

The BCR 18 part of Colorado contains 28,025,539 acres and is dominated by 11,226,629 acres of shortgrass prairies that provide habitat for declining prairie birds such as: Long-billed Curlew, Lark Bunting, Grasshopper Sparrow, Cassin's Sparrow and McCown's Longspur. Additionally, prairie dog towns support Mountain Plovers and Burrowing Owls. This area of Colorado also has the largest amounts (2,134,789 acres) of Sand Sage Prairie in the JV that support many grassland species but especially Greater and Lesser Prairie-Chicken, and Scaled Quail.

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

Habitat assessments and modeling suggest that waterfowl population objectives (foraging use-days) can be supported on the available wetland habitats, but that only about 25% of shorebird population objectives (also foraging use-days) can be supported.

To reach an average of 100% of population objective for priority bird species, we recommend the changes specified in Table 1 under "Optimal". Specifically, PLJV recommends:

1. Increase the amount of protected habitats especially playas, shortgrass and sand sage prairie.
2. Waterfowl habitat conservation efforts should emphasize protection and enhancement of existing habitats, as a hedge against future habitat declines, including buffering all playas in cropland, and restoring and enhancing river flows.
3. Migratory shorebird habitat conservation efforts should be directed at providing habitat to support 1,350,477 additional foraging use-days, which is the current shortfall. This could be done by converting 6,524 acres of playas to moist-soil units, and managing for optimum shorebird foraging suitability (mudflats and very shallow water with minimal emergent cover). This strategy is reflected in the table below (under "Other Wetlands:Moist-soil unit"). Because only a small portion of existing wetland habitat is suitable for foraging shorebirds (too deep, too densely vegetated, etc.), alternative conservation strategies could involve improving suitability of existing wetlands for foraging shorebirds through management actions such as grazing, brush removal, water level management, etc. For example, if the suitability of the existing habitat for migratory shorebirds could be quadrupled, the population goal would nearly be met. However, this strategy requires management of more acres than the strategy described above.
4. Encourage the elimination of invasive exotics, such as salt cedar, in riparian areas in conjunction with native replanting. Increase the percentage of riparian canopy forest by converting from 66,000 exotic shrubland acres, targeting the Arkansas River valley and tributaries for Lewis's Woodpecker.
5. Manage at least 60% of ponderosa pine forest through regular low-intensity cool burns.
6. Increase the acreage of large blocks of shortgrass to 816,000 acres focusing first on counties north of the S. Platte and central eastern CO (such as Cheyenne and Kiowa Cos) for Long-billed Curlew.
7. Increase the large block acreage of sand sage by 1,390,000 acres, especially in Baca, Yuma, and Logan counties and areas immediately south of the Big Sandy and Arkansas rivers in the southeastern quadrant of the state. Some of this can be done through CRP. This should increase the availability of habitat for both Lesser and Greater Prairie-Chicken.
7. Ensure all CRP is planted to native and area appropriate grasses and forbs. Include shrubs in the mixture. Near Sand Sage areas plant mixed grass species with shrubs and legumes (native preferably) in Shortgrass areas use blue grama and buffalo grass. Consider a program which replants with native grasses in reenrolled CRP fields. Including all CRP programs add 273,266 acres of CRP. Where possible, fields, which are adjacent to

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Area Acres= 28,025,540

native habitat, should be enrolled in CRP.

8. Encourage maximum enrollment in Farm Bill programs to buffer playas and/or increase block size of native grasslands. Consider programs not beholden to the CRP county cap.

9. Maintain existing acres of prairie-dogs. In order to meet objectives for Burrowing Owl and Mountain Plover add 57,600 acres of prairie dogs.

10. Protect known colonial waterbird colonies and areas where marsh birds breed, especially known Black Rail breeding areas in riparian marsh along the Arkansas River.

Badlands/Cliffs/Outcrops **Acres: 21,617** **Post Program Acres: 0** **Optimal Acres: 0**

<i>Condition</i>	<i>% of Assoc.</i>	<i>Condition Acres</i>	<i>Optimal % of Assoc.</i>	<i>Optimal Acres</i>
NA				

Cropland
10,071,763 **Acres: 10,345,029** **Post Program Acres: 10,071,763** **Optimal Acres:**

<i>Condition</i>	<i>% of Assoc.</i>	<i>Condition Acres</i>	<i>Optimal % of Assoc.</i>	<i>Optimal Acres</i>
Other	0.71700			
Sunflowers	0.00800	82,760	0.008	80,574
Peanuts	0.00000	0	0	0
Wheat	0.14200	1,468,994	0.142	1,430,190
Soybeans	0.00000	0	0	0
Alfalfa	0.02200	227,591	0.022	221,579
Corn	0.06900	713,807	0.069	694,952
Pasture	0.00000	0	0	0
Millet	0.00000	0	0	0
Sorghum	0.03200	331,041	0.032	322,296
Hay	0.01000	103,450	0.01	100,718
Fallow	0.00000	0	0	0

CRP (large block)
0 **Acres: 0** **Post Program Acres: 0** **Optimal Acres:**

<i>Condition</i>	<i>% of Assoc.</i>	<i>Condition Acres</i>	<i>Optimal % of Assoc.</i>	<i>Optimal Acres</i>
Non-native	0.90000	0	0.9	0
Native	0.10000	0	0.1	0

CRP (small block)
2,643,561 **Acres: 2,370,295** **Post Program Acres: 2,643,561** **Optimal Acres:**

<i>Condition</i>	<i>% of Assoc.</i>	<i>Condition Acres</i>	<i>Optimal % of Assoc.</i>	<i>Optimal Acres</i>
Native	0.10000	237,030	0.1	264,356
Non-native	0.90000	2,133,266	0.9	2,379,205

Mixed Grass (large block)
10,000 **Acres: 10,000** **Post Program Acres: 10,000** **Optimal Acres:**

<i>Condition</i>	<i>% of Assoc.</i>	<i>Condition Acres</i>	<i>Optimal % of Assoc.</i>	<i>Optimal Acres</i>
Unmanaged/no-mod grazing	0.25000	2,500	0.25	2,500
Unmanaged/mod-heavy grazing	0.25000	2,500	0.25	2,500
Managed/no-mod grazing	0.25000	2,500	0.25	2,500
Managed/mod-heavy grazing	0.25000	2,500	0.25	2,500

Mixed Grass (small block)
17,670 **Acres: 17,670** **Post Program Acres: 17,670** **Optimal Acres:**

<i>Condition</i>	<i>% of Assoc.</i>	<i>Condition Acres</i>	<i>Optimal % of Assoc.</i>	<i>Optimal Acres</i>
Managed/mod-heavy grazing	0.25000	4,418	0.25	4,418
Unmanaged/no-mod grazing	0.25000	4,418	0.25	4,418
Managed/no-mod grazing	0.25000	4,418	0.25	4,418
Unmanaged/mod-heavy grazing	0.25000	4,418	0.25	4,418

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Other 0 Acres: 1,874,448 Post Program Acres: 0 Optimal Acres:

<i>Condition</i>	<i>% of Assoc.</i>	<i>Condition Acres</i>	<i>Optimal % of Assoc.</i>	<i>Optimal Acres</i>
NA				

Other Wetlands 8,285 Acres: 1,761 Post Program Acres: 1,761 Optimal Acres:

<i>Condition</i>	<i>% of Assoc.</i>	<i>Condition Acres</i>	<i>Optimal % of Assoc.</i>	<i>Optimal Acres</i>
Moist-soil unit	0.00000	0	0.78745	6,524
Saline	0.00000	0	0	0
Emergent marsh	1.00000	1,761	0.21255	1,761

Pinyon/Juniper 773,753 Acres: 773,753 Post Program Acres: 773,753 Optimal Acres:

<i>Condition</i>	<i>% of Assoc.</i>	<i>Condition Acres</i>	<i>Optimal % of Assoc.</i>	<i>Optimal Acres</i>
NA	1.00000	773,753	1	773,753

Playa 15,797 Acres: 22,321 Post Program Acres: 22,321 Optimal Acres:

<i>Condition</i>	<i>% of Assoc.</i>	<i>Condition Acres</i>	<i>Optimal % of Assoc.</i>	<i>Optimal Acres</i>
Dry	0.85000	18,973	0.78806	12,449
Wet pit only	0.06000	1,339	0.08476	1,339
Wet	0.09000	2,009	0.12718	2,009

Ponderosa Pine 116,987 Acres: 116,987 Post Program Acres: 116,987 Optimal Acres:

<i>Condition</i>	<i>% of Assoc.</i>	<i>Condition Acres</i>	<i>Optimal % of Assoc.</i>	<i>Optimal Acres</i>
Managed	0.02000	2,340	0.6	70,192
Unmanaged	0.98000	114,647	0.4	46,795

Reservoirs Lakes Ponds 190,099 Acres: 190,099 Post Program Acres: 190,099 Optimal Acres:

<i>Condition</i>	<i>% of Assoc.</i>	<i>Condition Acres</i>	<i>Optimal % of Assoc.</i>	<i>Optimal Acres</i>
Stock pond	0.37600	71,477	0.376	71,477
Pit	0.02000			
Lagoon	0.02000	3,802	0.02	3,802
Reservoir	0.30600	58,170	0.306	58,170
Freshwater lake	0.27800	52,848	0.278	52,848
Saline lake	0.00000	0	0	0

Riverine Systems 495,329 Acres: 495,329 Post Program Acres: 495,329 Optimal Acres:

<i>Condition</i>	<i>% of Assoc.</i>	<i>Condition Acres</i>	<i>Optimal % of Assoc.</i>	<i>Optimal Acres</i>
Riparian canopy - early successional w/o understory	0.15000	74,299	0.15	74,299
Riparian canopy - early successional w/ understory	0.16500	81,729	0.165	81,729
Riparian canopy - late successional w/o understory	0.19000	94,113	0.19	94,113
Warmwater slough	0.01000	4,953	0.01	4,953
Wet meadow	0.03000	14,860	0.03	14,860
Floodplain marsh	0.01000	4,953	0.01	4,953
Riparian shrubland	0.24000	118,879	0.11	54,486
River channel	0.05000	24,766	0.05	24,766
Unvegetated sandbar	0.00500	2,477	0.005	2,477
Riparian canopy - late successional w/ understory	0.15000	74,299	0.28	138,692

Sand Sage (large block) 1,390,000 Acres: 0 Post Program Acres: 0 Optimal Acres:

<i>Condition</i>	<i>% of Assoc.</i>	<i>Condition Acres</i>	<i>Optimal % of Assoc.</i>	<i>Optimal Acres</i>
Not grazed	0.05000	0	0.05	69,500

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Grazed 0.95000 0

0.95 1,320,500

Sand Sage (small block) Acres: 2,142,048 Post Program Acres: 2,142,048 Optimal Acres: 752,048

<i>Condition</i>	<i>% of Assoc.</i>	<i>Condition Acres</i>	<i>Optimal % of Assoc.</i>	<i>Optimal Acres</i>
Grazed	0.95000	2,034,946	0.95	714,446
Not grazed	0.05000	107,102	0.05	37,602

Shortgrass (large block) Acres: 4,732,701 Post Program Acres: 4,732,701 Optimal Acres: 5,549,201

<i>Condition</i>	<i>% of Assoc.</i>	<i>Condition Acres</i>	<i>Optimal % of Assoc.</i>	<i>Optimal Acres</i>
Managed/mod-heavy grazing	0.23800	1,126,383	0.237	1,315,161
Unmanaged/mod-heavy grazing	0.23800	1,126,383	0.237	1,315,161
Unmanaged/no-mod grazing	0.23800	1,126,383	0.237	1,315,161
PD town	0.04800	227,170	0.053	294,108
Managed/no-mod grazing	0.23800	1,126,383	0.237	1,315,161

Shortgrass (small block) Acres: 7,280,472 Post Program Acres: 7,280,472 Optimal Acres: 6,463,972

<i>Condition</i>	<i>% of Assoc.</i>	<i>Condition Acres</i>	<i>Optimal % of Assoc.</i>	<i>Optimal Acres</i>
Unmanaged/no-mod grazing	0.15600	1,135,754	0.135	872,636
PD town	0.04800	349,463	0.053	342,591
Unmanaged/mod-heavy grazing	0.15600	1,135,754	0.135	872,636
Managed/no-mod grazing	0.15600	1,135,754	0.156	1,008,380
Managed/mod-heavy grazing	0.15600	1,135,754	0.135	872,636