined over the last 30 years at an average rate of 1.1% per year in BCR 19. Studies in South Dakota have demonstrated that densities increase with increasing riparian forest age. Recommended actions are: 1) Increase the amount of late successional riparian forest by 36,438 acres, providing an additional 18,889 birds and bringing the species up to the goal. Currently we have recommended the increase in acres to come from wet meadow; however, this could be done by changing acreages of other Riverine System conditions.

Bullock's Oriole has declined in the last 30 years at an average rate of 3.8% per year across BCR 19, 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. Studies in South Dakota have demonstrated that densities increase with increasing riparian forest age. Recommended actions are: 1) Increase late successional riparian forest by 47,160 acres primarily in the southwestern portion of the Area and from Harper south to Harmon counties. This will provide an additional 1,034 birds and would bring the species up to the goal. Currently the PLJV estimates that within Bullock's Oriole range, there are 5,573 acres of late successional riparian forest.

Woodland Guild

Woodlands (estimated at 850,965 acres) comprise a little over 4% of the total area, and are comprised of several sub-types: eastern redcedar, crosstimbers woodland, and hillside woodland. Eastern redcedar comprises over half of all the woodland acreage and is not modeled to support any priority species. Crosstimbers woodland is at the western edge of its range in the Area and supports species such as Mississippi Kite, Red-headed Woodpecker and Painted Bunting. Hillside Woodland is fairly specialized habitat and holds a federally endangered species (the Black-capped Vireo) among other priority species. Of all priority species using woodlands, only Black-capped Vireo has more of its numbers here than in other habitats within the Area.

Black-capped Vireo is a federal- and state-listed endangered species. Abundance goals have been adapted from the recovery plan. Recommended actions are: 1) Increase the amount of hillside woodland by 7,717 acres, providing an additional 1,100 birds. This acreage will likely be achieved by converting crosstimbers woodland, although whether this is borne out by GIS mapping has yet to be determined. This should bring the species to goal. To meet needs of the Recovery Plan, this acreage should be in a separate area from Wichita Mountains NWR. Note that we have little confidence in the ability of GIS to clearly delineate this habitat type. Further, Black-capped Vireo prefers to nest in only one successional stage of this woodland so it requires relatively frequent burning across other portions of its habitat (in later successional stages) in

order to maintain breeding activity at prescribed levels. The amount of habitat described in this AIP is likely to have already been attained at Wichita Mountain NWR, after a relatively recent fire, and the abundance goal has already certainly been met. Nevertheless, in order to ensure the maintenance of this population in Oklahoma there needs to be enough suitable habitat elsewhere in the state to occupy if/when habitat at Wichita Mountains becomes unsuitable for the vireo. Further, the management of this habitat in the state as a whole should be undertaken to ensure that at least one area of habitat is in suitable condition and available every year.

Special Note

Several breeding species in this Area are not projected to reach goal even if all the habitat recommendations are implemented. Potential problems with the available landcover data for this Area may partly explain this. For example, we have evaluated the landcover from Oklahoma GAP and a newer landcover layer of eastern red cedar (ERC) developed by Oklahoma NRCS covering several counties in BCR 19 (over 4.5 million acres and just over 25% of the entire BCR). The images used for analysis in Oklahoma GAP were mostly taken in 1992 and the images for the ERC layer were taken in 2004, a gap of twelve years. We overlaid the older Oklahoma GAP layer with the newer ERC layer and, determined those areas originally classified as non-woodland and currently classified as ERC. The chart below lists various habitats and conditions, % converted to eastern red cedar and the average loss (divided by 12) of habitat per year.

Association	% converted to ERC	Avg. Loss per year
Pasture	9.17%	0.764%
Mixed Grass	15.71%	1.309%
Native riparian shrubland	18.40%	1.533%
Tallgrass	12.29%	1.024%
Wet meadow	20.38%	1.698%
Riparian canopy	20.46%	1.705%
Sand Sage	24.50%	2.042%
Riverine Systems	26.47%	2.205%
Shinnery	37.19%	3.099%

These rates of conversion, if they hold true for the rest of Oklahoma, would have a large effect on the numbers used in determining habitat goals for breeding landbirds. If these percentages were run back through planning models reducing current acreages of habitat, it would reduce the current estimated carrying capacity of most priority birds, reduce the goal for the species and conversely, increase the amount of habitat that could be converted from ERC to an appropriate condition for each species, perhaps allowing the species to achieve goal populations or get significantly closer.

This data is only preliminary and has not been incorporated into PLJV planning. But given the current inability of BCR 19- OK to achieve appropriate goals, this may be data that partners wish

to have incorporated into the PLJV planning process in the future to achieve a more realistic picture of habitat needs for the Area.

INTEGRATED BIRD HABITAT RECOMMENDATIONS

(By Association)

Badlands/Cliffs/Outcrops

There are currently no priority species using this habitat type. However, these areas can be beneficial for nesting prairie raptors and other species. Maintain all acres of this habitat type.

Cropland

Convert 300,000 acres of cropland to CRP for Lesser Prairie-Chicken and 177,000 acres of cropland to sand sage for Cassin's Sparrow. Convert 7,770 acres of cropland to moist-soil units for waterfowl and shorebirds. Convert tame grass pastures (e.g., bermuda) to native grasses.

Crosstimbers Woodland

This habitat type supports Mississippi Kite, Red-headed Woodpecker and Painted Bunting among others. This habitat type is at the western fringe of its range in the Area. Convert 7,717 acres of Crosstimbers Woodland to Hillside Woodland habitat for Black-capped Vireo. Maintain all other acres of this habitat type while ensuring that habitat is maintained so that throughout these acres there is a mosaic of woodland and grassy areas.

CRP

Add 300,000 acres of CRP (or CRP-like habitat) within or near Lesser Prairie-Chicken range in the northwestern portion of the Area. Ensure that this is all placed to create large blocks of habitat (see Lesser Prairie-Chicken model).

Convert (or maintain) 559,291 acres of the CRP acreage within Lesser Prairie-Chicken range to native mixed grass species interseeded with forbs and legumes.

Target new CRP field additions within Lesser Prairie-Chicken range so that 479,392 acres contribute to large blocks of habitat.

Forest/Woodland (upland)

This habitat type is primarily eastern redcedar (ERC). The PLJV recommends that all 434,000 acres of this habitat type be converted to mixed grass prairie. The PLJV GIS layer incorporates the latest ERC layer from NRCS Oklahoma but that layer does not include all of BCR 19. Therefore we suspect that many more acres of this habitat type actually exist within the Area. This habitat type historically was found regularly only on slopes and canyon sides. When it invades flatlands it should be controlled.

Hillside Woodland

Increase hillside woodland by 7,717 acres for Black-capped Vireo. This acreage needs to be in areas separate from Wichita Mountains NWR. While the abundance goal for Oklahoma may already have been achieved, the Recovery plan suggests the need for populations to be spread through the historical range in the state. The vireo prefers early-mid successional oak woodlands. Preferred habitat is maintained through regular but infrequent burns, which necessitates creating unsuitable habitat for a few years. The birds already in suitable habitat must have alternative areas to breed when habitat succession creates unsuitable conditions for breeding. Otherwise numbers of these birds will drop while appropriate habitat regenerates. This is not a desirable scenario for delisting. Therefore while the goal is to maintain a certain acreage of suitable habitat, in order to do so on an ongoing basis, larger areas of potential habitat must be identified and maintained, in order to keep birds at or above the abundance goal at all times.

Research how to mimic recent hot fires at Wichita Mountains NWR to create habitat preferred by the Black-capped Vireo. Implement these procedures in other areas of recent vireo occurrence.

Mesquite Savannah

Convert 398,236 acres of mesquite shrubland to mesquite savannah for many grassland birds including Scissor-tailed Flycatcher, Loggerhead Shrike and Cassin's Sparrow, among others. Change the habitat so that there are relatively few mesquite per acre. Regular burning can be used to maintain mesquite savannah in this type of condition, although less frequent return intervals than in shinnery habitat are required for maintenance. PLJV currently estimates that 102,312 acres of mesquite habitat are in this condition.

Mixed Grass

Manage 3,945,675 acres of mixed grass prairie for many shrubs (~10% shrub cover) for Loggerhead Shrike and Lark Sparrow. Currently the PLJV estimates that 2,173,746 acres are managed for this condition.

For Bell's Vireo, promoting land management practices in prairies which ensure that dense shrub patches increase within drainages and especially near water sources, will support increased numbers of these birds.

Maintain all current acres of mixed grass prairie, estimated at 4,845,621 acres. Regular burning of this habitat type should control eastern redcedar.

Other

PLJV currently estimates that there are 202,820 acres of urban/suburban acres in this Area. Planting only one or a few trees per acres, preferably native cottonwoods, in areas without trees will support Mississippi Kite, Baltimore Oriole and Western Kingbird among others. Note that here and in riparian situations are the only areas that the PLJV recommends planting any trees.

Other Wetlands

Maintain quality of existing moist-soil units (estimated 7,013 acres), and develop another 8,757 acres (ideally from converted cropland). Of these, 3,915 acres should be managed for optimal suitability for foraging shorebirds (mudflats and very shallow water with minimal emergent cover) by grazing, mowing, etc. The remainder should be managed for dense stands of seed-producing plants attractive to waterfowl, and flooded during spring only (ideally not flooded during fall). Provide supplemental water as needed if rainfall is insufficient to flood these areas. Existing moist-soil units currently support substantial foraging use-days for waterfowl and shorebirds, but foraging habitat still is limited. These actions will provide approximately 37 million additional foraging use-days for waterfowl (in spring) and 3.2 million for shorebirds, and will increase the foraging carrying capacity for these birds to desired levels.

Maintain the quantity and quality of saline wetlands (estimated 10,633 acres). This habitat currently provides important foraging habitat for shorebirds and the Area is below desired carrying capacity for these birds.

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

Playa

Protect playas (estimated 2,338 acres) from further sedimentation by installing grass buffers around playas located in cropland. Buffer width, species composition, and management should be carefully considered to protect playas from sedimentation yet allow overland water flow to reach the basin. Restore natural hydrology by filling pits and removing excessive accumulated sediments. Install fences around playa basins to manage livestock grazing. Consider double-fencing (a fence around the playa basin and another around the upland buffer) to allow grazing in the uplands while protecting moist-soil plants for waterfowl. Avoid fencing playas in areas

known to be occupied by Lesser Prairie-Chickens to reduce collision risks. Playas provide important waterfowl foraging habitat, and the Area is below the carrying capacity objective.

Reservoirs, Lakes, and Ponds

Improve stock pond (estimated 61,970 acres) foraging habitat for waterfowl by fencing cattle from the shallow upper ends. This habitat supports important foraging use-days, and the Area is below desired foraging carrying capacity.

Riverine Systems

Increase the acreage of late successional riparian forest by 110,379 acres for a total of 132,673 acres for Mississippi Kite. Of those acres, 47,160 should be placed in the southwestern portion of the Area, and from Harper south to Harmon counties, to support Bullock's Oriole.

Increase native riparian shrubland, especially along the Canadian and Red Rivers by 53,095 acres for Bell's Vireo.

Restore and enhance river channel (estimated 83,373 acres) flows through exotic brush control, minimizing/restoring water diversions, and protecting/improving groundwater levels. Create and maintain wide, braided, stream channels. This will maintain/improve important foraging habitat for shorebirds and other wetland birds and critical roosting habitat for Sandhill and Whooping Cranes. This habitat currently provides important foraging habitat for shorebirds, and the Area is below desired foraging carry capacity.

PLJV modeling does not include determining the amount of exotic riparian shrubland. In order to maintain the current carrying capacity for species such as Painted Bunting and Bell's Vireo, we encourage the elimination of all invasive exotics, such as salt cedar and Russian olive, in riparian areas in conjunction with native shrub replanting.

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

Sand Sage

Restore 177,000 acres of Sand sage in or near the eastern panhandle for Cassin's Sparrow.

Focus CRP placement near sand sage prairie so that 1,154,656 acres of sand sage contributes to large blocks of habitat for Lesser Prairie-Chicken. Currently it is estimated that 437,012 acres contribute to large blocks.

Manage 274,692 acres of sand sage for higher grass in or near the eastern panhandle for Lark Bunting and Grasshopper Sparrow. Currently the PLJV estimates that 48,883 acres are managed for this condition.

Shinnery

Focus CRP placement near shinnery so that 184,399 acres contribute to large blocks of habitat for Lesser Prairie-Chicken. Currently it is estimated that 110,823 acres contribute.

Control eastern redcedar in shinnery through frequent burning, perhaps every 5 years.

Shortgrass

Manage 42,897 acres of shortgrass prairie within the panhandle so that there is relatively taller grass during the breeding season for Lark Bunting. Most of these acres should be targeted for Beaver and Texas counties.

Tallgrass

Maintain tallgrass prairie where it exists in the northeastern portion of the Area. This habitat is important for species such as Upland Sandpiper and Eastern Meadowlark. Configuring the landscape so that there are at least 200 acres of grassland which is maintained through patch burning to reduce shrub encroachment, may encourage colonization by Henslow's Sparrow. In addition, some of these areas may be appropriate for Greater Prairie-Chicken.

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.
- Serious consideration should be given to stepping down objectives to a 10-year time frame that coincides with Farm Bill time frame. Farm Bill conservation provisions and programs (CRP, WRP etc.) are the most likely primary vehicles for attaining habitat conservation objectives.
- 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 GIS landcover data (see Special Note section).
- Evaluate the importance of certain wetland types, especially river channels and wet meadows, for waterfowl, shorebirds, and waterbirds. Emphasize the foraging value of these habitats, and the accuracy of current acreage estimates from GIS.
- Consider alternative approaches to waterfowl and crane carrying capacity modeling, e.g., under the assumption that roosting habitat (rather than foraging habitat) is most limiting.
- Consider developing new (lower) population targets for some species. Most population targets are based on recovering birds lost during the past 30 years, but for some species this requires habitat conversion and restoration at levels that may be difficult to achieve. Alternatively, population targets for some species (e.g., Sandhill Cranes) could appropriately be adjusted upward.

RECOMMENDED READING

- Davis, D. M., R. Horton, E. A. Odell, R. D. Rodgers and, H. Whitlaw. 2007. Draft Lesser Prairie-Chicken Conservation Initiative. Lesser Prairie Chicken Interstate Working Group. Unpublished Report. New Mexico Department of Game and Fish, Santa Fe, New Mexico, USA.
- 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](http://www.fws.gov/patuxent/), Laurel, MD

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.

Species/Guild Name: Cranes

Season: Fall

Assoc Name	Condition Name	Condition			Large		CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block	Units			
Other Wetlands	Emergent marsh	1,760	1.0000	1.0000	1.00000	396.0000	697,009	1,115,192	62.50%
		1,761	1.0000	1.0000	1.00000	396.0000	697,358	1,115,192	62.50%
Other Wetlands	Moist-soil unit	7,013	1.0000	1.0000	1.00000	1,253.0000	8,787,700	1,115,192	788.00%
		15,770	1.0000	1.0000	1.00000	1,253.0000	19,759,810	1,115,192	1771.86%
Other Wetlands	Saline	10,633	1.0000	1.0000	1.00000	396.0000	4,210,489	1,115,192	377.56%
		10,634	1.0000	1.0000	1.00000	396.0000	4,211,052	1,115,192	377.60%
Playa	Wet	468	1.0000	1.0000	1.00000	127.0000	59,385	1,115,192	5.33%
		468	1.0000	1.0000	1.00000	127.0000	59,385	1,115,192	5.30%
Riverine Systems	Wet meadow	337,490	1.0000	1.0000	1.00000	396.0000	133,646,174	1,115,192	11984.14
		174,020	1.0000	1.0000	1.00000	396.0000	68,912,054	1,115,192	6179.30%
Riverine Systems	Floodplain marsh	493	1.0000	1.0000	1.00000	396.0000	195,231	1,115,192	17.51%
		493	1.0000	1.0000	1.00000	396.0000	195,231	1,115,192	17.50%
Summary for Fall (6 records)					Pre-planning Sum		147,595,988	13235.03%	
					Post-planning Sum		93,834,890	8414.20%	

Species/Guild Name: Cranes

Season: Spring

Assoc Name	Condition Name	Condition			Large		CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block	Units			
Other Wetlands	Moist-soil unit	7,013	1.0000	1.0000	1.00000	1,253.0000	8,787,700	455,079	1931.03%
		15,770	1.0000	1.0000	1.00000	1,253.0000	19,759,810	455,079	4342.06%
Other Wetlands	Emergent marsh	1,760	1.0000	1.0000	1.00000	396.0000	697,009	455,079	153.16%
		1,761	1.0000	1.0000	1.00000	396.0000	697,358	455,079	153.20%
Other Wetlands	Saline	10,633	1.0000	1.0000	1.00000	396.0000	4,210,489	455,079	925.22%
		10,634	1.0000	1.0000	1.00000	396.0000	4,211,052	455,079	925.30%
Playa	Wet	468	1.0000	1.0000	1.00000	127.0000	59,385	455,079	13.05%
		468	1.0000	1.0000	1.00000	127.0000	59,385	455,079	13.00%
Riverine Systems	Wet meadow	337,490	1.0000	1.0000	1.00000	396.0000	133,646,174	455,079	29367.69
		174,020	1.0000	1.0000	1.00000	396.0000	68,912,054	455,079	15142.80
Riverine Systems	Floodplain marsh	493	1.0000	1.0000	1.00000	396.0000	195,231	455,079	42.90%
		493	1.0000	1.0000	1.00000	396.0000	195,231	455,079	42.90%
Summary for Spring (6 records)					Pre-planning Sum		147,595,988	32433.05%	
					Post-planning Sum		93,834,890	20619.26%	

Species/Guild Name: Cranes

Season: Winter

Assoc Name	Condition Name	Condition			Large		CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block	Units			
Cropland	Wheat	5,145,066	1.0000	1.0000	1.00000	396.0000	2,037,446,126	1,414,787	144010.80%
		4,869,571	1.0000	1.0000	1.00000	396.0000	1,928,350,188	1,414,787	136299.60%
Cropland	Corn	51,605	1.0000	1.0000	1.00000	396.0000	20,435,409	1,414,787	1444.42%
		48,841	1.0000	1.0000	1.00000	396.0000	19,341,186	1,414,787	1367.00%
Cropland	Sorghum	162,962	1.0000	1.0000	1.00000	252.0000	41,066,372	1,414,787	2902.65%
		154,236	1.0000	1.0000	1.00000	252.0000	38,867,455	1,414,787	2747.20%
Cropland	Peanuts	52,510	1.0000	1.0000	1.00000	252.0000	13,232,498	1,414,787	935.30%
		49,698	1.0000	1.0000	1.00000	252.0000	12,523,958	1,414,787	885.20%
Summary for Winter (4 records)					Pre-planning Sum		2,112,180,405	149293.17%	
					Post-planning Sum		1,999,082,787	141299.00%	

Species/Guild Name: Shorebirds-Nonbreeding-Upland

Season: Nonbreeding

Assoc Name	Condition Name	Condition			Large		CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block	Units			
Cropland	Pasture	716,127	1.0000	0.0001	1.00000	350.0000	25,064	27,226	92.06%
		677,781	1.0000	0.0001	1.00000	350.0000	23,722	27,226	87.10%
Cropland	Alfalfa	240,821	1.0000	0.0001	1.00000	350.0000	8,429	27,226	30.96%
		227,926	1.0000	0.0001	1.00000	350.0000	7,977	27,226	29.20%
Cropland	Sod farm	4,527	1.0000	0.0100	1.00000	350.0000	15,844	27,226	58.19%
		4,284	1.0000	0.0100	1.00000	350.0000	14,995	27,226	55.00%

CRP	Non-native	449,089	1.0000	0.0001	1.00000	350.0000	15,718	27,226	57.73%
		79,899	1.0000	0.0001	1.00000	350.0000	2,796	27,226	10.20%
CRP	Native	49,899	1.0000	0.0001	1.00000	350.0000	1,746	27,226	6.41%
		719,089	1.0000	0.0001	1.00000	350.0000	25,168	27,226	92.40%
Mixed Grass	PD town	0	1.0000	0.0001	1.00000	350.0000	0	27,226	0.00%
		0	1.0000	0.0001	1.00000	350.0000	0	27,226	0.00%
Mixed Grass	Many shrubs/low grass	1,086,873	1.0000	0.0001	1.00000	350.0000	38,041	27,226	139.72%
		1,972,838	1.0000	0.0001	1.00000	350.0000	69,049	27,226	253.60%
Mixed Grass	Few shrubs/high grass	1,086,873	1.0000	0.0001	1.00000	350.0000	38,041	27,226	139.72%
		396,046	1.0000	0.0001	1.00000	350.0000	13,862	27,226	50.90%
Mixed Grass	Many shrubs/high grass	1,086,873	1.0000	0.0001	1.00000	350.0000	38,041	27,226	139.72%
		1,972,838	1.0000	0.0001	1.00000	350.0000	69,049	27,226	253.60%
Mixed Grass	Few shrubs/ low grass	1,086,873	1.0000	0.0001	1.00000	350.0000	38,041	27,226	139.72%
		396,046	1.0000	0.0001	1.00000	350.0000	13,862	27,226	50.90%
Shortgrass	Many shrubs/high grass	71,496	1.0000	0.0001	1.00000	350.0000	2,502	27,226	9.19%
		71,496	1.0000	0.0001	1.00000	350.0000	2,502	27,226	9.10%
Shortgrass	Few shrubs/ low grass	71,496	1.0000	0.0001	1.00000	350.0000	2,502	27,226	9.19%
		71,496	1.0000	0.0001	1.00000	350.0000	2,502	27,226	9.10%
Shortgrass	Few shrubs/high grass	71,496	1.0000	0.0001	1.00000	350.0000	2,502	27,226	9.19%
		71,496	1.0000	0.0001	1.00000	350.0000	2,502	27,226	9.10%
Shortgrass	Many shrubs/low grass	71,496	1.0000	0.0001	1.00000	350.0000	2,502	27,226	9.19%
		71,496	1.0000	0.0001	1.00000	350.0000	2,502	27,226	9.10%
Tallgrass	Few shrubs/ low grass	123,488	1.0000	0.0001	1.00000	350.0000	4,322	27,226	15.87%
		123,488	1.0000	0.0001	1.00000	350.0000	4,322	27,226	15.80%
Tallgrass	Many shrubs/high grass	123,488	1.0000	0.0001	1.00000	350.0000	4,322	27,226	15.87%
		123,488	1.0000	0.0001	1.00000	350.0000	4,322	27,226	15.80%
Tallgrass	Many shrubs/low grass	123,488	1.0000	0.0001	1.00000	350.0000	4,322	27,226	15.87%
		123,488	1.0000	0.0001	1.00000	350.0000	4,322	27,226	15.80%
Tallgrass	Few shrubs/high grass	123,488	1.0000	0.0001	1.00000	350.0000	4,322	27,226	15.87%
		123,488	1.0000	0.0001	1.00000	350.0000	4,322	27,226	15.80%
Summary for Nonbreeding (18 records)							246,261		904.50%
							267,776		982.50%

Species/Guild Name: Shorebirds-Nonbreeding-Wetland

Season: Nonbreeding

Assoc Name	Condition Name	Condition		Large		Units	CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block				
Other Wetlands	Emergent marsh	1,760	1.0000	0.1000	1.00000	805.0000	141,690	6,143,034	2.31%
		1,761	1.0000	0.1000	1.00000	805.0000	141,761	6,143,034	2.30%
Other Wetlands	Moist-soil unit	7,013	1.0000	0.1500	1.00000	805.0000	846,859	6,143,034	13.79%
		15,770	1.0000	0.3200	1.00000	805.0000	4,062,352	6,143,034	66.13%
Other Wetlands	Saline	10,633	1.0000	0.1500	1.00000	805.0000	1,283,880	6,143,034	20.90%
		10,634	1.0000	0.1500	1.00000	805.0000	1,284,052	6,143,034	20.90%
Playa	Wet	468	1.0000	0.1000	1.00000	805.0000	37,642	6,143,034	0.61%
		468	1.0000	0.1000	1.00000	805.0000	37,642	6,143,034	0.60%
Playa	Wet pit only	117	1.0000	0.0010	1.00000	805.0000	94	6,143,034	0.00%
		117	1.0000	0.0010	1.00000	805.0000	94	6,143,034	0.00%
Reservoirs Lakes Ponds	Lagoon	3,298	1.0000	0.0050	1.00000	805.0000	13,274	6,143,034	0.22%
		3,298	1.0000	0.0050	1.00000	805.0000	13,274	6,143,034	0.20%
Reservoirs Lakes Ponds	Freshwater lake	168	1.0000	0.0050	1.00000	805.0000	677	6,143,034	0.01%
		168	1.0000	0.0050	1.00000	805.0000	677	6,143,034	0.00%
Reservoirs Lakes Ponds	Stock pond	61,970	1.0000	0.0050	1.00000	805.0000	249,428	6,143,034	4.06%
		61,970	1.0000	0.0050	1.00000	805.0000	249,428	6,143,034	4.00%
Reservoirs Lakes Ponds	Reservoir	102,604	1.0000	0.0050	1.00000	805.0000	412,982	6,143,034	6.72%
		102,604	1.0000	0.0050	1.00000	805.0000	412,982	6,143,034	6.70%
Riverine Systems	Floodplain marsh	493	1.0000	0.0130	1.00000	805.0000	5,159	6,143,034	0.08%
		493	1.0000	0.0130	1.00000	805.0000	5,159	6,143,034	0.00%
Summary for Nonbreeding (11 records)							2,991,685		48.69%
							6,207,421		101.05%

Species/Guild Name: Waterfowl-Nonbreeding

Season: Fall

Assoc Name	Condition Name	Condition		Large		Units	CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block				
Cropland	Corn	51,605	1.0000	0.0000	1.00000	668.0000	0	57,459,092	0.00%
		48,841	1.0000	0.0000	1.00000	668.0000	0	57,459,092	0.00%
Cropland	Sorghum	162,962	1.0000	0.0000	1.00000	849.0000	0	57,459,092	0.00%
		154,236	1.0000	0.0000	1.00000	849.0000	0	57,459,092	0.00%
Cropland	Peanuts	52,510	1.0000	0.0000	1.00000	849.0000	0	57,459,092	0.00%
		49,698	1.0000	0.0000	1.00000	849.0000	0	57,459,092	0.00%
Cropland	Wheat	5,145,066	1.0000	0.0000	1.00000	1,336.0000	0	57,459,092	0.00%
		4,869,571	1.0000	0.0000	1.00000	1,336.0000	0	57,459,092	0.00%
Other Wetlands	Emergent marsh	1,760	1.0000	1.0000	1.00000	1,336.0000	2,351,526	57,459,092	4.09%
		1,761	1.0000	1.0000	1.00000	1,336.0000	2,352,702	57,459,092	4.00%
Other Wetlands	Moist-soil unit	7,013	1.0000	1.0000	1.00000	4,223.0000	29,617,286	57,459,092	51.54%
		15,770	1.0000	1.0000	1.00000	4,223.0000	66,596,710	57,459,092	115.90%
Other Wetlands	Saline	10,633	1.0000	1.0000	1.00000	1,336.0000	14,205,083	57,459,092	24.72%
		10,634	1.0000	1.0000	1.00000	1,336.0000	14,206,982	57,459,092	24.70%
Playa	Wet	468	1.0000	1.0000	1.00000	428.0000	200,133	57,459,092	0.35%
		468	1.0000	1.0000	1.00000	428.0000	200,133	57,459,092	0.30%
Reservoirs Lakes Ponds	Reservoir	102,604	1.0000	0.0500	1.00000	225.0000	1,154,299	57,459,092	2.01%
		102,604	1.0000	0.0500	1.00000	225.0000	1,154,299	57,459,092	2.00%
Reservoirs Lakes Ponds	Freshwater lake	168	1.0000	0.0500	1.00000	225.0000	1,893	57,459,092	0.00%
		168	1.0000	0.0500	1.00000	225.0000	1,893	57,459,092	0.00%
Reservoirs Lakes Ponds	Lagoon	3,298	1.0000	0.4000	1.00000	428.0000	564,596	57,459,092	0.98%
		3,298	1.0000	0.4000	1.00000	428.0000	564,596	57,459,092	0.90%
Reservoirs Lakes Ponds	Stock pond	61,970	1.0000	0.4000	1.00000	225.0000	5,577,281	57,459,092	9.71%
		61,970	1.0000	0.4000	1.00000	225.0000	5,577,281	57,459,092	9.70%
Riverine Systems	Floodplain marsh	493	1.0000	1.0000	1.00000	1,336.0000	658,657	57,459,092	1.15%
		493	1.0000	1.0000	1.00000	1,336.0000	658,657	57,459,092	1.10%
Summary for Fall (14 records)				Pre-planning Sum			54,330,754		94.56%
				Post-planning Sum			91,313,253		158.92%

Species/Guild Name: Waterfowl-Nonbreeding

Season: Spring

Assoc Name	Condition Name	Condition		Large		Units	CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block				
Cropland	Wheat	5,145,066	1.0000	0.0000	1.00000	1,336.0000	0	91,311,564	0.00%
		4,869,571	1.0000	0.0000	1.00000	1,336.0000	0	91,311,564	0.00%
Cropland	Sorghum	162,962	1.0000	0.0000	1.00000	849.0000	0	91,311,564	0.00%
		154,236	1.0000	0.0000	1.00000	849.0000	0	91,311,564	0.00%
Cropland	Peanuts	52,510	1.0000	0.0000	1.00000	849.0000	0	91,311,564	0.00%
		49,698	1.0000	0.0000	1.00000	849.0000	0	91,311,564	0.00%
Cropland	Corn	51,605	1.0000	0.0000	1.00000	668.0000	0	91,311,564	0.00%
		48,841	1.0000	0.0000	1.00000	668.0000	0	91,311,564	0.00%
Other Wetlands	Emergent marsh	1,760	1.0000	1.0000	1.00000	1,336.0000	2,351,526	91,311,564	2.58%
		1,761	1.0000	1.0000	1.00000	1,336.0000	2,352,702	91,311,564	2.50%
Other Wetlands	Saline	10,633	1.0000	1.0000	1.00000	1,336.0000	14,205,083	91,311,564	15.56%
		10,634	1.0000	1.0000	1.00000	1,336.0000	14,206,982	91,311,564	15.50%
Other Wetlands	Moist-soil unit	7,013	1.0000	1.0000	1.00000	4,223.0000	29,617,286	91,311,564	32.44%
		15,770	1.0000	1.0000	1.00000	4,223.0000	66,596,710	91,311,564	72.93%
Playa	Wet	468	1.0000	1.0000	1.00000	428.0000	200,133	91,311,564	0.22%
		468	1.0000	1.0000	1.00000	428.0000	200,133	91,311,564	0.20%
Reservoirs Lakes Ponds	Lagoon	3,298	1.0000	0.4000	1.00000	428.0000	564,596	91,311,564	0.62%
		3,298	1.0000	0.4000	1.00000	428.0000	564,596	91,311,564	0.60%
Reservoirs Lakes Ponds	Reservoir	102,604	1.0000	0.0500	1.00000	225.0000	1,154,299	91,311,564	1.26%
		102,604	1.0000	0.0500	1.00000	225.0000	1,154,299	91,311,564	1.20%
Reservoirs Lakes Ponds	Freshwater lake	168	1.0000	0.0500	1.00000	225.0000	1,893	91,311,564	0.00%
		168	1.0000	0.0500	1.00000	225.0000	1,893	91,311,564	0.00%
Reservoirs Lakes Ponds	Stock pond	61,970	1.0000	0.4000	1.00000	225.0000	5,577,281	91,311,564	6.11%
		61,970	1.0000	0.4000	1.00000	225.0000	5,577,281	91,311,564	6.10%
Riverine Systems	Floodplain marsh	493	1.0000	1.0000	1.00000	1,336.0000	658,657	91,311,564	0.72%
		493	1.0000	1.0000	1.00000	1,336.0000	658,657	91,311,564	0.70%
Summary for Spring (14 records)				Pre-planning Sum			54,330,754		59.49%
				Post-planning Sum			91,313,253		100.00%

Species/Guild Name: Waterfowl-Nonbreeding

Season: Winter

Assoc Name	Condition Name	Condition		Large		Units	CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block				
Cropland	Sorghum	162,962	1.0000	1.0000	1.00000	849.0000	138,354,563	25,019,269	552.99%
		154,236	1.0000	1.0000	1.00000	849.0000	130,946,308	25,019,269	523.30%
Cropland	Corn	51,605	1.0000	1.0000	1.00000	668.0000	34,471,851	25,019,269	137.78%
		48,841	1.0000	1.0000	1.00000	668.0000	32,626,041	25,019,269	130.40%
Cropland	Peanuts	52,510	1.0000	1.0000	1.00000	849.0000	44,580,915	25,019,269	178.19%
		49,698	1.0000	1.0000	1.00000	849.0000	42,193,810	25,019,269	168.60%
Cropland	Wheat	5,145,066	1.0000	1.0000	1.00000	1,336.0000		25,019,269	
		4,869,571	1.0000	1.0000	1.00000	1,336.0000		25,019,269	
Other Wetlands	Saline	10,633	0.0000	1.0000	1.00000	1,336.0000	0	25,019,269	0.00%
		10,634	0.0000	1.0000	1.00000	1,336.0000	0	25,019,269	0.00%
Other Wetlands	Moist-soil unit	7,013	0.0000	1.0000	1.00000	4,223.0000	0	25,019,269	0.00%
		15,770	0.0000	1.0000	1.00000	4,223.0000	0	25,019,269	0.00%
Other Wetlands	Emergent marsh	1,760	0.0000	1.0000	1.00000	1,336.0000	0	25,019,269	0.00%
		1,761	0.0000	1.0000	1.00000	1,336.0000	0	25,019,269	0.00%
Playa	Wet	468	0.0000	1.0000	1.00000	428.0000	0	25,019,269	0.00%
		468	0.0000	1.0000	1.00000	428.0000	0	25,019,269	0.00%
Reservoirs Lakes Ponds	Stock pond	61,970	0.0000	0.4000	1.00000	225.0000	0	25,019,269	0.00%
		61,970	0.0000	0.4000	1.00000	225.0000	0	25,019,269	0.00%
Reservoirs Lakes Ponds	Lagoon	3,298	0.0000	0.4000	1.00000	428.0000	0	25,019,269	0.00%
		3,298	0.0000	0.4000	1.00000	428.0000	0	25,019,269	0.00%
Reservoirs Lakes Ponds	Reservoir	102,604	0.0000	0.0500	1.00000	225.0000	0	25,019,269	0.00%
		102,604	0.0000	0.0500	1.00000	225.0000	0	25,019,269	0.00%
Reservoirs Lakes Ponds	Freshwater lake	168	0.0000	0.0500	1.00000	225.0000	0	25,019,269	0.00%
		168	0.0000	0.0500	1.00000	225.0000	0	25,019,269	0.00%
Riverine Systems	Floodplain marsh	493	0.0000	1.0000	1.00000	1,336.0000	0	25,019,269	0.00%
		493	0.0000	1.0000	1.00000	1,336.0000	0	25,019,269	0.00%
Summary for Winter (14 records)							217,407,329		868.96%
							205,766,159		822.30%

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

<i>Species/Guild Name: Baltimore Oriole</i>		<i>Season: Breeding</i>							
Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Other	Urban/Suburban	202,882	1.0000	1.0000	1.00000	0.0800	16,231	68,842	23.58%
		202,882	1.0000	1.0000	1.00000	0.0800	16,231	68,842	23.58%
Riverine Systems	Riparian canopy - early successional w/ understory	33,470	1.0000	1.0000	1.00000	0.1584	5,302	68,842	7.70%
		33,470	1.0000	1.0000	1.00000	0.1584	5,302	68,842	7.70%
Riverine Systems	Riparian canopy - late successional w/o understory	22,295	1.0000	1.0000	1.00000	0.5184	11,558	68,842	16.79%
		22,295	1.0000	1.0000	1.00000	0.5184	11,558	68,842	16.79%
Riverine Systems	Riparian canopy - early successional w/o understor	33,470	1.0000	1.0000	1.00000	0.1584	5,302	68,842	7.70%
		33,470	1.0000	1.0000	1.00000	0.1584	5,302	68,842	7.70%
Riverine Systems	Riparian canopy - late successional w/ understory	22,295	1.0000	1.0000	1.00000	0.5184	11,558	68,842	16.79%
		132,674	1.0000	1.0000	1.00000	0.5184	68,778	68,842	99.91%
Summary for Breeding (5 records)					<i>Pre-planning Sum</i>		49,951		72.56%
					<i>Post-planning Sum</i>		107,171		155.68%

<i>Species/Guild Name: Bell's Vireo</i>		<i>Season: Breeding</i>							
Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Hillside Woodland	NA	15,276	1.0000	1.0000	1.00000	0.0600	917	156,882	0.58%
		22,993	1.0000	1.0000	1.00000	0.0600	1,380	156,882	0.88%
Mixed Grass	Many shrubs/high grass	1,086,873	1.0000	1.0000	1.00000	0.0180	19,564	156,882	12.47%
		1,994,752	1.0000	1.0000	1.00000	0.0180	35,906	156,882	22.89%
Mixed Grass	Many shrubs/low grass	1,086,873	1.0000	1.0000	1.00000	0.0180	19,564	156,882	12.47%
		1,994,752	1.0000	1.0000	1.00000	0.0180	35,906	156,882	22.89%
Riverine Systems	Native riparian shrubland	8,491	1.0000	1.0000	1.00000	1.4500	12,311	156,882	7.85%
		61,582	1.0000	1.0000	1.00000	1.4500	89,294	156,882	56.92%
Shinnery	Many shrubs/low grass	46,100	1.0000	1.0000	1.00000	0.0600	2,766	156,882	1.76%
		46,100	1.0000	1.0000	1.00000	0.0600	2,766	156,882	1.76%
Shinnery	Few shrubs/high grass	46,100	1.0000	1.0000	1.00000	0.0600	2,766	156,882	1.76%
		46,100	1.0000	1.0000	1.00000	0.0600	2,766	156,882	1.76%
Tallgrass	Many shrubs/high grass	123,488	1.0000	1.0000	1.00000	0.0891	11,003	156,882	7.01%
		123,488	1.0000	1.0000	1.00000	0.0891	11,003	156,882	7.01%
Tallgrass	Many shrubs/low grass	123,488	1.0000	1.0000	1.00000	0.0891	11,003	156,882	7.01%
		123,488	1.0000	1.0000	1.00000	0.0891	11,003	156,882	7.01%
Summary for Breeding (8 records)					<i>Pre-planning Sum</i>		79,894		50.92%
					<i>Post-planning Sum</i>		190,024		121.12%

<i>Species/Guild Name: Black-capped Vireo</i>		<i>Season: Breeding</i>							
Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Hillside Woodland	NA	15,276	1.0000	1.0000	1.00000	0.1419	2,168	3,263	66.44%
		22,993	1.0000	1.0000	1.00000	0.1419	3,263	3,263	100.00%
Summary for Breeding (1 record)					<i>Pre-planning Sum</i>		2,168		66.44%
					<i>Post-planning Sum</i>		3,263		100.00%

<i>Species/Guild Name: Bullock's Oriole</i>		<i>Season: Breeding</i>							
Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Mesquite Savannah	Savannah	102,312	1.0000	1.0000	1.00000	0.0017	174	2,347	7.41%
		400,438	1.0000	1.0000	1.00000	0.0017	681	2,347	29.02%
Mesquite Savannah	Shrubland	398,236	1.0000	1.0000	1.00000	0.0017	677	2,347	28.85%

		100,110	1.0000	1.0000	1.00000	0.0017	170	2,347	7.24%
Riverine Systems	Riparian canopy - late	22,295	1.0000	0.2500	1.00000	0.0212	118	2,347	5.03%
	successional w/ understory	132,674	1.0000	0.4520	1.00000	0.0212	1,271	2,347	54.15%
Riverine Systems	Riparian canopy - late	22,295	1.0000	0.2500	1.00000	0.0212	118	2,347	5.03%
	successional w/o understory	22,295	1.0000	0.2500	1.00000	0.0212	118	2,347	5.03%
Riverine Systems	Riparian canopy - early	33,470	1.0000	0.2500	1.00000	0.0065	54	2,347	2.30%
	successional w/ understory	33,470	1.0000	0.2500	1.00000	0.0065	54	2,347	2.30%
Riverine Systems	Riparian canopy - early	33,470	1.0000	0.2500	1.00000	0.0065	54	2,347	2.30%
	successional w/o understor	33,470	1.0000	0.2500	1.00000	0.0065	54	2,347	2.30%
Summary for Breeding (6 records)						<i>Pre-planning Sum</i>	1,195		50.91%
						<i>Post-planning Sum</i>	2,348		100.04%

Species/Guild Name: Cassin's Sparrow

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
CRP	Native	49,899	1.0000	1.0000	1.00000	0.4586	22,884	277,356	8.25%
		719,089	1.0000	1.0000	1.00000	0.4586	329,774	277,356	118.90%
CRP	Non-native	449,089	1.0000	1.0000	1.00000	0.0398	17,874	277,356	6.44%
		79,899	1.0000	1.0000	1.00000	0.0398	3,180	277,356	1.15%
Mesquite Savannah	Savannah	102,312	1.0000	1.0000	1.00000	0.0826	8,451	277,356	3.05%
		400,438	1.0000	1.0000	1.00000	0.0826	33,076	277,356	11.93%
Sand Sage	Low grass	928,773	1.0000	1.0000	1.00000	0.0541	50,247	277,356	18.12%
		1,096,923	1.0000	1.0000	1.00000	0.0541	59,344	277,356	21.40%
Sand Sage	High grass	48,883	1.0000	1.0000	1.00000	0.0541	2,645	277,356	0.95%
		57,733	1.0000	1.0000	1.00000	0.0541	3,123	277,356	1.13%
Shinnery	Many shrubs/low grass	46,100	1.0000	1.0000	1.00000	0.1872	8,630	277,356	3.11%
		46,100	1.0000	1.0000	1.00000	0.1872	8,630	277,356	3.11%
Shinnery	Many shrubs/high grass	46,100	1.0000	1.0000	1.00000	0.1872	8,630	277,356	3.11%
		46,100	1.0000	1.0000	1.00000	0.1872	8,630	277,356	3.11%
Shinnery	Few shrubs/low grass	46,100	1.0000	1.0000	1.00000	0.1144	5,274	277,356	1.90%
		46,100	1.0000	1.0000	1.00000	0.1144	5,274	277,356	1.90%
Shinnery	Few shrubs/high grass	46,100	1.0000	1.0000	1.00000	0.1144	5,274	277,356	1.90%
		46,100	1.0000	1.0000	1.00000	0.1144	5,274	277,356	1.90%
Shortgrass	Many shrubs/low grass	71,496	1.0000	1.0000	1.00000	0.0664	4,747	277,356	1.71%
		71,496	1.0000	1.0000	1.00000	0.0664	4,747	277,356	1.71%
Shortgrass	Many shrubs/high grass	71,496	1.0000	1.0000	1.00000	0.0664	4,747	277,356	1.71%
		71,496	1.0000	1.0000	1.00000	0.0664	4,747	277,356	1.71%
Shortgrass	Few shrubs/ low grass	71,496	1.0000	1.0000	1.00000	0.0129	922	277,356	0.33%
		71,496	1.0000	1.0000	1.00000	0.0129	922	277,356	0.33%
Shortgrass	Few shrubs/high grass	71,496	1.0000	1.0000	1.00000	0.0129	922	277,356	0.33%
		71,496	1.0000	1.0000	1.00000	0.0129	922	277,356	0.33%
Summary for Breeding (13 records)						<i>Pre-planning Sum</i>	141,247		50.92%
						<i>Post-planning Sum</i>	467,643		168.60%

Species/Guild Name: Chihuahuan Raven

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Mesquite Savannah	Savannah	102,312	0.2500	1.0000	1.00000	0.0017	43	368	11.68%
		400,438	0.2500	1.0000	1.00000	0.0017	170	368	46.20%
Mesquite Savannah	Shrubland	398,236	0.2500	1.0000	1.00000	0.0017	169	368	45.92%
		100,110	0.2500	1.0000	1.00000	0.0017	43	368	11.68%
Shinnery	Few shrubs/low grass	46,100	1.0000	1.0000	1.00000	0.0017	78	368	21.20%
		46,100	1.0000	1.0000	1.00000	0.0017	78	368	21.20%
Shinnery	Few shrubs/high grass	46,100	1.0000	1.0000	1.00000	0.0017	78	368	21.20%
		46,100	1.0000	1.0000	1.00000	0.0017	78	368	21.20%
Summary for Breeding (4 records)						<i>Pre-planning Sum</i>	368		100.00%
						<i>Post-planning Sum</i>	369		100.27%

Species/Guild Name: Dickcissel

Season: Breeding

Assoc Name	Condition Name	Condition			Large Block	Units	CC	Goal	% of Goal
		Acres	Avail.	Suit.					
Cropland	Wheat	5,145,066	1.0000	1.0000	1.00000	0.0016	8,232	1,297,472	0.63%
		4,869,571	1.0000	1.0000	1.00000	0.0016	7,791	1,297,472	0.60%
Cropland	Hay	720,653	1.0000	1.0000	1.00000	0.0704	50,734	1,297,472	3.91%
		682,066	1.0000	1.0000	1.00000	0.0704	48,017	1,297,472	3.70%
Cropland	Sunflowers	0	1.0000	1.0000	1.00000	0.0016	0	1,297,472	0.00%
		0	1.0000	1.0000	1.00000	0.0016	0	1,297,472	0.00%
Cropland	Pasture	716,127	1.0000	1.0000	1.00000	0.0704	50,415	1,297,472	3.89%
		677,781	1.0000	1.0000	1.00000	0.0704	47,716	1,297,472	3.68%
Cropland	Alfalfa	240,821	1.0000	1.0000	1.00000	0.0704	16,954	1,297,472	1.31%
		227,926	1.0000	1.0000	1.00000	0.0704	16,046	1,297,472	1.24%
Crosstimbers WoodlandNA		400,695	1.0000	1.0000	1.00000	0.0081	3,246	1,297,472	0.25%
		392,978	1.0000	1.0000	1.00000	0.0081	3,183	1,297,472	0.25%
CRP	Native	49,899	1.0000	1.0000	1.00000	0.6800	33,931	1,297,472	2.62%
		719,089	1.0000	1.0000	1.00000	0.6800	488,981	1,297,472	37.69%
CRP	Non-native	449,089	1.0000	1.0000	1.00000	0.6800	305,381	1,297,472	23.54%
		79,899	1.0000	1.0000	1.00000	0.6800	54,331	1,297,472	4.19%
Mixed Grass	Few shrubs/high grass	1,086,873	1.0000	1.0000	1.00000	0.1582	171,943	1,297,472	13.25%
		396,046	1.0000	1.0000	1.00000	0.1582	62,654	1,297,472	4.83%
Mixed Grass	Many shrubs/low grass	1,086,873	1.0000	1.0000	1.00000	0.1232	133,903	1,297,472	10.32%
		1,994,752	1.0000	1.0000	1.00000	0.1232	245,753	1,297,472	18.94%
Mixed Grass	Few shrubs/ low grass	1,086,873	1.0000	1.0000	1.00000	0.1232	133,903	1,297,472	10.32%
		396,046	1.0000	1.0000	1.00000	0.1232	48,793	1,297,472	3.76%
Mixed Grass	Many shrubs/high grass	1,086,873	1.0000	1.0000	1.00000	0.1582	171,943	1,297,472	13.25%
		1,994,752	1.0000	1.0000	1.00000	0.1582	315,570	1,297,472	24.32%
Riverine Systems	Native riparian shrubland	8,491	1.0000	1.0000	1.00000	0.0081	69	1,297,472	0.01%
		61,582	1.0000	1.0000	1.00000	0.0081	499	1,297,472	0.04%
Riverine Systems	Wet meadow	337,490	1.0000	1.0000	1.00000	0.0324	10,935	1,297,472	0.84%
		174,020	1.0000	1.0000	1.00000	0.0324	5,638	1,297,472	0.43%
Shinnery	Many shrubs/low grass	46,100	1.0000	1.0000	1.00000	0.0700	3,227	1,297,472	0.25%
		46,100	1.0000	1.0000	1.00000	0.0700	3,227	1,297,472	0.25%
Shinnery	Many shrubs/high grass	46,100	1.0000	1.0000	1.00000	0.1400	6,454	1,297,472	0.50%
		46,100	1.0000	1.0000	1.00000	0.1400	6,454	1,297,472	0.50%
Shinnery	Few shrubs/high grass	46,100	1.0000	1.0000	1.00000	0.1400	6,454	1,297,472	0.50%
		46,100	1.0000	1.0000	1.00000	0.1400	6,454	1,297,472	0.50%
Shinnery	Few shrubs/low grass	46,100	1.0000	1.0000	1.00000	0.0700	3,227	1,297,472	0.25%
		46,100	1.0000	1.0000	1.00000	0.0700	3,227	1,297,472	0.25%
Shortgrass	Few shrubs/high grass	71,496	1.0000	1.0000	1.00000	0.0392	2,803	1,297,472	0.22%
		71,496	1.0000	1.0000	1.00000	0.0392	2,803	1,297,472	0.22%
Shortgrass	Many shrubs/high grass	71,496	1.0000	1.0000	1.00000	0.0392	2,803	1,297,472	0.22%
		71,496	1.0000	1.0000	1.00000	0.0392	2,803	1,297,472	0.22%
Tallgrass	Few shrubs/ low grass	123,488	1.0000	1.0000	1.00000	0.3280	40,504	1,297,472	3.12%
		123,488	1.0000	1.0000	1.00000	0.3280	40,504	1,297,472	3.12%
Tallgrass	Many shrubs/high grass	123,488	1.0000	1.0000	1.00000	0.4100	50,630	1,297,472	3.90%
		123,488	1.0000	1.0000	1.00000	0.4100	50,630	1,297,472	3.90%
Tallgrass	Few shrubs/high grass	123,488	1.0000	1.0000	1.00000	0.4100	50,630	1,297,472	3.90%
		123,488	1.0000	1.0000	1.00000	0.4100	50,630	1,297,472	3.90%
Tallgrass	Many shrubs/low grass	123,488	1.0000	1.0000	1.00000	0.3280	40,504	1,297,472	3.12%
		123,488	1.0000	1.0000	1.00000	0.3280	40,504	1,297,472	3.12%
Summary for Breeding (24 records)					Pre-planning Sum		1,298,825		100.10%
					Post-planning Sum		1,552,208		119.62%

Species/Guild Name: Eastern Meadowlark

Season: Resident

Assoc Name	Condition Name	Condition			Large Block	Units	CC	Goal	% of Goal
		Acres	Avail.	Suit.					
Cropland	Pasture	716,127	1.0000	1.0000	1.00000	0.0720	51,561	590,986	8.72%
		677,781	1.0000	1.0000	1.00000	0.0720	48,800	590,986	8.26%
Cropland	Alfalfa	240,821	1.0000	1.0000	1.00000	0.0720	17,339	590,986	2.93%

		227,926	1.0000	1.0000	1.00000	0.0720	16,411	590,986	2.78%
Cropland	Hay	720,653	1.0000	1.0000	1.00000	0.0720	51,887	590,986	8.78%
		682,066	1.0000	1.0000	1.00000	0.0720	49,109	590,986	8.31%
CRP	Native	49,899	1.0000	1.0000	1.00000	0.1848	9,221	590,986	1.56%
		719,089	1.0000	1.0000	1.00000	0.1848	132,888	590,986	22.49%
CRP	Non-native	449,089	1.0000	1.0000	1.00000	0.1848	82,992	590,986	14.04%
		79,899	1.0000	1.0000	1.00000	0.1848	14,765	590,986	2.50%
Mesquite Savannah	Shrubland	398,236	1.0000	1.0000	1.00000	0.0061	2,429	590,986	0.41%
		100,110	1.0000	1.0000	1.00000	0.0061	611	590,986	0.10%
Mesquite Savannah	Savannah	102,312	1.0000	1.0000	1.00000	0.0122	1,248	590,986	0.21%
		400,438	1.0000	1.0000	1.00000	0.0122	4,885	590,986	0.83%
Mixed Grass	Few shrubs/ low grass	1,086,873	1.0000	1.0000	1.00000	0.0540	58,691	590,986	9.93%
		396,046	1.0000	1.0000	1.00000	0.0540	21,386	590,986	3.62%
Mixed Grass	Few shrubs/high grass	1,086,873	1.0000	1.0000	1.00000	0.0660	71,734	590,986	12.14%
		396,046	1.0000	1.0000	1.00000	0.0660	26,139	590,986	4.42%
Riverine Systems	Wet meadow	337,490	1.0000	1.0000	1.00000	0.0121	4,084	590,986	0.69%
		174,020	1.0000	1.0000	1.00000	0.0121	2,106	590,986	0.36%
Shortgrass	Many shrubs/high grass	71,496	1.0000	1.0000	1.00000	0.0034	243	590,986	0.04%
		71,496	1.0000	1.0000	1.00000	0.0034	243	590,986	0.04%
Shortgrass	Few shrubs/high grass	71,496	1.0000	1.0000	1.00000	0.0034	243	590,986	0.04%
		71,496	1.0000	1.0000	1.00000	0.0034	243	590,986	0.04%
Tallgrass	Few shrubs/high grass	123,488	1.0000	1.0000	1.00000	0.2677	33,058	590,986	5.59%
		123,488	1.0000	1.0000	1.00000	0.2677	33,058	590,986	5.59%
Tallgrass	Few shrubs/ low grass	123,488	1.0000	1.0000	1.00000	0.3570	44,085	590,986	7.46%
		123,488	1.0000	1.0000	1.00000	0.3570	44,085	590,986	7.46%
Summary for Resident (14 records)							428,815		72.55%
							394,729		66.78%
						<i>Pre-planning Sum</i>			
						<i>Post-planning Sum</i>			

Species/Guild Name: Grasshopper Sparrow

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Hay	720,653	1.0000	1.0000	1.00000	0.0337	24,286	1,575,359	1.54%
		682,066	1.0000	1.0000	1.00000	0.0337	22,986	1,575,359	1.46%
Cropland	Alfalfa	240,821	1.0000	1.0000	1.00000	0.0194	4,672	1,575,359	0.30%
		227,926	1.0000	1.0000	1.00000	0.0194	4,422	1,575,359	0.28%
Cropland	Wheat	5,145,066	1.0000	1.0000	1.00000	0.0121	62,255	1,575,359	3.95%
		4,869,571	1.0000	1.0000	1.00000	0.0121	58,922	1,575,359	3.74%
Cropland	Pasture	716,127	1.0000	1.0000	1.00000	0.0168	12,031	1,575,359	0.76%
		677,781	1.0000	1.0000	1.00000	0.0168	11,387	1,575,359	0.72%
CRP	Non-native	449,089	1.0000	1.0000	1.00000	0.1153	51,780	1,575,359	3.29%
		79,899	1.0000	1.0000	1.00000	0.1153	9,212	1,575,359	0.58%
CRP	Native	49,899	1.0000	1.0000	1.00000	0.1153	5,753	1,575,359	0.37%
		719,089	1.0000	1.0000	1.00000	0.1153	82,911	1,575,359	5.26%
Mixed Grass	Many shrubs/high grass	1,086,873	1.0000	1.0000	1.00000	0.2463	267,697	1,575,359	16.99%
		1,994,752	1.0000	1.0000	1.00000	0.2463	491,307	1,575,359	31.19%
Mixed Grass	Few shrubs/high grass	1,086,873	1.0000	1.0000	1.00000	0.2463	267,697	1,575,359	16.99%
		396,046	1.0000	1.0000	1.00000	0.2463	97,546	1,575,359	6.19%
Mixed Grass	Many shrubs/low grass	1,086,873	1.0000	1.0000	1.00000	0.0509	55,322	1,575,359	3.51%
		1,994,752	1.0000	1.0000	1.00000	0.0509	101,533	1,575,359	6.45%
Mixed Grass	Few shrubs/ low grass	1,086,873	1.0000	1.0000	1.00000	0.0509	55,322	1,575,359	3.51%
		396,046	1.0000	1.0000	1.00000	0.0509	20,159	1,575,359	1.28%
Riverine Systems	Wet meadow	337,490	1.0000	1.0000	1.00000	0.0396	13,365	1,575,359	0.85%
		174,020	1.0000	1.0000	1.00000	0.0396	6,891	1,575,359	0.44%
Sand Sage	High grass	48,883	1.0000	1.0000	1.00000	0.1711	8,364	1,575,359	0.53%
		57,733	1.0000	1.0000	1.00000	0.1711	9,878	1,575,359	0.63%
Sand Sage	Low grass	928,773	1.0000	1.0000	1.00000	0.0354	32,879	1,575,359	2.09%
		1,096,923	1.0000	1.0000	1.00000	0.0354	38,831	1,575,359	2.46%
Shortgrass	Many shrubs/low grass	71,496	1.0000	1.0000	1.00000	0.0509	3,639	1,575,359	0.23%
		71,496	1.0000	1.0000	1.00000	0.0509	3,639	1,575,359	0.23%
Shortgrass	Few shrubs/high grass	71,496	1.0000	1.0000	1.00000	0.2463	17,609	1,575,359	1.12%

		71,496	1.0000	1.0000	1.00000	0.2463	17,609	1,575,359	1.12%
Shortgrass	Many shrubs/high grass	71,496	1.0000	1.0000	1.00000	0.2463	17,609	1,575,359	1.12%
		71,496	1.0000	1.0000	1.00000	0.2463	17,609	1,575,359	1.12%
Shortgrass	Few shrubs/ low grass	71,496	1.0000	1.0000	1.00000	0.0509	3,639	1,575,359	0.23%
		71,496	1.0000	1.0000	1.00000	0.0509	3,639	1,575,359	0.23%
Tallgrass	Many shrubs/high grass	123,488	1.0000	1.0000	1.00000	0.2890	35,688	1,575,359	2.27%
		123,488	1.0000	1.0000	1.00000	0.2890	35,688	1,575,359	2.27%
Tallgrass	Few shrubs/high grass	123,488	1.0000	1.0000	1.00000	0.2890	35,688	1,575,359	2.27%
		123,488	1.0000	1.0000	1.00000	0.2890	35,688	1,575,359	2.27%
Tallgrass	Few shrubs/ low grass	123,488	1.0000	1.0000	1.00000	0.2890	35,688	1,575,359	2.27%
		123,488	1.0000	1.0000	1.00000	0.2890	35,688	1,575,359	2.27%
Tallgrass	Many shrubs/low grass	123,488	1.0000	1.0000	1.00000	0.2890	35,688	1,575,359	2.27%
		123,488	1.0000	1.0000	1.00000	0.2890	35,688	1,575,359	2.27%
Summary for Breeding (21 records)						<i>Pre-planning Sum</i>	1,046,671		66.43%
						<i>Post-planning Sum</i>	1,141,233		72.43%

Species/Guild Name: Lark Bunting

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Mixed Grass	Few shrubs/high grass	1,086,873	1.0000	0.0200	1.00000	0.0222	483	8,222	5.87%
		396,046	1.0000	0.0200	1.00000	0.0222	176	8,222	2.14%
Mixed Grass	Many shrubs/low grass	1,086,873	1.0000	0.0200	1.00000	0.0169	367	8,222	4.46%
		1,994,752	1.0000	0.0200	1.00000	0.0169	674	8,222	8.20%
Mixed Grass	Few shrubs/ low grass	1,086,873	1.0000	0.0200	1.00000	0.0184	400	8,222	4.86%
		396,046	1.0000	0.0200	1.00000	0.0184	146	8,222	1.78%
Mixed Grass	PD town	0	1.0000	1.0000	1.00000	0.0184	0	8,222	0.00%
		0	1.0000	1.0000	1.00000	0.0184	0	8,222	0.00%
Mixed Grass	Many shrubs/high grass	1,086,873	1.0000	0.0200	1.00000	0.0204	443	8,222	5.39%
		1,994,752	1.0000	0.0200	1.00000	0.0204	814	8,222	9.90%
Sand Sage	Low grass	928,773	1.0000	0.1000	1.00000	0.0196	1,820	8,222	22.14%
		1,096,923	1.0000	0.2379	1.00000	0.0196	5,115	8,222	62.21%
Sand Sage	High grass	48,883	1.0000	0.1000	1.00000	0.0237	116	8,222	1.41%
		57,733	1.0000	0.2379	1.00000	0.0237	326	8,222	3.96%
Shortgrass	Many shrubs/low grass	71,496	1.0000	0.1000	1.00000	0.0169	121	8,222	1.47%
		71,496	1.0000	0.1000	1.00000	0.0169	121	8,222	1.47%
Shortgrass	Few shrubs/ low grass	71,496	1.0000	0.1000	1.00000	0.0184	132	8,222	1.61%
		71,496	1.0000	0.1000	1.00000	0.0184	132	8,222	1.61%
Shortgrass	Many shrubs/high grass	71,496	1.0000	0.1000	1.00000	0.0204	146	8,222	1.78%
		71,496	1.0000	0.3000	1.00000	0.0204	438	8,222	5.33%
Shortgrass	Few shrubs/high grass	71,496	1.0000	0.1000	1.00000	0.0222	159	8,222	1.93%
		71,496	1.0000	0.3000	1.00000	0.0222	476	8,222	5.79%
Summary for Breeding (11 records)						<i>Pre-planning Sum</i>	4,187		50.92%
						<i>Post-planning Sum</i>	8,418		102.38%

Species/Guild Name: Lark Sparrow

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Mesquite Savannah	Savannah	102,312	1.0000	1.0000	1.00000	0.1420	14,528	1,456,229	1.00%
		400,438	1.0000	1.0000	1.00000	0.1420	56,862	1,456,229	3.90%
Mixed Grass	Few shrubs/ low grass	1,086,873	1.0000	1.0000	1.00000	0.0644	69,995	1,456,229	4.81%
		396,046	1.0000	1.0000	1.00000	0.0644	25,505	1,456,229	1.75%
Mixed Grass	Few shrubs/high grass	1,086,873	1.0000	1.0000	1.00000	0.0644	69,995	1,456,229	4.81%
		396,046	1.0000	1.0000	1.00000	0.0644	25,505	1,456,229	1.75%
Mixed Grass	Many shrubs/low grass	1,086,873	1.0000	1.0000	1.00000	0.1713	186,181	1,456,229	12.79%
		1,994,752	1.0000	1.0000	1.00000	0.1713	341,701	1,456,229	23.46%
Mixed Grass	Many shrubs/high grass	1,086,873	1.0000	1.0000	1.00000	0.1713	186,181	1,456,229	12.79%
		1,994,752	1.0000	1.0000	1.00000	0.1713	341,701	1,456,229	23.46%
Other	small roads	383,430	1.0000	1.0000	1.00000	0.0662	25,383	1,456,229	1.74%
		383,430	1.0000	1.0000	1.00000	0.0662	25,383	1,456,229	1.74%

Riverine Systems	Native riparian shrubland	8,491	1.0000	1.0000	1.00000	0.0016	14	1,456,229	0.00%
		61,582	1.0000	1.0000	1.00000	0.0016	99	1,456,229	0.01%
Sand Sage	Low grass	928,773	1.0000	1.0000	1.00000	0.1420	131,886	1,456,229	9.06%
		1,096,923	1.0000	1.0000	1.00000	0.1420	155,763	1,456,229	10.70%
Sand Sage	High grass	48,883	1.0000	1.0000	1.00000	0.1420	6,941	1,456,229	0.48%
		57,733	1.0000	1.0000	1.00000	0.1420	8,198	1,456,229	0.56%
Shinnery	Few shrubs/low grass	46,100	1.0000	1.0000	1.00000	0.0662	3,052	1,456,229	0.21%
		46,100	1.0000	1.0000	1.00000	0.0662	3,052	1,456,229	0.21%
Shinnery	Few shrubs/high grass	46,100	1.0000	1.0000	1.00000	0.0662	3,052	1,456,229	0.21%
		46,100	1.0000	1.0000	1.00000	0.0662	3,052	1,456,229	0.21%
Shortgrass	Many shrubs/low grass	71,496	1.0000	1.0000	1.00000	0.1713	12,247	1,456,229	0.84%
		71,496	1.0000	1.0000	1.00000	0.1713	12,247	1,456,229	0.84%
Shortgrass	Many shrubs/high grass	71,496	1.0000	1.0000	1.00000	0.1713	12,247	1,456,229	0.84%
		71,496	1.0000	1.0000	1.00000	0.1713	12,247	1,456,229	0.84%
Shortgrass	Few shrubs/ low grass	71,496	1.0000	1.0000	1.00000	0.0644	4,604	1,456,229	0.32%
		71,496	1.0000	1.0000	1.00000	0.0644	4,604	1,456,229	0.32%
Shortgrass	Few shrubs/high grass	71,496	1.0000	1.0000	1.00000	0.0644	4,604	1,456,229	0.32%
		71,496	1.0000	1.0000	1.00000	0.0644	4,604	1,456,229	0.32%
Tallgrass	Few shrubs/ low grass	123,488	1.0000	1.0000	1.00000	0.0220	2,717	1,456,229	0.19%
		123,488	1.0000	1.0000	1.00000	0.0220	2,717	1,456,229	0.19%
Tallgrass	Many shrubs/low grass	123,488	1.0000	1.0000	1.00000	0.0646	7,977	1,456,229	0.55%
		123,488	1.0000	1.0000	1.00000	0.0646	7,977	1,456,229	0.55%
Summary for Breeding (17 records)							741,604		50.92%
							1,031,217		70.81%

Species/Guild Name: Lesser Prairie-Chicken

Season: Resident

Assoc Name	Condition Name	Condition		Large		Units	CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block				
CRP	Non-native	449,089	1.0000	1.0000	0.06000	0.0012	32	26,324	0.12%
		79,899	1.0000	1.0000	0.60000	0.0012	58	26,324	0.22%
CRP	Native	49,899	1.0000	1.0000	0.06000	0.0125	37	26,324	0.14%
		719,089	1.0000	1.0000	0.60000	0.0125	5,393	26,324	20.49%
Sand Sage	Low grass	928,773	1.0000	1.0000	0.44700	0.0156	6,477	26,324	24.60%
		1,096,923	1.0000	1.0000	1.00000	0.0156	17,112	26,324	65.01%
Sand Sage	High grass	48,883	1.0000	1.0000	0.44700	0.0156	341	26,324	1.30%
		57,733	1.0000	1.0000	1.00000	0.0156	901	26,324	3.42%
Shinnery	Many shrubs/low grass	46,100	1.0000	1.0000	0.60100	0.0156	432	26,324	1.64%
		46,100	1.0000	1.0000	1.00000	0.0156	719	26,324	2.73%
Shinnery	Many shrubs/high grass	46,100	1.0000	1.0000	0.60100	0.0156	432	26,324	1.64%
		46,100	1.0000	1.0000	1.00000	0.0156	719	26,324	2.73%
Shinnery	Few shrubs/low grass	46,100	1.0000	1.0000	0.60100	0.0156	432	26,324	1.64%
		46,100	1.0000	1.0000	1.00000	0.0156	719	26,324	2.73%
Shinnery	Few shrubs/high grass	46,100	1.0000	1.0000	0.60100	0.0156	432	26,324	1.64%
		46,100	1.0000	1.0000	1.00000	0.0156	719	26,324	2.73%
Summary for Resident (8 records)							8,615		32.72%
							26,340		100.06%

Species/Guild Name: Loggerhead Shrike

Season: Resident

Assoc Name	Condition Name	Condition		Large		Units	CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block				
Mesquite Savannah	Savannah	102,312	1.0000	1.0000	1.00000	0.0232	2,374	115,938	2.05%
		400,438	1.0000	1.0000	1.00000	0.0232	9,290	115,938	8.01%
Mixed Grass	Many shrubs/low grass	1,086,873	1.0000	1.0000	1.00000	0.0111	12,064	115,938	10.41%
		1,994,752	1.0000	1.0000	1.00000	0.0111	22,142	115,938	19.10%
Mixed Grass	Many shrubs/high grass	1,086,873	1.0000	1.0000	1.00000	0.0111	12,064	115,938	10.41%
		1,994,752	1.0000	1.0000	1.00000	0.0111	22,142	115,938	19.10%
Mixed Grass	Few shrubs/high grass	1,086,873	1.0000	1.0000	1.00000	0.0048	5,217	115,938	4.50%
		396,046	1.0000	1.0000	1.00000	0.0048	1,901	115,938	1.64%
Mixed Grass	Few shrubs/ low grass	1,086,873	1.0000	1.0000	1.00000	0.0048	5,217	115,938	4.50%
		396,046	1.0000	1.0000	1.00000	0.0048	1,901	115,938	1.64%

Sand Sage	Low grass	928,773	1.0000	1.0000	1.00000	0.0122	11,331	115,938	9.77%
		1,096,923	1.0000	1.0000	1.00000	0.0122	13,382	115,938	11.54%
Sand Sage	High grass	48,883	1.0000	1.0000	1.00000	0.0122	596	115,938	0.51%
		57,733	1.0000	1.0000	1.00000	0.0122	704	115,938	0.61%
Shinnery	Few shrubs/high grass	46,100	1.0000	1.0000	1.00000	0.0232	1,070	115,938	0.92%
		46,100	1.0000	1.0000	1.00000	0.0232	1,070	115,938	0.92%
Shinnery	Many shrubs/low grass	46,100	1.0000	1.0000	1.00000	0.0232	1,070	115,938	0.92%
		46,100	1.0000	1.0000	1.00000	0.0232	1,070	115,938	0.92%
Shinnery	Few shrubs/low grass	46,100	1.0000	1.0000	1.00000	0.0232	1,070	115,938	0.92%
		46,100	1.0000	1.0000	1.00000	0.0232	1,070	115,938	0.92%
Shinnery	Many shrubs/high grass	46,100	1.0000	1.0000	1.00000	0.0232	1,070	115,938	0.92%
		46,100	1.0000	1.0000	1.00000	0.0232	1,070	115,938	0.92%
Shortgrass	Many shrubs/low grass	71,496	1.0000	1.0000	1.00000	0.0096	686	115,938	0.59%
		71,496	1.0000	1.0000	1.00000	0.0096	686	115,938	0.59%
Shortgrass	Few shrubs/high grass	71,496	1.0000	1.0000	1.00000	0.0042	300	115,938	0.26%
		71,496	1.0000	1.0000	1.00000	0.0042	300	115,938	0.26%
Shortgrass	Few shrubs/ low grass	71,496	1.0000	1.0000	1.00000	0.0042	300	115,938	0.26%
		71,496	1.0000	1.0000	1.00000	0.0042	300	115,938	0.26%
Shortgrass	Many shrubs/high grass	71,496	1.0000	1.0000	1.00000	0.0096	686	115,938	0.59%
		71,496	1.0000	1.0000	1.00000	0.0096	686	115,938	0.59%
Tallgrass	Few shrubs/high grass	123,488	1.0000	1.0000	1.00000	0.0048	593	115,938	0.51%
		123,488	1.0000	1.0000	1.00000	0.0048	593	115,938	0.51%
Tallgrass	Many shrubs/high grass	123,488	1.0000	1.0000	1.00000	0.0111	1,371	115,938	1.18%
		123,488	1.0000	1.0000	1.00000	0.0111	1,371	115,938	1.18%
Tallgrass	Few shrubs/ low grass	123,488	1.0000	1.0000	1.00000	0.0048	593	115,938	0.51%
		123,488	1.0000	1.0000	1.00000	0.0048	593	115,938	0.51%
Tallgrass	Many shrubs/low grass	123,488	1.0000	1.0000	1.00000	0.0111	1,371	115,938	1.18%
		123,488	1.0000	1.0000	1.00000	0.0111	1,371	115,938	1.18%
Summary for Resident (19 records)					<i>Pre-planning Sum</i>		59,043		50.91%
					<i>Post-planning Sum</i>		81,642		70.41%

Species/Guild Name: Mississippi Kite

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Crosstimbers WoodlandNA		400,695	1.0000	0.4000	1.00000	0.0040	641	62,396	1.03%
		392,978	1.0000	0.4000	1.00000	0.0040	629	62,396	1.01%
Other	Urban/Suburban	202,882	1.0000	0.4000	1.00000	0.2312	18,763	62,396	30.07%
		202,882	1.0000	0.4000	1.00000	0.2312	18,763	62,396	30.07%
Riverine Systems	Riparian canopy - late successional w/ understory	22,295	1.0000	0.4000	1.00000	0.6937	6,186	62,396	9.91%
		132,674	1.0000	0.4000	1.00000	0.6937	36,814	62,396	59.00%
Riverine Systems	Riparian canopy - late successional w/o understory	22,295	1.0000	0.4000	1.00000	0.6937	6,186	62,396	9.91%
		22,295	1.0000	0.4000	1.00000	0.6937	6,186	62,396	9.91%
Summary for Breeding (4 records)					<i>Pre-planning Sum</i>		31,776		50.93%
					<i>Post-planning Sum</i>		62,392		99.99%

Species/Guild Name: Northern Bobwhite

Season: Resident

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Wheat	5,145,066	1.0000	1.0000	1.00000	0.0390	200,658	729,039	27.52%
		4,869,571	1.0000	1.0000	1.00000	0.0390	189,913	729,039	26.05%
Cropland	Sunflowers	0	1.0000	1.0000	1.00000	0.0390	0	729,039	0.00%
		0	1.0000	1.0000	1.00000	0.0390	0	729,039	0.00%
Cropland	Soybeans	75,143	1.0000	1.0000	1.00000	0.0390	2,931	729,039	0.40%
		71,120	1.0000	1.0000	1.00000	0.0390	2,774	729,039	0.38%
Cropland	Pasture	716,127	1.0000	1.0000	1.00000	0.0390	27,929	729,039	3.83%
		677,781	1.0000	1.0000	1.00000	0.0390	26,433	729,039	3.63%
Cropland	Sorghum	162,962	1.0000	1.0000	1.00000	0.0390	6,356	729,039	0.87%
		154,236	1.0000	1.0000	1.00000	0.0390	6,015	729,039	0.83%
Cropland	Peanuts	52,510	1.0000	1.0000	1.00000	0.0390	2,048	729,039	0.28%
		49,698	1.0000	1.0000	1.00000	0.0390	1,938	729,039	0.27%

Cropland	Hay	720,653	1.0000	1.0000	1.00000	0.0390	28,105	729,039	3.86%
		682,066	1.0000	1.0000	1.00000	0.0390	26,601	729,039	3.65%
Cropland	Alfalfa	240,821	1.0000	1.0000	1.00000	0.0390	9,392	729,039	1.29%
		227,926	1.0000	1.0000	1.00000	0.0390	8,889	729,039	1.22%
Crosstimbers Woodland	NA	400,695	1.0000	1.0000	1.00000	0.0200	8,014	729,039	1.10%
		392,978	1.0000	1.0000	1.00000	0.0200	7,860	729,039	1.08%
CRP	Native	49,899	1.0000	1.0000	1.00000	0.0960	4,790	729,039	0.66%
		719,089	1.0000	1.0000	1.00000	0.0960	69,033	729,039	9.47%
CRP	Non-native	449,089	1.0000	1.0000	1.00000	0.0960	43,113	729,039	5.91%
		79,899	1.0000	1.0000	1.00000	0.0960	7,670	729,039	1.05%
Hillside Woodland	NA	15,276	1.0000	1.0000	1.00000	0.2023	3,090	729,039	0.42%
		22,993	1.0000	1.0000	1.00000	0.2023	4,651	729,039	0.64%
Mesquite Savannah	Savannah	102,312	1.0000	1.0000	1.00000	0.2023	20,698	729,039	2.84%
		400,438	1.0000	1.0000	1.00000	0.2023	81,009	729,039	11.11%
Mesquite Savannah	Shrubland	398,236	1.0000	1.0000	1.00000	0.2023	80,563	729,039	11.05%
		100,110	1.0000	1.0000	1.00000	0.2023	20,252	729,039	2.78%
Mixed Grass	Few shrubs/ low grass	1,086,873	1.0000	1.0000	1.00000	0.0450	48,909	729,039	6.71%
		396,046	1.0000	1.0000	1.00000	0.0450	17,822	729,039	2.44%
Mixed Grass	Few shrubs/high grass	1,086,873	1.0000	1.0000	1.00000	0.1050	114,122	729,039	15.65%
		396,046	1.0000	1.0000	1.00000	0.1050	41,585	729,039	5.70%
Mixed Grass	Many shrubs/high grass	1,086,873	1.0000	1.0000	1.00000	0.0750	81,515	729,039	11.18%
		1,994,752	1.0000	1.0000	1.00000	0.0750	149,606	729,039	20.52%
Mixed Grass	Many shrubs/low grass	1,086,873	1.0000	1.0000	1.00000	0.0150	16,303	729,039	2.24%
		1,994,752	1.0000	1.0000	1.00000	0.0150	29,921	729,039	4.10%
Riverine Systems	Riparian canopy - late successional w/ understory	22,295	1.0000	1.0000	1.00000	0.0600	1,338	729,039	0.18%
		132,674	1.0000	1.0000	1.00000	0.0600	7,960	729,039	1.09%
Riverine Systems	Riparian canopy - early successional w/ understory	33,470	1.0000	1.0000	1.00000	0.0600	2,008	729,039	0.28%
		33,470	1.0000	1.0000	1.00000	0.0600	2,008	729,039	0.28%
Riverine Systems	Native riparian shrubland	8,491	1.0000	1.0000	1.00000	0.0600	509	729,039	0.07%
		61,582	1.0000	1.0000	1.00000	0.0600	3,695	729,039	0.51%
Riverine Systems	Wet meadow	337,490	1.0000	1.0000	1.00000	0.0242	8,167	729,039	1.12%
		174,020	1.0000	1.0000	1.00000	0.0242	4,211	729,039	0.58%
Sand Sage	Low grass	928,773	1.0000	1.0000	1.00000	0.0003	279	729,039	0.04%
		1,096,923	1.0000	1.0000	1.00000	0.0003	329	729,039	0.05%
Sand Sage	High grass	48,883	1.0000	1.0000	1.00000	0.0005	24	729,039	0.00%
		57,733	1.0000	1.0000	1.00000	0.0005	29	729,039	0.00%
Shinnery	Many shrubs/low grass	46,100	1.0000	1.0000	1.00000	0.0133	613	729,039	0.08%
		46,100	1.0000	1.0000	1.00000	0.0133	613	729,039	0.08%
Shinnery	Few shrubs/high grass	46,100	1.0000	1.0000	1.00000	0.0222	1,023	729,039	0.14%
		46,100	1.0000	1.0000	1.00000	0.0222	1,023	729,039	0.14%
Shinnery	Few shrubs/low grass	46,100	1.0000	1.0000	1.00000	0.0222	1,023	729,039	0.14%
		46,100	1.0000	1.0000	1.00000	0.0222	1,023	729,039	0.14%
Shinnery	Many shrubs/high grass	46,100	1.0000	1.0000	1.00000	0.0133	613	729,039	0.08%
		46,100	1.0000	1.0000	1.00000	0.0133	613	729,039	0.08%
Shortgrass	Few shrubs/ low grass	71,496	1.0000	1.0000	1.00000	0.0055	393	729,039	0.05%
		71,496	1.0000	1.0000	1.00000	0.0055	393	729,039	0.05%
Shortgrass	Many shrubs/low grass	71,496	1.0000	1.0000	1.00000	0.0165	1,180	729,039	0.16%
		71,496	1.0000	1.0000	1.00000	0.0165	1,180	729,039	0.16%
Shortgrass	Few shrubs/high grass	71,496	1.0000	1.0000	1.00000	0.0165	1,180	729,039	0.16%
		71,496	1.0000	1.0000	1.00000	0.0165	1,180	729,039	0.16%
Shortgrass	Many shrubs/high grass	71,496	1.0000	1.0000	1.00000	0.0275	1,966	729,039	0.27%
		71,496	1.0000	1.0000	1.00000	0.0275	1,966	729,039	0.27%
Tallgrass	Few shrubs/high grass	123,488	1.0000	1.0000	1.00000	0.0350	4,322	729,039	0.59%
		123,488	1.0000	1.0000	1.00000	0.0350	4,322	729,039	0.59%
Tallgrass	Few shrubs/ low grass	123,488	1.0000	1.0000	1.00000	0.0150	1,852	729,039	0.25%
		123,488	1.0000	1.0000	1.00000	0.0150	1,852	729,039	0.25%
Tallgrass	Many shrubs/low grass	123,488	1.0000	1.0000	1.00000	0.0050	617	729,039	0.08%
		123,488	1.0000	1.0000	1.00000	0.0050	617	729,039	0.08%
Tallgrass	Many shrubs/high grass	123,488	1.0000	1.0000	1.00000	0.0275	3,396	729,039	0.47%
		123,488	1.0000	1.0000	1.00000	0.0275	3,396	729,039	0.47%
Summary for Resident (36 records)					Pre-planning Sum		729,039	99.98%	

Post-planning Sum **728,382** **99.89%**

Species/Guild Name: Painted Bunting

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Crosstimbers Woodland	NA	400,695	1.0000	1.0000	1.00000	0.0700	28,049	136,522	20.55%
		392,978	1.0000	1.0000	1.00000	0.0700	27,508	136,522	20.15%
Hillside Woodland	NA	15,276	1.0000	1.0000	1.00000	0.1800	2,750	136,522	2.01%
		22,993	1.0000	1.0000	1.00000	0.1800	4,139	136,522	3.03%
Mesquite Savannah	Savannah	102,312	1.0000	1.0000	1.00000	0.1800	18,416	136,522	13.49%
		400,438	1.0000	1.0000	1.00000	0.1800	72,079	136,522	52.80%
Mesquite Savannah	Shrubland	398,236	1.0000	1.0000	1.00000	0.1800	71,682	136,522	52.51%
		100,110	1.0000	1.0000	1.00000	0.1800	18,020	136,522	13.20%
Riverine Systems	Native riparian shrubland	8,491	1.0000	1.0000	1.00000	0.3200	2,717	136,522	1.99%
		61,582	1.0000	1.0000	1.00000	0.3200	19,706	136,522	14.43%
Shinnery	Few shrubs/high grass	46,100	1.0000	1.0000	1.00000	0.0700	3,227	136,522	2.36%
		46,100	1.0000	1.0000	1.00000	0.0700	3,227	136,522	2.36%
Shinnery	Many shrubs/high grass	46,100	1.0000	1.0000	1.00000	0.0700	3,227	136,522	2.36%
		46,100	1.0000	1.0000	1.00000	0.0700	3,227	136,522	2.36%
Shinnery	Many shrubs/low grass	46,100	1.0000	1.0000	1.00000	0.0700	3,227	136,522	2.36%
		46,100	1.0000	1.0000	1.00000	0.0700	3,227	136,522	2.36%
Shinnery	Few shrubs/low grass	46,100	1.0000	1.0000	1.00000	0.0700	3,227	136,522	2.36%
		46,100	1.0000	1.0000	1.00000	0.0700	3,227	136,522	2.36%
Summary for Breeding (9 records)					Pre-planning Sum		136,522		100.00%
					Post-planning Sum		154,360		113.06%

Species/Guild Name: Red-headed Woodpecker

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Crosstimbers Woodland	NA	400,695	1.0000	1.0000	1.00000	0.0200	8,014	23,995	33.40%
		392,978	1.0000	1.0000	1.00000	0.0200	7,860	23,995	32.76%
Other	Urban/Suburban	202,882	1.0000	1.0000	1.00000	0.0502	10,185	23,995	42.45%
		202,882	1.0000	1.0000	1.00000	0.0502	10,185	23,995	42.45%
Riverine Systems	Riparian canopy - late successional w/o understory	22,295	1.0000	1.0000	1.00000	0.1300	2,898	23,995	12.08%
		22,295	1.0000	1.0000	1.00000	0.1300	2,898	23,995	12.08%
Riverine Systems	Riparian canopy - late successional w/ understory	22,295	1.0000	1.0000	1.00000	0.1300	2,898	23,995	12.08%
		132,674	1.0000	1.0000	1.00000	0.1300	17,248	23,995	71.88%
Summary for Breeding (4 records)					Pre-planning Sum		23,995		100.00%
					Post-planning Sum		38,191		159.16%

Species/Guild Name: Ring-necked Pheasant

Season: Resident

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Alfalfa	240,821	1.0000	0.3000	1.00000	0.0300	2,167	15,459	14.02%
		227,926	1.0000	0.3000	1.00000	0.0300	2,051	15,459	13.27%
Cropland	Wheat	5,145,066	1.0000	0.3000	1.00000	0.0016	2,470	15,459	15.98%
		4,869,571	1.0000	0.3000	1.00000	0.0016	2,337	15,459	15.12%
Cropland	Pasture	716,127	1.0000	0.3000	1.00000	0.0121	2,600	15,459	16.82%
		677,781	1.0000	0.3000	1.00000	0.0121	2,460	15,459	15.91%
Cropland	Sunflowers	0	1.0000	0.3000	1.00000	0.0016	0	15,459	0.00%
		0	1.0000	0.3000	1.00000	0.0016	0	15,459	0.00%
Cropland	Hay	720,653	1.0000	0.3000	1.00000	0.0121	2,616	15,459	16.92%
		682,066	1.0000	0.3000	1.00000	0.0121	2,476	15,459	16.02%
CRP	Native	49,899	1.0000	0.3000	1.00000	0.0094	141	15,459	0.91%
		719,089	1.0000	0.5628	1.00000	0.0094	3,804	15,459	24.61%
CRP	Non-native	449,089	1.0000	0.3000	1.00000	0.0094	1,266	15,459	8.19%
		79,899	1.0000	0.5628	1.00000	0.0094	423	15,459	2.74%
Other Wetlands	Moist-soil unit	7,013	1.0000	0.3000	1.00000	0.1101	232	15,459	1.50%
		15,770	1.0000	0.3000	1.00000	0.1101	521	15,459	3.37%

Other Wetlands	Emergent marsh	1,760	1.0000	0.3000	1.00000	0.1101	58	15,459	0.38%
		1,761	1.0000	0.3000	1.00000	0.1101	58	15,459	0.38%
Playa	Dry	1,754	1.0000	1.0000	1.00000	0.1101	193	15,459	1.25%
		1,754	1.0000	1.0000	1.00000	0.1101	193	15,459	1.25%
Riverine Systems	Wet meadow	337,490	1.0000	0.1000	1.00000	0.1101	3,716	15,459	24.04%
		174,020	1.0000	0.1000	1.00000	0.1101	1,916	15,459	12.39%
Summary for Resident (11 records)					Pre-planning Sum		15,459	100.00%	
					Post-planning Sum		16,239	105.04%	

Species/Guild Name: Scaled Quail

Season: Resident

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Mesquite Savannah	Savannah	102,312	0.0500	1.0000	1.00000	0.0135	69	599	11.52%
		400,438	0.0500	1.0000	1.00000	0.0135	270	599	45.08%
Mesquite Savannah	Shrubland	398,236	0.0500	1.0000	1.00000	0.0045	90	599	15.03%
		100,110	0.0500	1.0000	1.00000	0.0045	23	599	3.84%
Sand Sage	Low grass	928,773	0.0500	1.0000	1.00000	0.0090	418	599	69.78%
		1,096,923	0.0500	1.0000	1.00000	0.0090	494	599	82.47%
Sand Sage	High grass	48,883	0.0500	1.0000	1.00000	0.0090	22	599	3.67%
		57,733	0.0500	1.0000	1.00000	0.0090	26	599	4.34%
Summary for Resident (4 records)					Pre-planning Sum		599	100.00%	
					Post-planning Sum		813	135.72%	

Species/Guild Name: Scissor-tailed Flycatcher

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Hay	720,653	1.0000	1.0000	1.00000	0.0123	8,864	172,241	5.15%
		682,066	1.0000	1.0000	1.00000	0.0123	8,389	172,241	4.87%
Cropland	Pasture	716,127	1.0000	1.0000	1.00000	0.0123	8,808	172,241	5.11%
		677,781	1.0000	1.0000	1.00000	0.0123	8,337	172,241	4.84%
Cropland	Alfalfa	240,821	1.0000	1.0000	1.00000	0.0123	2,962	172,241	1.72%
		227,926	1.0000	1.0000	1.00000	0.0123	2,803	172,241	1.63%
Crosstimbers Woodland	NA	400,695	1.0000	1.0000	1.00000	0.0400	16,028	172,241	9.31%
		392,978	1.0000	1.0000	1.00000	0.0400	15,719	172,241	9.13%
Mesquite Savannah	Savannah	102,312	1.0000	1.0000	1.00000	0.0620	6,343	172,241	3.68%
		400,438	1.0000	1.0000	1.00000	0.0620	24,827	172,241	14.41%
Mixed Grass	Few shrubs/ low grass	1,086,873	1.0000	1.0000	1.00000	0.0062	6,739	172,241	3.91%
		396,046	1.0000	1.0000	1.00000	0.0062	2,455	172,241	1.43%
Mixed Grass	Few shrubs/high grass	1,086,873	1.0000	1.0000	1.00000	0.0062	6,739	172,241	3.91%
		396,046	1.0000	1.0000	1.00000	0.0062	2,455	172,241	1.43%
Other	small roads	383,430	1.0000	1.0000	1.00000	0.0400	15,337	172,241	8.90%
		383,430	1.0000	1.0000	1.00000	0.0400	15,337	172,241	8.90%
Other	Urban/Suburban	202,882	1.0000	1.0000	1.00000	0.0200	4,058	172,241	2.36%
		202,882	1.0000	1.0000	1.00000	0.0200	4,058	172,241	2.36%
Riverine Systems	Riparian canopy - early successional w/ understory	33,470	1.0000	1.0000	1.00000	0.0400	1,339	172,241	0.78%
		33,470	1.0000	1.0000	1.00000	0.0400	1,339	172,241	0.78%
Riverine Systems	Riparian canopy - early successional w/o understor	33,470	1.0000	1.0000	1.00000	0.0400	1,339	172,241	0.78%
		33,470	1.0000	1.0000	1.00000	0.0400	1,339	172,241	0.78%
Riverine Systems	Riparian canopy - late successional w/ understory	22,295	1.0000	1.0000	1.00000	0.0400	892	172,241	0.52%
		132,674	1.0000	1.0000	1.00000	0.0400	5,307	172,241	3.08%
Riverine Systems	Riparian canopy - late successional w/o understory	22,295	1.0000	1.0000	1.00000	0.0400	892	172,241	0.52%
		22,295	1.0000	1.0000	1.00000	0.0400	892	172,241	0.52%
Shinnery	Few shrubs/high grass	46,100	1.0000	1.0000	1.00000	0.0400	1,844	172,241	1.07%
		46,100	1.0000	1.0000	1.00000	0.0400	1,844	172,241	1.07%
Shinnery	Many shrubs/low grass	46,100	1.0000	1.0000	1.00000	0.0400	1,844	172,241	1.07%
		46,100	1.0000	1.0000	1.00000	0.0400	1,844	172,241	1.07%
Shinnery	Many shrubs/high grass	46,100	1.0000	1.0000	1.00000	0.0400	1,844	172,241	1.07%
		46,100	1.0000	1.0000	1.00000	0.0400	1,844	172,241	1.07%
Shinnery	Few shrubs/low grass	46,100	1.0000	1.0000	1.00000	0.0400	1,844	172,241	1.07%
		46,100	1.0000	1.0000	1.00000	0.0400	1,844	172,241	1.07%

Summary for Breeding (17 records)	<i>Pre-planning Sum</i>	87,716	50.92%
	<i>Post-planning Sum</i>	100,633	58.42%

Species/Guild Name: Snowy Plover

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Other Wetlands	Saline	10,633	1.0000	1.0000	1.00000	0.0585	622	660	94.24%
		10,634	1.0000	1.0000	1.00000	0.0585	622	660	94.24%
Riverine Systems	Unvegetated sandbar	6,409	1.0000	1.0000	1.00000	0.0059	38	660	5.76%
		6,409	1.0000	1.0000	1.00000	0.0059	38	660	5.76%
Summary for Breeding (2 records)							660		100.00%
							660		100.00%

Species/Guild Name: Swainson's Hawk

Season: Breeding

Assoc Name	Condition Name	Condition Acres	Avail.	Suit.	Large Block	Units	CC	Goal	% of Goal
Cropland	Pasture	716,127	1.0000	1.0000	1.00000	0.0005	358	13,787	2.60%
		677,781	1.0000	1.0000	1.00000	0.0005	339	13,787	2.46%
Cropland	Wheat	5,145,066	1.0000	1.0000	1.00000	0.0005	2,573	13,787	18.66%
		4,869,571	1.0000	1.0000	1.00000	0.0005	2,435	13,787	17.66%
Cropland	Hay	720,653	1.0000	1.0000	1.00000	0.0005	360	13,787	2.61%
		682,066	1.0000	1.0000	1.00000	0.0005	341	13,787	2.47%
Cropland	Alfalfa	240,821	1.0000	1.0000	1.00000	0.0005	120	13,787	0.87%
		227,926	1.0000	1.0000	1.00000	0.0005	114	13,787	0.83%
Mesquite Savannah	Savannah	102,312	1.0000	1.0000	1.00000	0.0003	31	13,787	0.22%
		400,438	1.0000	1.0000	1.00000	0.0003	120	13,787	0.87%
Mixed Grass	Few shrubs/ low grass	1,086,873	1.0000	1.0000	1.00000	0.0006	652	13,787	4.73%
		396,046	1.0000	1.0000	1.00000	0.0006	238	13,787	1.73%
Mixed Grass	Many shrubs/high grass	1,086,873	1.0000	1.0000	1.00000	0.0003	326	13,787	2.36%
		1,994,752	1.0000	1.0000	1.00000	0.0003	598	13,787	4.34%
Mixed Grass	Few shrubs/high grass	1,086,873	1.0000	1.0000	1.00000	0.0006	652	13,787	4.73%
		396,046	1.0000	1.0000	1.00000	0.0006	238	13,787	1.73%
Mixed Grass	Many shrubs/low grass	1,086,873	1.0000	1.0000	1.00000	0.0003	326	13,787	2.36%
		1,994,752	1.0000	1.0000	1.00000	0.0003	598	13,787	4.34%
Riverine Systems	Wet meadow	337,490	1.0000	1.0000	1.00000	0.0004	135	13,787	0.98%
		174,020	1.0000	1.0000	1.00000	0.0004	70	13,787	0.51%
Riverine Systems	Riparian canopy - late successional w/o understory	22,295	1.0000	1.0000	1.00000	0.0004	9	13,787	0.07%
		22,295	1.0000	1.0000	1.00000	0.0004	9	13,787	0.07%
Riverine Systems	Riparian canopy - late successional w/ understory	22,295	1.0000	1.0000	1.00000	0.0004	9	13,787	0.07%
		132,674	1.0000	1.0000	1.00000	0.0004	53	13,787	0.38%
Sand Sage	Low grass	928,773	1.0000	1.0000	1.00000	0.0010	929	13,787	6.74%
		1,096,923	1.0000	1.0000	1.00000	0.0010	1,097	13,787	7.96%
Sand Sage	High grass	48,883	1.0000	1.0000	1.00000	0.0010	49	13,787	0.36%
		57,733	1.0000	1.0000	1.00000	0.0010	58	13,787	0.42%
Shinnery	Few shrubs/high grass	46,100	1.0000	1.0000	1.00000	0.0010	46	13,787	0.33%
		46,100	1.0000	1.0000	1.00000	0.0010	46	13,787	0.33%
Shinnery	Few shrubs/low grass	46,100	1.0000	1.0000	1.00000	0.0010	46	13,787	0.33%
		46,100	1.0000	1.0000	1.00000	0.0010	46	13,787	0.33%
Shortgrass	Few shrubs/ low grass	71,496	1.0000	1.0000	1.00000	0.0018	129	13,787	0.94%
		71,496	1.0000	1.0000	1.00000	0.0018	129	13,787	0.94%
Shortgrass	Many shrubs/low grass	71,496	1.0000	1.0000	1.00000	0.0010	71	13,787	0.51%
		71,496	1.0000	1.0000	1.00000	0.0010	71	13,787	0.51%
Shortgrass	Many shrubs/high grass	71,496	1.0000	1.0000	1.00000	0.0010	71	13,787	0.51%
		71,496	1.0000	1.0000	1.00000	0.0010	71	13,787	0.51%
Shortgrass	Few shrubs/high grass	71,496	1.0000	1.0000	1.00000	0.0018	129	13,787	0.94%
		71,496	1.0000	1.0000	1.00000	0.0018	129	13,787	0.94%
Summary for Breeding (20 records)							7,021		50.92%
							6,800		49.31%

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

Assoc Name	Condition Name	Condition			Large		Units	CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block					
Cropland	Pasture	716,127	0.5000	1.0000	1.00000	0.0046	1,647	12,194	13.51%	
		677,781	0.5000	1.0000	1.00000	0.0046	1,559	12,194	12.78%	
CRP	Native	49,899	0.5000	1.0000	1.00000	0.0013	32	12,194	0.26%	
		719,089	0.5000	1.0000	1.00000	0.0013	467	12,194	3.83%	
Mixed Grass	Few shrubs/ low grass	1,086,873	0.5000	1.0000	1.00000	0.0040	2,174	12,194	17.83%	
		396,046	0.5000	1.0000	1.00000	0.0040	792	12,194	6.49%	
Mixed Grass	Few shrubs/high grass	1,086,873	0.5000	1.0000	1.00000	0.0057	3,098	12,194	25.41%	
		396,046	0.5000	1.0000	1.00000	0.0057	1,129	12,194	9.26%	
Riverine Systems	Wet meadow	337,490	0.7000	1.0000	1.00000	0.0074	1,748	12,194	14.33%	
		174,020	0.7000	1.0000	1.00000	0.0074	901	12,194	7.39%	
Shortgrass	Many shrubs/high grass	71,496	0.7000	1.0000	1.00000	0.0016	80	12,194	0.66%	
		71,496	0.7000	1.0000	1.00000	0.0016	80	12,194	0.66%	
Shortgrass	Few shrubs/high grass	71,496	0.7000	1.0000	1.00000	0.0016	80	12,194	0.66%	
		71,496	0.7000	1.0000	1.00000	0.0016	80	12,194	0.66%	
Tallgrass	Few shrubs/ low grass	123,488	1.0000	1.0000	1.00000	0.0125	1,544	12,194	12.66%	
		123,488	1.0000	1.0000	1.00000	0.0125	1,544	12,194	12.66%	
Tallgrass	Few shrubs/high grass	123,488	1.0000	1.0000	1.00000	0.0145	1,791	12,194	14.69%	
		123,488	1.0000	1.0000	1.00000	0.0145	1,791	12,194	14.69%	
Summary for Breeding (9 records)					Pre-planning Sum		12,194		100.00%	
					Post-planning Sum		8,343		68.41%	

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

Assoc Name	Condition Name	Condition			Large		Units	CC	Goal	% of Goal
		Acres	Avail.	Suit.	Block					
Cropland	Hay	720,653	1.0000	1.0000	1.00000	0.0010	721	326,548	0.22%	
		682,066	1.0000	1.0000	1.00000	0.0010	682	326,548	0.21%	
Cropland	Pasture	716,127	1.0000	1.0000	1.00000	0.0010	716	326,548	0.22%	
		677,781	1.0000	1.0000	1.00000	0.0010	678	326,548	0.21%	
Cropland	Alfalfa	240,821	1.0000	1.0000	1.00000	0.0010	241	326,548	0.07%	
		227,926	1.0000	1.0000	1.00000	0.0010	228	326,548	0.07%	
CRP	Non-native	449,089	1.0000	1.0000	1.00000	0.0200	8,982	326,548	2.75%	
		79,899	1.0000	1.0000	1.00000	0.0200	1,598	326,548	0.49%	
CRP	Native	49,899	1.0000	1.0000	1.00000	0.0200	998	326,548	0.31%	
		719,089	1.0000	1.0000	1.00000	0.0200	14,382	326,548	4.40%	
Mesquite Savannah	Shrubland	398,236	1.0000	1.0000	1.00000	0.0153	6,093	326,548	1.87%	
		100,110	1.0000	1.0000	1.00000	0.0153	1,532	326,548	0.47%	
Mesquite Savannah	Savannah	102,312	1.0000	1.0000	1.00000	0.0215	2,200	326,548	0.67%	
		400,438	1.0000	1.0000	1.00000	0.0215	8,609	326,548	2.64%	
Mixed Grass	Many shrubs/low grass	1,086,873	1.0000	1.0000	1.00000	0.0153	16,629	326,548	5.09%	
		1,994,752	1.0000	1.0000	1.00000	0.0153	30,520	326,548	9.35%	
Mixed Grass	Few shrubs/ low grass	1,086,873	1.0000	1.0000	1.00000	0.0215	23,368	326,548	7.16%	
		396,046	1.0000	1.0000	1.00000	0.0215	8,515	326,548	2.61%	
Mixed Grass	Many shrubs/high grass	1,086,873	1.0000	1.0000	1.00000	0.0153	16,629	326,548	5.09%	
		1,994,752	1.0000	1.0000	1.00000	0.0153	30,520	326,548	9.35%	
Mixed Grass	Few shrubs/high grass	1,086,873	1.0000	1.0000	1.00000	0.0215	23,368	326,548	7.16%	
		396,046	1.0000	1.0000	1.00000	0.0215	8,515	326,548	2.61%	
Other	small roads	383,430	1.0000	1.0000	1.00000	0.0200	7,669	326,548	2.35%	
		383,430	1.0000	1.0000	1.00000	0.0200	7,669	326,548	2.35%	
Other	Urban/Suburban	202,882	1.0000	1.0000	1.00000	0.0858	17,407	326,548	5.33%	
		202,882	1.0000	1.0000	1.00000	0.0858	17,407	326,548	5.33%	
Riverine Systems	Native riparian shrubland	8,491	1.0000	1.0000	1.00000	0.0200	170	326,548	0.05%	
		61,582	1.0000	1.0000	1.00000	0.0200	1,232	326,548	0.38%	
Riverine Systems	Riparian canopy - late successional w/o understory	22,295	1.0000	1.0000	1.00000	0.0200	446	326,548	0.14%	
		22,295	1.0000	1.0000	1.00000	0.0200	446	326,548	0.14%	
Riverine Systems	Riparian canopy - early successional w/ understory	33,470	1.0000	1.0000	1.00000	0.0200	669	326,548	0.20%	
		33,470	1.0000	1.0000	1.00000	0.0200	669	326,548	0.20%	
Riverine Systems	Riparian canopy - late	22,295	1.0000	1.0000	1.00000	0.0200	446	326,548	0.14%	

	successional w/ understory	132,674	1.0000	1.0000	1.00000	0.0200	2,653	326,548	0.81%
Riverine Systems	Wet meadow	337,490	1.0000	1.0000	1.00000	0.0200	6,750	326,548	2.07%
		174,020	1.0000	1.0000	1.00000	0.0200	3,480	326,548	1.07%
Riverine Systems	Riparian canopy - early	33,470	1.0000	1.0000	1.00000	0.0200	669	326,548	0.20%
	successional w/o understor	33,470	1.0000	1.0000	1.00000	0.0200	669	326,548	0.20%
Sand Sage	High grass	48,883	1.0000	1.0000	1.00000	0.0153	748	326,548	0.23%
		57,733	1.0000	1.0000	1.00000	0.0153	883	326,548	0.27%
Sand Sage	Low grass	928,773	1.0000	1.0000	1.00000	0.0153	14,210	326,548	4.35%
		1,096,923	1.0000	1.0000	1.00000	0.0153	16,783	326,548	5.14%
Shinnery	Few shrubs/low grass	46,100	1.0000	1.0000	1.00000	0.0153	705	326,548	0.22%
		46,100	1.0000	1.0000	1.00000	0.0153	705	326,548	0.22%
Shinnery	Many shrubs/high grass	46,100	1.0000	1.0000	1.00000	0.0153	705	326,548	0.22%
		46,100	1.0000	1.0000	1.00000	0.0153	705	326,548	0.22%
Shinnery	Few shrubs/high grass	46,100	1.0000	1.0000	1.00000	0.0153	705	326,548	0.22%
		46,100	1.0000	1.0000	1.00000	0.0153	705	326,548	0.22%
Shinnery	Many shrubs/low grass	46,100	1.0000	1.0000	1.00000	0.0153	705	326,548	0.22%
		46,100	1.0000	1.0000	1.00000	0.0153	705	326,548	0.22%
Shortgrass	Many shrubs/low grass	71,496	1.0000	1.0000	1.00000	0.0153	1,094	326,548	0.34%
		71,496	1.0000	1.0000	1.00000	0.0153	1,094	326,548	0.34%
Shortgrass	Few shrubs/ low grass	71,496	1.0000	1.0000	1.00000	0.0215	1,537	326,548	0.47%
		71,496	1.0000	1.0000	1.00000	0.0215	1,537	326,548	0.47%
Shortgrass	Few shrubs/high grass	71,496	1.0000	1.0000	1.00000	0.0215	1,537	326,548	0.47%
		71,496	1.0000	1.0000	1.00000	0.0215	1,537	326,548	0.47%
Shortgrass	Many shrubs/high grass	71,496	1.0000	1.0000	1.00000	0.0153	1,094	326,548	0.34%
		71,496	1.0000	1.0000	1.00000	0.0153	1,094	326,548	0.34%
Tallgrass	Many shrubs/low grass	123,488	1.0000	1.0000	1.00000	0.0153	1,889	326,548	0.58%
		123,488	1.0000	1.0000	1.00000	0.0153	1,889	326,548	0.58%
Tallgrass	Few shrubs/high grass	123,488	1.0000	1.0000	1.00000	0.0215	2,655	326,548	0.81%
		123,488	1.0000	1.0000	1.00000	0.0215	2,655	326,548	0.81%
Tallgrass	Few shrubs/ low grass	123,488	1.0000	1.0000	1.00000	0.0215	2,655	326,548	0.81%
		123,488	1.0000	1.0000	1.00000	0.0215	2,655	326,548	0.81%
Tallgrass	Many shrubs/high grass	123,488	1.0000	1.0000	1.00000	0.0153	1,889	326,548	0.58%
		123,488	1.0000	1.0000	1.00000	0.0153	1,889	326,548	0.58%
Summary for Breeding (33 records)							166,299		50.91%
							174,840		53.53%

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	4,323	4,323	0
Cropland	Soybeans	75,143	71,120	-4,023
Cropland	Peanuts	52,510	49,698	-2,812
Cropland	Sod farm	4,527	4,284	-243
Cropland	Corn	51,605	48,841	-2,764
Cropland	Sorghum	162,962	154,236	-8,726
Cropland	Wheat	5,145,066	4,869,571	-275,495
Cropland	Alfalfa	240,821	227,926	-12,895
Cropland	Pasture	716,127	677,781	-38,346
Cropland	Sunflowers	0	0	0
Cropland	Hay	720,653	682,066	-38,587
Cropland	Other	1,884,019	1,783,139	-100,880
Crosstimbers Woodland	NA	400,695	392,978	-7,717
CRP	Native	49,899	719,089	669,190
CRP	Non-native	449,089	79,899	-369,190
Forest/Woodland (upland)	Eastern Redcedar	434,994	0	-434,994
Hillside Woodland	NA	15,276	22,993	7,717
Mesquite Savannah	Savannah	102,312	400,438	298,126
Mesquite Savannah	Shrubland	398,236	100,110	-298,126
Mixed Grass	Few shrubs/high grass	1,086,873	396,046	-690,827
Mixed Grass	Many shrubs/low grass	1,086,873	1,994,752	907,879
Mixed Grass	Many shrubs/high grass	1,086,873	1,994,752	907,879
Mixed Grass	PD town	0	0	0
Mixed Grass	Few shrubs/ low grass	1,086,873	396,046	-690,827
Other	Urban/Suburban	202,882	202,882	0
Other	small roads	383,430	383,430	0
Other	4-lane roads	33,783	33,783	0
Other	Other	2,053	2,053	0
Other Wetlands	Moist-soil unit	7,013	15,770	8,757
Other Wetlands	Saline	10,633	10,634	1
Other Wetlands	Emergent marsh	1,760	1,761	1
Playa	Wet pit only	117	117	0
Playa	Wet	468	468	0
Playa	Dry	1,754	1,754	0
Reservoirs Lakes Ponds	Freshwater lake	168	168	0
Reservoirs Lakes Ponds	Stock pond	61,970	61,970	0
Reservoirs Lakes Ponds	Reservoir	102,604	102,604	0
Reservoirs Lakes Ponds	Lagoon	3,298	3,298	0
Reservoirs Lakes Ponds	Pit	219	219	0
Riverine Systems	Unvegetated sandbar	6,409	6,409	0
Riverine Systems	Riparian canopy - early	33,470	33,470	0
Riverine Systems	Riparian canopy - late	22,295	22,295	0
Riverine Systems	Riparian canopy - early	33,470	33,470	0
Riverine Systems	Riparian canopy - late	22,295	132,674	110,379
Riverine Systems	Floodplain marsh	493	493	0
Riverine Systems	Native riparian shrubland	8,491	61,582	53,091
Riverine Systems	River channel	83,373	83,373	0
Riverine Systems	Warmwater slough	0	0	0
Riverine Systems	Wet meadow	337,490	174,020	-163,470
Riverine Systems	Exotic riparian shrubland	0	0	0
Sand Sage	Low grass	928,773	1,096,923	168,150

Sand Sage	High grass	48,883	57,733	8,850
Shinnery	Many shrubs/low grass	46,100	46,100	0
Shinnery	Few shrubs/high grass	46,100	46,100	0
Shinnery	Few shrubs/low grass	46,100	46,100	0
Shinnery	Many shrubs/high grass	46,100	46,100	0
Shortgrass	Few shrubs/ low grass	71,496	71,496	0
Shortgrass	Many shrubs/low grass	71,496	71,496	0
Shortgrass	Many shrubs/high grass	71,496	71,496	0
Shortgrass	Few shrubs/high grass	71,496	71,496	0
Tallgrass	Few shrubs/high grass	123,488	123,488	0
Tallgrass	Many shrubs/low grass	123,488	123,488	0
Tallgrass	Many shrubs/high grass	123,488	123,488	0
Tallgrass	Few shrubs/ low grass	123,488	123,488	0
	Sum	18,556,791	18,557,679	

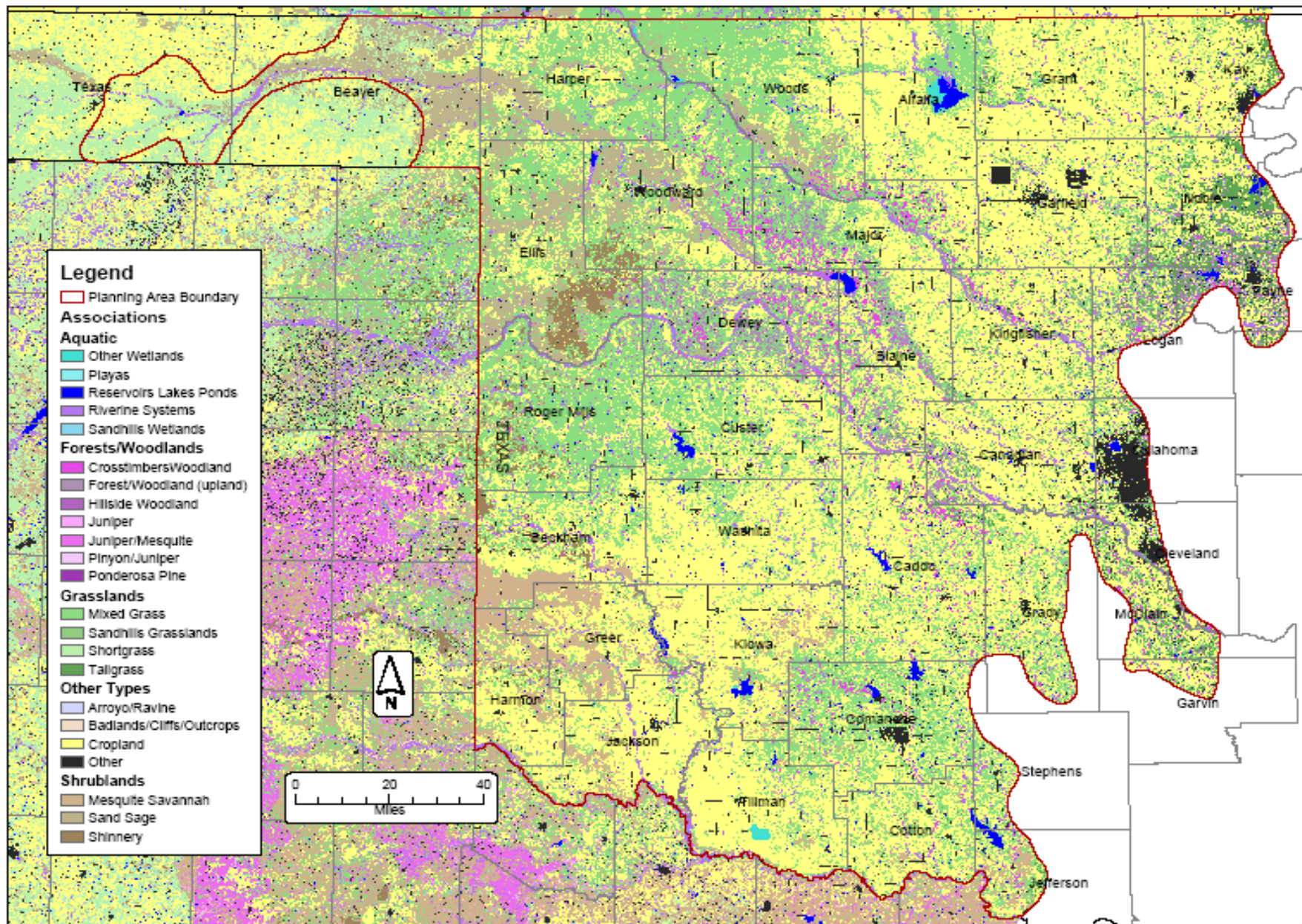


Figure 1. Bird habitat associations for the Central Mixed-grass Prairie Bird Conservation Region of Oklahoma.