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Southwestern
Region

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Kiowa, Rita Blanca, Black Kettle, and McClellan Creek National Grasslands

Fiscal Year 2013 Monitoring and Evaluation Report



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Forest Supervisor Certification

I certify that Kiowa, Rita Blanca, Black Kettle, and McClellan Creek National Grasslands Land and Resource Management Plan is sufficient to guide future management of these National Grasslands.

This Monitoring and Evaluation Report meets regulatory requirements for completing an annual report for the fiscal year of 2013, based on Section 219 of the 1982 planning rule provisions.

Elaine Kohrman

Elaine Kohrman, Forest Supervisor

8/25/2014

Date



Executive Summary

This report presents fiscal year (FY) 2013 monitoring results of land and resource management activities important to achieving Grasslands-wide and management area specific plan direction stated in the [2012 Kiowa, Rita Blanca, Black Kettle, and McClellan Creek National Grasslands \(Cibola Grasslands\) Land and Resource Management Plan](#). The annual monitoring elements addressed by this report are presented on pages 113-126 of the *2012 Cibola Grasslands Plan*.

Please note that a monitoring and evaluation report for the mountain districts of the Cibola National Forest and Grasslands is not presented for FY 2013. The mountain districts of the Cibola National Forest are currently in a plan revision process under the 2012 Forest Service Planning Rule, revising the *1985 Cibola Forest Plan*. A recently completed, two volume *Assessment Report of Ecological/Social/Economic Conditions, Trends, and Risks to Sustainability, Cibola National Forest Mountain Ranger Districts* was published in April 2014 and suffices for monitoring and evaluation reporting for FY 2013. These documents can be found at the Cibola Forest Plan Revision Webpage, http://www.fs.usda.gov/detail/cibola/landmanagement/planning/?cid=fsbdev3_065627. For FY 2014, the Cibola will resume its annual monitoring and evaluation report for the mountain districts under the *1985 Cibola Forest Plan* and will continue to do so until the revised plan is implemented, circa 2017. The monitoring and evaluation report measuring progress under the *2012 Cibola Grasslands Plan* will also be published again for FY 2014 and beyond.

This section summarizes information presented in the monitoring table found on pages 7 thru 12 of this report. Monitoring results and inferences for recreation, vegetation conditions, and wildlife management indicator species are reported. These results and inferences are anticipated to be relevant to future adaptive management.

Results for developed recreation monitoring are that condition surveys/inventories were conducted on 20% of developed recreation sites on all National Grasslands administered by the Cibola. Seventy-eight percent of monitored sites are in Class I Facility Condition Index (FCI) and 22% of sites are in Class II FCI. A FCI value less than 10% is regarded as Class I; an FCI greater than 10% is regarded as Class II. Facility Condition Index is an indicator of the depleted value of an asset. This value is calculated by dividing the deferred maintenance cost (DM) by the current replacement value (CRV). Completing deferred maintenance on developed recreation facilities continues to be a challenge for two main reasons; limited program funds and challenges with attracting qualified contractors.

Monitoring of ecological indicators for mixed grass prairie, shinnery oak, and deep-plowed inclusions on the Black Kettle and McClellan Creek Management Area indicated that because of drought, no prescribed burns were conducted to treat encroachment of undesirable trees. A few unplanned fires occurred in these vegetation types but were quickly suppressed due to drought conditions. No mechanical or herbicidal treatments were conducted on undesirable trees in these vegetation types during the fiscal year.

Rio Grande turkey, a management indicator species for mixed riparian hardwood vegetation on the Black Kettle NG, declined in population numbers, a continuation of a nearly decade-long trend. Western Bluebird, a management indicator species in pinyon-juniper and juniper grassland on the Kiowa NG, appears to be stable based upon survey data furnished by the Rocky Mountain Bird Observatory.

Grasslands Plan Background

The Cibola Grasslands Plan and associated Environmental Impact Statement (EIS) were published and implemented in 2012 under the 1982 Planning Rule. Previously, the Cibola Grasslands had been managed under direction of the [1985 Cibola Forest Plan](#), as amended. The 2012 Cibola Grasslands Plan has not been amended to-date.

However, there is an administrative correction to Part 6, page 124 (Monitoring Elements) of the Cibola Grasslands Plan currently being undertaken. A typographical mistake was made in identifying the Mountain Bluebird (*Sialia currucoides*) as a management indicator species (MIS) in pinyon-juniper and juniper grasslands on the Kiowa and Rita Blanca Management Area. The correct MIS for the above vegetation communities on the aforesaid management area is the Western Bluebird (*Sialia mexicana*). The Western Bluebird is more suited as a MIS because of its more consistently documented occurrence and ease of detection on the management area, versus the sporadic, occasional occurrence of the Mountain Bluebird. The analysis conducted and documented in the final EIS for the Cibola Grasslands Plan focused on the need for a MIS specifically for cavity nesting birds that would reveal a change in vegetation structure and species composition in the pinyon-juniper and juniper grasslands vegetation communities due to Forest Service management. The Western Bluebird is a cavity nesting species better suited to reveal such changes. This species was indeed selected as an MIS in collaborative interagency meetings of USFS biologists with biologists of the NMDGF and USFWS in July 2010 and are documented in the planning record; however the name of the species became transposed in the final documents. Thus, the trends of the Western Bluebird, not the Mountain Bluebird, are reported in this FY 2013 Monitoring and Evaluation Report.

Table of Monitoring Activities, Results, and Relevant Comments for FY 2013, Cibola National Grasslands

ABBREVIATIONS USED IN TABLE

ARRA – American Recovery and Reinvestment Act

AUM – Animal Unit Month

BBS – Breeding bird survey

BLM – Bureau of Land Management

CCF – 100 cubic feet

CFRP – Collaborative Forest Restoration Program

D6 – Black Kettle and McClellan Creek Ranger District

D7 – Kiowa and Rita Blanca Ranger District

EIS – Environmental Impact Statement

FACTS – Forest Service Activity Tracking System

FARSITE - Fire behavior and growth simulator

FS – Forest Service

FSveg – Field Sampled Vegetation database

GIS – Geographic Information System

IDIQ – Indefinite Delivery Indefinite Quantity Contract

INFRA – Infrastructure database

NEPA –National Environmental Policy Act

NMDGF – New Mexico Dept. of Game & Fish

NMSU – New Mexico State University

NWI – National Wetlands Inventory

ODWC – Okla. Dept. of Wildlife Conservation

PAC – Protected Activity Center

PAOT- People at one time

PTSAR – Periodic Timber Sale Accomplishment Report

RAR – Roads Accomplishment Report

RD – Ranger District

RO – Regional Office

RX – Prescribed burn

SO – Forest Supervisor’s Office

TDPW – Texas Dept. of Parks and Wildlife

TEUI – Terrestrial Ecological Unit Inventory

USFWS – U.S. Fish and Wildlife Service

USGS – U.S. Geological Survey

WUI – Wildland urban interface

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Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments
Developed Recreation – Grasslands-wide	Condition surveys/Inventories were conducted on 20% of developed recreation sites on both Grasslands.	Recreation Files and Infra data for D6 and D7	D6 , D7	78% of sites are in Class I Facility Condition Index (FCI) and 22% of sites are in Class II FCI	A FCI value less than 10% is regarded as Class I; a FCI greater than 10% is regarded as Class II. Facility Condition Index is an indicator of the depleted value of an asset. This value is calculated by dividing the deferred maintenance cost (DM) by the current replacement value (CRV).
Black Kettle and McClellan Creek NGs mixed grass prairie ecological indicator	Acreages of treatments of undesirable treatment and postfire mortality, changes in species composition within burned areas, and planned and unplanned fire occurrences.	D6 Range files	D6	Because of drought, no prescribed fire was planned or accomplished. A few small unplanned fires occurred on the district, but were quickly extinguished due to conditions.	Undesirable trees are still present on mixed grass prairie due to lack of prescribed fire on the ground.
Black Kettle and McClellan Creek NGs shinnery oak and deep-plowed inclusions ecological indicator	Acreage of undesirable trees present in shinnery oak, acreage of prescribed fire occurring, acreage of postfire mortality, acreage of species composition shifts within burned areas, acreage of planned or unplanned fire occurrences.	D6 Range files	D6	Because of drought no prescribed fire was planned or accomplished. A few small unplanned fires occurred on the district, but were quickly extinguished do to conditions.	Undesirable trees are still present on shinnery oak and deep-plowed inclusions due to lack of prescribed fire on the ground.

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Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments
<p>Black Kettle NG mixed hardwood riparian management indicator species (MIS)</p>	<p>The Rio Grande turkey populations on BKNG are monitored by Oklahoma Department of Wildlife Conservation (ODWC) and the Ranger District Biologist. ODWC monitors fall turkey roosts for Roger Mills county. BKNG also completes a spring turkey survey route.</p> <p>ODWC collects harvest data for spring turkey hunts. This data is available online.</p> <p>Turkey populations are not monitored in Texas.</p>	<p>Survey data from ODWC for Rogers Mills County and BKNG for land units within Oklahoma.</p>	<p>D6</p>	<p>During the 2012/2013 monitoring season, ODWC observed 46 flocks of Rio Grande turkeys in Roger Mills Co., Okla., estimating 1,650 birds. These numbers were down from the previous year and a continuation of a downward trend over the previous 9 years.</p>	<p>Drought and excessive heat from 2011-2013 probably had a significant impact on Rio Grande turkey recruitment (the number of poults that reach juvenile age in the fall). Weather conditions and predation are the two main factors influencing Rio Grande turkey nesting success and poult survival. Effects from weather and predation can be direct, indirect or interrelated; therefore, complicated and not completely understood. Nesting cover is probably adequate in most locations. However, the long-term drought and heat of this monitoring period produced minimal vegetative growth, negatively affecting food for poults and hens, and perhaps fall recruitment.</p> <p>Black Kettle National Grasslands and the National Wild Turkey Federation are restoring and maintaining turkey roosts, loafing areas and</p>

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Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments
					<p>brood range in cottonwood bottoms by removing the dense understory of eastern red cedar, salt cedar, and black locust that are taking up space, water and nutrients and creating a fire ladder into the overstory cottonwood galleries. About 100 acres have been treated on the National Grasslands in Units #38, #51 and #78 in Roger Mills County, Oklahoma. The invasive trees are cut and masticated with two 250 h. p. Hydroax machines with 8' mulcher heads. The shredded wood is left on the ground as mulch. A lush grass and forb understory is expected next year to benefit all wildlife. The units will be rested from livestock grazing, and the grass/forb/legume composition is anticipated to improve over time with applied management on the site.</p>

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Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments
Kiowa NG pinyon-juniper MIS	USGS Breeding Bird Survey (BBS) to monitor breeding birds including Western Bluebird MIS	SO Wildlife Files, Annual Breeding Bird Survey Report. *Rocky Mountain Bird Observatory (RMBO) website	D7	<p>The Western Bluebird was not counted on the Cibola NF Mills Canyon BBS route in 2013. The route was not monitored in 2012. It has been counted a total of 6 times during 10 years of survey on this route.</p> <p>However, in 2012 and 2013, RMBO estimated densities and population sizes for 32 species on the Kiowa NG and 17 species on the Rita Blanca NG. Annual estimates of density and occupancy can be compared over time to determine if population changes are a result of population growth or decline and/or range expansion or contraction. Density estimates included the Western Bluebird. Occupancy was confirmed under this monitoring design on 1 transect on the Kiowa NG. The following table displays the number of Western Bluebirds detected in each of 4</p>	<p>Populations at the national level show a stable trend for the Western Bluebird. Surveys by the USGS from 1966 through 2010 indicate a slightly downward trend for the state of New Mexico (www.mbr-pwrc.usgs.gov).</p> <p>Reasons for recent declines in New Mexico as a whole are not well understood. The trend for the Kiowa NG indicates a stable trend.</p> <p>Proper woodland management as provided for in the Cibola Grasslands Plan will ensure habitat is provided for the Western Bluebird.</p>

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Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments															
				<p>years of monitoring effort and the number of birds per square kilometer (D=Density) on the Kiowa NG. None were reported on the Rita Blanca NG.</p> <table border="1" data-bbox="1123 516 1560 605"> <tr> <td>Year</td> <td>2009</td> <td>2011</td> <td>2012</td> <td>2013</td> </tr> <tr> <td>#</td> <td>0</td> <td>5</td> <td>4</td> <td>4</td> </tr> <tr> <td>D</td> <td></td> <td>6.6</td> <td>*</td> <td>8.46</td> </tr> </table> <p>*Not Reported</p>	Year	2009	2011	2012	2013	#	0	5	4	4	D		6.6	*	8.46	
Year	2009	2011	2012	2013																
#	0	5	4	4																
D		6.6	*	8.46																
<p>Kiowa and Rita Blanca NGs Burrowing Owl MIS on shortgrass prairie early successional vegetation community</p>	<p>RMBO integrated monitoring in Bird Conservation Regions Annual Report (2012 and 2013).</p> <p>RMBO will conduct Specialized surveys to monitor Burrowing Owl populations and will begin in 2015</p>	<p>D7 and SO Wildlife files</p> <p>*RMBO website</p>	<p>D7/SO</p>	<p>The following table displays the number of Burrowing Owls detected in each of 4 years of recent monitoring effort on the Rita Blanca NG. None were reported on the Kiowa NG.</p> <table border="1" data-bbox="1123 959 1560 1040"> <tr> <td>Year</td> <td>09</td> <td>11</td> <td>12</td> <td>13</td> </tr> <tr> <td>#</td> <td>7</td> <td>3</td> <td>4</td> <td>*</td> </tr> </table> <p>*Not Reported</p>	Year	09	11	12	13	#	7	3	4	*	<p>Burrowing owls are heavily dependent on prairie dogs for burrows, for burrow maintenance, and for the preferred low vegetation profile. Programs to maintain prairie dogs (shooting area closures, dusting for fleas and plague vaccine testing) which are being practiced on portions of the Kiowa and Rita Blanca Management Area are expected to be beneficial to Burrowing Owl populations because they maintain breeding habitat.</p> <p>This monitoring design and current sampling intensity is not providing population trend</p>					
Year	09	11	12	13																
#	7	3	4	*																

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Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments
					<p>information for the Burrowing Owl on the Kiowa and Rita Blanca Management Area. The Cibola National Forest Supervisor’s Office established an agreement with RMBO in 2014 to establish a base-line estimate of Burrowing Owl populations within known prairie dog towns on the Kiowa/Rita Blanca NGs in NM, TX and OK.</p> <p>Work on the baseline surveys will begin in the spring of 2015 and should provide population and density estimates so that MIS trend can be monitored.</p>

*Information from Rocky Mountain Bird Observatory can be found at the following link: <http://rmbo.org/v3/avian/ReportsPublications.aspx>