# Community Wildfire Protection Plan Kiowa County Fire



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From The National Park Service
Department of Interior
Bent's Old Fort
National Historic Site
And
Sand Creek Massacre
National Historic Site

**National Park Service** 

National Park Service U.S. Department of the Interior



## Community Wildfire Protection Plan Kiowa County Fire

December 2007

(Appendix B Addition: 2013)

## **Table of Contents**

Overview 3 -
Background3 -
Participants4 -
Plan Components 4 -
A. Wildland Urban Interface (WUI)
B. Preparedness to Respond to Wildland Fire 4 -
C. Community Risk Analysis (Risk, Fuels, Values) and Wildfire Mitigation Assessment Mapping 5 -
D. Fuels Treatment Priorities 6 -
E. Structural Ignitability Reduction Recommendations 6 -
Implementation Plan 7 -
Appendix A: Fire Protection Assessment 10 -
Appendix B: Annual Workplans 31 -
Appendix C: Fire Department 20 Minute Response Map and Kiowa County CWPP Maps 39 -

## Community Wildfire Protection Plan Kiowa County Fire

## **December 3, 2007**

#### Overview

Community Wildfire Protection Plans (CWPP) are authorized and defined in Title I of the *Healthy Forests Restoration Act (HFRA)* passed by Congress on November 21, 2003 and signed into law by President Bush on December 3, 2003.

The Healthy Forest Restoration Act (HFRA) places renewed emphasis on community planning by extending a variety of benefits to communities with a wildfire protection plan in place. Critical among these benefits are - 1) The option to establish localized definitions and boundaries for areas having high Risk (potential), Hazards (fuels) and Values; and 2), The opportunity to help shape management priorities for federal and non-federal lands within the planning area.

The CWPP, as described in the Act, brings together diverse local interests to discuss their mutual concerns for public safety, community sustainability and natural resources. It offers a positive, solution-oriented environment in which to address challenges such as local firefighting capacity, the need for defensible space around homes (and areas of value), and where and how to prioritize land management. (Colorado State Forest Service, 2005. Community Wildfire Protection Plans: Guidelines for Implementation. 4 pages.)

The purpose of this document is to provide stakeholders and those living in Kiowa County with an overview of the wildland fire risks, hazards and values within the planning area; recommend possible courses of action to reduce the impacts of wildfire in the planned area; and to share a current action plan.

## **Background**

With partners and stakeholders, the Sand Creek National Historic Site, National Park Service, completed an initial Wildfire Mitigation Assessment exercise identifying Risk, Hazard and Values within the Park in September of 2004.

Partners and stakeholders in Kiowa County have participated in Annual Wildfire Operating Plans since 2005, with a 'Regional' AWOP (Baca, Kiowa, Otero counties) in place in 2007.

In 2006, stakeholder applied for a National Fire Plan Community Assistance Grant from the National Park Service to write a CWPP and to provide seed money for initial mitigation implementation. Stakeholders recognized the need for a plan to identify and mitigate wildfire risks in the county.

The NFP Community Assistance Grant was approved in 2007. CWPP planning meetings started May 16, 2007, with other meetings June 27, August 1, and September 12.

## **Participants**

Participants since the onset include the Kiowa County Commissioners, the Kiowa County Sheriff, the Kiowa County Office of Emergency Management, and representatives from Kiowa County Fire, Haswell VFD, Eads VFD, and Sheridan Lake VFD. These same individuals also represent Haswell, Eads, and Sheridan Lake communities. Federal and state partners include the National Park Service Sand Creek Massacre National Historic Site, Natural Resource Conservation Service, Colorado Division of Wildlife, and Colorado State Forest Service. The Bureau of Land Management is also being notified of CWPP development in the County.

(Vern Harris, Donald Oswald, Forrest Frazee, Chris Sorenson, Marvin Watson, Alexa Roberts, Allyn Miller, Karl Zimmermann, Fran Pannebaker, Mike Smith (DOW Habitat Biologist), Donna Davis)

## **Plan Components**

### A. Wildland Urban Interface (WUI)

Kiowa County's highest concern areas are the communities; the Sand Creek Massacre National Historic Site, National Park Service; the recreational areas; and the railroad/high-use travel corridors in the county (See map). Also of concern are the river drainages and remaining travel corridors.

The communities are Arlington (non-incorporated) population of 11; Haswell (incorporated) population 82; Eads (incorporated) population 724 and county seat; Chivington (non-incorporated) population 11; Brandon (non-incorporated) population 27; Sheridan Lake (incorporated) population 75; Towner (non-incorporated) population 23.

The Kiowa County population is 1441. Kiowa County is 1794 square miles (1,148,160 acres).

General - The county is rural with population centers around the communities. Major state highways cross the county N-S (Highway 287 & 385) and E-W (Highway 96). The V& N Railroad also follows Highway 96 through the county. Two river drainages the Mustang and Adobe Creeks near Arlington, and the Rush and Sandy Creeks near Chivington are present. There are two major recreational areas - Adobe Reservoir and Queens Reservoirs. Vegetation is generally sage, Conservation Reserve Program (CRP) grasses, short-grass prairie, and cropland. The National Park Service Sand Creek Massacre National Historic Site is located in the county (northeast of Chivington). Bureau of Land Management parcels are also dotted within the county. Parcels of State Lands are managed by the Colorado Division of Wildlife.

## B. Preparedness to Respond to Wildland Fire

Kiowa County and community volunteer fire departments serve and protect 1441 residents and 1794 square miles within the county. 911 is used for all Emergency Calls within the County.

The Volunteer Fire Departments include - Kiowa County Search & Rescue, Haswell Volunteer Fire Department (8 Volunteers), Eads Volunteer Fire Department (13 Volunteers), Sheridan Lake Volunteer Fire Department (10 Volunteers), and Towner County Volunteers (11 Volunteers). See Appendix C for 20-minute response map.

Additionally, the NPS has a 50-gallon six-wheeler (equipment); and the County has a CSFS/Kiowa County Equipment Agreement Type 3/4 Diesel Engine housed at the county seat.

Kiowa County has signed annual mutual aid agreements with all Baca, Bent, Crowley, Kiowa, Otero and Prowers county fire departments and rural fire protection districts.

Kiowa County has a signed Agreement for Cooperative Wildfire Protection with the Colorado State Forest Service.

Kiowa County has had signed Annual Wildfire Operating Plans with the United States Forest Service, the United States Park Service, The Bureau of Land Management, and the Colorado State Forest Service, since 2005. In 2007 a 'Regional' AWOP was signed with Baca, Kiowa and Otero counties.

Haswell, Eads, and Sheridan Lake are incorporated. These communities have central water and individual fire departments. Eads has a no trash burning community ordinance.

Arlington, Chivington and Brandon are non-incorporated. These communities do not have central water and do not have volunteer fire departments (although individuals are on adjoining community departments).

Towner is non-incorporated. It has central water and does have a fire station in town.

Kiowa County can initiate fire bans as appropriate. Incorporated and non-incorporated communities have agreed to be a part of the overall county fire band placement and rescission process. The Sand Creek Massacre National Historic Site, National Park Service may have other considerations, but would hope to work closely with the county to support fire ban efforts.

The Colorado Office of Emergency Management has an active County Director in Kiowa County who also coordinates with the Area Emergency Management Office and State.

Kiowa County has a website for fire updates as appropriate (www.kiowacountycolo.com).

### C. Community Risk Analysis (Risk, Fuels, Values) and Wildfire Mitigation Assessment Mapping

(See Appendix A for a complete discussion of the risk analysis and assessment mapping for Kiowa County)

#### Areas

- 1 Communities (HHH)
- 2 NPS, SAND (HHH)
- 3 Seasonal Lakes/Recreation (HHH)
- 4 Railroads/Travel Corridors (HHH)
- 5 Travel Corridors (HLH)
- 6 River Drainages (LHH)
- 7 High Value Agricultural Areas (LLH)
- 8 Rural Areas (LMH & LLH)

Note Abbreviations – High (H), Medium (M), Low (L)

Note Abbreviations – HHH means High Risk, High Fuel, High Value. LMH means Low Risk, Medium Fuel, High Value.

Discussion – Areas rated HHH are of highest priority due to risk, fuels and values in Kiowa County. Areas with 2 HHs are also of high concern. For example, high fuels and high values can easily create a scenario taxing limited resources. Risk may be low or medium, however a large wildfire would still create a potential economic

burden to the taxpayer in the county. The same could apply to high risk and high values – although the fuel is not rated high, it does not preclude the event causing significant resource depletion.

Areas rated with two or three Ls are of concern and should be considered when funding or resource opportunities arise, however they are not the highest priority.

Therefore, Kiowa County's Mapped high concern 'Red Zones' might include Areas 1, 2, 3, 4 (three HHH's). Areas 5 and 6 with two HH's are of concern; Areas 7 and 8 are not an immediate priority (only one H).

Due to typical county wind driven fire events and other fire behavior factors including high temperatures, low relative humidity, dry ignitable flashy fuels; along with distance and immediate access to many rural locations; and the nature of volunteer fire organizations with manpower/response factors to consider — arbitrary lines have been drawn around the zones. For example, one mile either side of a travel corridor in a 'typical' fire scenario may be more than enough buffer. However in a wind driven event or late in the season when vegetation is cured — a one-mile 'buffer' may not be sufficient. Six miles may not be sufficient. For planning purposes, we are allowing flexibility with our zone boundaries to allow the overall goal of fire prevention/mitigation needs to be addressed.

#### D. Fuels Definition and Treatment Methods Discussion

Hazard Fuel Definitions -

High Fuels are defined as Riparian (cottonwood, tamarisk); Conservation Reserve Program grasses (CRP); National Park Service (NPS) grasses; stubble/crop residue; weeds/tumbleweeds; dwellings (greater than five/section); and/or man-made windbreaks (greater than five/section).

Medium fuels include short and medium grass prairie; prairie sand/sage; fencerow tumbleweeds; dwellings (1-5 per section) and/or man-made windbreaks (1-5 per section).

Low fuels are defined as non-irrigated cropland, zero dwellings; and/or zero man-made windbreaks.

General Fuels Treatment Methods -

Riparian Treatments (cottonwood/, tamarisk) include combinations of mechanical removal, chemical treatment, firewood (cottonwood), wood chipping, pile burning, and/or hauling away brush.

High and Medium fuel grasses; stubble/crop residue, sand sage, weeds/tumbleweeds treatments may include mechanical methods (mowing, grazing), and/or prescribed burning.

Dwellings and/or man-made windbreaks/plantings treatments may include mowing around structures, breaking up continuous ground fuels and/or ladder fuels, thinning, deadwood removal (see structural ignitability for dwelling concepts).

### E. Structural Ignitability Reduction Discussion

Firewise Awareness -

Public awareness of Firewise concepts and self-implementation of applicable concepts may help landowners potentially reduce the risk of structural ignitability in the event of an encroaching wildfire.

Firewise Concepts include - Are You At Risk!, Access, Water Supply, Defensible Space, Trees and Shrubs, Construction Design and Materials, Interior Safety, and What to do When....

Target Audiences and Outreach -

Targets are Homeowners/Rural businesses in Kiowa County.

## **Long-Term Implementation Plan (5-Year)**

(See Appendix B for specific Annual Workplan.)

General Discussion -

Broad, long-term mitigation strategies discussed at our various meetings included:

- Initiating public awareness in Firewise Concepts (i.e., Are You At Risk!, Access, Water Supply, Defensible Space, Trees and Shrubs, Construction Design and Materials, Interior Safety, and 'What to do When...'). Target audiences could include homeowners/rural businesses.
- Providing 'General Outdoor Fire Safety' brochures to various publics (smoking, outdoor camping fires, trash burning, agricultural burning, spark arresters, etc). Target audiences could include homeowners/rural businesses, recreational users, tourists, highway corridor travelers, and railroad personnel.

Tactics for the accomplishing the above included –

- Initiating countywide information outreach through public radio announcements, local Cable TV coverage, Kiowa County web-site alerts, newspaper articles, highway signages, county fair booth participation, local event opportunities, (Fire Prevention Week, annual volunteer chili supper displays, Senior Citizen Ladies events, bazaars, etc.).
- Providing educational material including Firewise 3-ring binder availability for check out to homeowners (library/fire department); booklets and/or handouts for local events; CDs/PDFs for distribution; Firewise educational handouts for schools.
- Providing Firewise presentations or trainings and/or Homeowner Homestead Assessments (example *Living with Fire A Guide for the Homeowner*) to interested volunteer groups/clubs to support public awareness and public inquiry.

Annual workplans could include components of the above and/or additional updated ideas and suggestions as appropriate for the mitigation effort that year.

Long-Term Mitigation Strategies Discussed By Area -

Long-term mitigation strategies (ideas) for the different areas identified in the Kiowa County Mitigation Assessment Map were discussed at our various meeting, and are listed below. Mitigation includes utilizing a potential mix of tools and resources, generally categorized as - 1) Education and Outreach; 2) Rules/Restrictions/Ordinances, and Enforcement; 3) Prevention Planning; 4) Fuel Mitigation; 5) Suppression; 6) Grants and Administration.

Efforts already in place are included –

#### 1 – Communities (HHH)

Concern – High Risk, High Fuels, High Values Mitigation -

Education and Outreach – Present Firewise Concept to various Public/Groups/Organizations (examples – Civic/Ag Clubs, fire departments)

County Ordinance – The County has a fire ban process in place

Fuel Mitigation – Consider example like Chivington Sagebrush fuel break

Suppression – Existing volunteer fire departments

Consider Grants - Potential Colorado Community Forest Restoration Grants

#### 2 - NPS, SAND (HHH)

Concern – High Risk, High Fuels, High Values Mitigation -

Education - Signage

Rules/Restrictions & Enforcement - Internal

Prevention Planning -

Developing plan for Desired Future Condition – including potentials for grazing, mechanical treatments, prescribed burning

Fuel Mitigation - 12' Mower, gyro track for tumbleweed mulching yearly; revegetation Suppression - 50-gallon water tank on six-wheel; water tank on north section;

DTR800 radios (Initial Attack communication)

Grant - FY07 IMR National Fire Plan Community Assistance Grant, Department of Interior, National Park Service

(\$10,000 – approximately \$300 Administration, \$300 Educational Materials, \$9,600 mitigation)

### 3 – Seasonal Lakes/Recreation (HHH)

Concern – High Risk, High Fuels, High Values Mitigation -

Education – Signage

 $Rules/Restrictions,\,Ordinances\,\,\&\,\,Enforce-Work\,\,with\,\,BLM/DOW/County$ 

Fuel Mitigation - mitigation lakes, private properties; revegetation when needed

Grants – As opportunity arises

## 4 – Railroads/Travel Corridors (HHH)

Concern – High Risk, High Fuels, High Values Mitigation -

Education – Signage for public corridors

Ordinances & Enforce – Colorado Department of Transportation/ V&N Railroad/County Fuel Mitigation -

CDOT – Hwy 287 & Hwy 96 – mowing

V&N Railroad -

County – Spraying & mowing

Adjoining private properties

Grants – As opportunity arises

## 5 – Travel Corridors (HMH & HLH)

Concern – High Risk, Medium/Low Fuels, High Values Mitigation -

(Same as Area 4 above)

## 6 – River Drainages (LHH & LHH)

Concern – Low Risk, High Fuels, High Values Mitigation -

Education – Watershed Protection/Water Quality, reduce threat of Large High-Intensity Fires, Wildlife Habitat, preserve ecological function, restoration, maintenance, utilization of small diameter woody material (firewood, etc)

Ordinances – County Fire Ban Fuel Mitigation - Site by site basis Grants - (Colorado Community Forest Restoration Grants)

### 7 – High Value Agricultural Areas (LLH)

### 8 – Rural Areas (LMH & LLH)

Concern – Low Risk, Low/Medium Fuels, High Values Mitigation -

Areas 7 and 8 are not an immediate priority

# **Appendix A:**

# **Kiowa County Community Wildfire Protection Planning Fire Protection Assessment**

## Kiowa County Community Wildfire Protection Planning Fire Protection Assessment\*

Eads, Colorado

June 27, 2007

**Team**: Kiowa County Partners

<u>**Objectives**</u>: Complete a fire protection assessment of Kiowa County, assigning High, Medium, or Low ratings on these components:

- 1. <u>Risk (potential for ignition)</u>: human activity and lightening
- 2. <u>Hazard (potential to burn)</u>: fuels and topography
- 3. <u>Values (potential for loss)</u>: natural or developed areas where loss or destruction by wildfire would be unacceptable.
- 4. <u>Fire occurrence history</u>.

**Process**: Using Kiowa County map as the base:

- 1. **Risk layer**: make a clear overlay outlining areas of high risk in red, medium risk in blue, everything else will be low risk. Areas of high risk are those containing the most potential for a **fire to start due to human activity or lightning**; medium risk areas are those containing substantial potential for fire starts, but less than the high risk areas.
- 2. <u>Hazard layer</u>: make a second clear overlay marking areas of high hazard in red, medium hazard in blue, and all else is low hazard.

The following definitions of high, medium, and low <u>hazard ratings</u> were determined:

Fuels & Topography	Low	Medium	<u>High</u>
Fuels	Non-Irrigated Cropland	Short grass prairie Medium grass Prairie Prairie Sand/Sage Fence Row Tweeds	Riparian (cottonwood, tamarisk) CRP grass/NPS/Stubble/Crop Residue Weeds/tumbleweeds
<b>Dwellings</b> (as fuel)	0 per section	1-5 per section	Greater than 5 per section
Windbreaks, Living Snow Fences	1 per section	1-5 per section	Greater than 5 per section

- 3. <u>Value layer</u>: make a third clear overlay showing high value areas in red, medium value areas in blue, and all else is considered low value. High value areas are those containing the most **values** whose loss to wildfire would be unacceptable. Medium areas contain substantial values to be protected from wildfire, but fewer than the high value areas.
- 4. Place the 3 clear overlays showing risk, hazard, and values on top of each other and put a fourth clear overlay on top of them. Draw adjusted boundaries on the top overlay. Mark the resulting compartments with **H**, **M**, or **L** (**High**, **Medium or Low**) **for Risk**, **Hazard**, **or Value**. Finally, number these compartments.
- 5. Copy final compartment boundaries, compartment numbers, and 3-letter ratings with black marker onto county map.
- 6. Complete Fire Protection Assessment forms for each compartment, documenting the compartment number, its ratings, and what risks and values are present.
- 7. This document, along with the fire Protection Assessment forms, and the final map is the Fire Protection Assessment package. The map may be digitized to produce a GIS map.

<u>Uses & Examples</u>: The areas marked on map as H H H (high risk, high hazard, high value) become the priority areas for prevention work, pre-attack planning, suppression resource placement, funding requests, mitigation, and other resource work planning.

Further fire protection assessments within the compartments may be mapped, in finer detail, to support on-the-ground work, such as prescribed fire, training, prevention events (schools, county fair, festivals, parades, booths, etc.), public education, homestead wildfire mitigation, fuel breaks, signing, and other projects.

<sup>\*</sup> The Wildfire Mitigation Assessment exercise outlines the first five steps in the eight-step Community Wildfire Protection Plan (CWPP) process initiated under the National Fire Plan.

<sup>\*</sup> Additionally the Society of American Foresters outline for CWPP process.

# **Communities**

KISK COM	TUNENTS (PU	TENTIAL FOR IGN	ITION) PRESENT IN THIS AREA
Trave   Railro   Light:   Electro   Powe   X Comro   Off-hood Recree   Campoon Watero   Hunti	ning ric fences r lines nunity/rural inte ighway vehicles ation grounds r Recreation &/o ng (Seasonal Fa	ermix or fishing	<ul> <li>Children with matches</li> <li>Electronic sites</li> <li>Oil/gas/mining/propane</li> <li>Construction sites</li> <li>Maintenance Projects/Canal Production</li> <li>Dumps</li> <li>Agricultural burning</li> <li>Scenic Areas</li> <li>Fireworks</li> <li>Party areas</li> <li>Firewood cutting</li> <li>X_ Other High Population Centers</li> <li>Wheat Harvest (June-July)</li> </ul>
	nal Park Activit	ies ( <b>POTENTIAL TO BU</b>	Sunflower Harvest (October)
Natio	nal Park Activiti		Sunflower Harvest (October)
Natio HAZARD C Fuels &	nal Park Activiti  OMPONENT (  Low	POTENTIAL TO BU	Sunflower Harvest (October)  JRN):  High  Riparian (cottonwood,

_X_	People/Life		Rare and endangered wildlife
_X_	Residential/commercial development		Rare and endangered plants
	Wildlife habitat		Water/riparian areas
	Wilderness (designated)		Watershed
	Wild & Scenic rivers		Soils
	Visual resources		Minerals
	Political values		Cultural resources
	Range/grazing		Timber
	Scenic byways		Developed recreation
	Hog Farms		Dispersed recreation
	NPS		Windbreaks, living snow fences
*Prai	rie Wildlife – All High Value –		
Asses	ss with DOW, as applying mitigation strategies	S	
Natio	nal Threatened and Endangered List – Least T	ern, P	iping Plover.
Natio	nal Species of Concern - Mountain plover, Bl	acktai	led Prairie Dog, Swift Fox,
Ferru	ginous Hawk, Massasauga Rattlesnake, Arkan	sas Re	ed Darter (fish).
Color	rado State Threatened – Burrowing Owl, Lesse	r Prai	rie Chicken.

# NPS - SAND

Area number	·2	Rat	ing: Risk_H_ Ha	zardH ValueH		
R	RISK COMP	ONENTS (PO	TENTIAL FOR IGN	IITION) PRESENT IN THIS AREA:		
Debrate		ing c fences lines lunity/rural integhway vehicles ation grounds Recreation &/o ag (Seasonal Fa	rmix or fishing ll/Winter)	Children with matches Electronic sites Oil/gas/mining/propane Construction sites Maintenance Projects/Canal Project Dumps Agricultural burning Scenic Areas Fireworks Party areas Firewood cutting Other Wheat Harvest (June-July) Sunflower Harvest (October)		
	uels & opography	Low	Medium	<u>High</u>		
F	uels	Non-Irrigated Cropland	Short grass prairie Medium grass Prairie Prairie Sand/Sage Fence Row Tweeds	Riparian (cottonwood, tamarisk) CRP grass/ <u>NPS</u> Weeds/tumbleweeds		
	Owellings as fuel)	0 per section	1-5per section	Greater than 5 per section		
L	Vindbreaks, iving Snow ences	1 per section	1-5 per section	Greater than 5 per section		

Resi Wild Wild Wild Visu Polit	ple/Life idential/commercial development dlife habitat derness (designated) d & Scenic rivers hal resources tical values ge/grazing		Rare and endangered wildlife Rare and endangered plants Water/riparian areas Watershed Soils Minerals Cultural resources Timber			
Scer	nic byways		Developed recreation			
Hog	Farms		Dispersed recreation			
_X_ NPS			Windbreaks, living snow fences			
*Prairie Wildlife – All High Value – Assess with DOW, as applying mitigation strategies						
National T	<u> Threatened and Endangered List</u> – Least T	ern, P	iping Plover.			
National S	pecies of Concern - Mountain plover, Bl	acktai	led Prairie Dog, Swift Fox,			
Ferruginou	ıs Hawk, Massasauga Rattlesnake, Arkan	isas Re	ed Darter (fish).			
Colorado S	State Threatened – Burrowing Owl, Lesse	er Prai	rie Chicken.			

# Seasonal Lakes/Recreation

Area number3_		Rating: Riskl	H HazardH ValueH
RISK CO	OMPONENTS (PO	TENTIAL FOR IGN	ITION) PRESENT IN THIS AREA:
Tr Ri El Cc X_ O X_ Ro Cs X_ W X_ H Tr N	ebris burning (Trastravel corridors ailroads ailroads ailroads ailroads ailroads ailroads ailroads alectric fences ower lines ommunity/rural interff-highway vehicles ecreation ampgrounds are Recreation &/ounting (Seasonal Fairails ational Park Activities)	rmix or fishing ll/Winter)	Children with matches Electronic sites Oil/gas/mining/propane Construction sites Maintenance Projects/Canal Projects Dumps Agricultural burning Scenic Areas Fireworks Party areas Firewood cutting Other Wheat Harvest (June-July) Sunflower Harvest (October)
Fuels &	phy Low	Medium	High
Fuels		Short grass prairie Medium grass Prairie Prairie Sand/Sage Fence Row Tweeds	Riparian (cottonwood, tamarisk) CRP grass/NPS Weeds/tumbleweeds
Dwelling (as fuel)	s 0 per section	1-5per section	Greater than 5 per section
Windbrea Living Sr Fences		1-5 per section	Greater than 5 per section

	People/Life Residential/commercial development Wildlife habitat Wilderness (designated) Wild & Scenic rivers Visual resources		Rare and endangered wildlife Rare and endangered plants Water/riparian areas Watershed Soils Minerals				
	Political values		Cultural resources				
	Range/grazing		Timber				
	Scenic byways		Developed recreation				
	Hog Farms	X	Dispersed recreation				
	NPS		Windbreaks, living snow fences				
	*Prairie Wildlife – All High Value – Assess with DOW, as applying mitigation strategies						
	nal Threatened and Endangered List – Least T		iping Plover.				
Natio	nal Species of Concern – Mountain plover, Bl	acktai	led Prairie Dog, Swift Fox,				
Ferru	ginous Hawk, Massasauga Rattlesnake, Arkan	ısas Re	ed Darter (fish).				
Color	rado State Threatened – Burrowing Owl, Lesse	er Prai	rie Chicken.				

# Railroad/Travel Corridors

Area number4		Rating:	Risk _	H	Hazard _	H	_ Value _	H
RISK COM	PONENTS (PO	DTENTIAL	FOR IG	NITIO	N) PRESE	NT IN	THIS AR	EA:
_X_ Travel _X_ Railro Lightn Electri Power Comm Off-hi Recrea Camp Water Huntin Trails Nation	ning ic fences lines nunity/rural inte ghway vehicles	ermix or fishing ıll/Winter) ies			Children w Electronic Oil/gas/mi Construction Maintenan Dumps Agricultura Scenic Are Fireworks Party areas Firewood of Other Wheat Har Sunflower	sites ning/pro on sites ce Proje al burni eas cutting evest (Ju	opane ects/Canal ng une-July)	
Fuels & <u>Topography</u>	Low	Medium		<u>Higl</u>	<u>h</u>			
Fuels	Non-Irrigated Cropland	Short grass Medium gr Prairie San Fence Row	ass Prairi d/Sage	e tam <i>CRF</i>	<b>urian</b> (cotto larisk) <b>Pgrass</b> /NF ds/tumblew	<b>P</b> S	l,	
Dwellings (as fuel)	0 per section	1-5per section		Great section	ter than 5 p	er		
Windbreaks, Living Snow Fences	1 per section	1-5 per section		Great section	ter than 5 p	er		

	People/Life Residential/commercial development Wildlife habitat Wilderness (designated) Wild & Scenic rivers Visual resources Political values		Rare and endangered wildlife Rare and endangered plants Water/riparian areas Watershed Soils Minerals Cultural resources			
	Range/grazing		Timber			
	Scenic byways		Developed recreation			
	Hog Farms		Dispersed recreation			
	NPS		Windbreaks, living snow fences			
*Prairie Wildlife – All High Value – Assess with DOW, as applying mitigation strategies						
<b>Nation</b>	nal Threatened and Endangered List – Least T	ern, P	iping Plover.			
Nation	nal Species of Concern – Mountain plover, Bland	acktai	led Prairie Dog, Swift Fox,			
Ferrug	ginous Hawk, Massasauga Rattlesnake, Arkan	sas Re	ed Darter (fish).			
Colora	ado State Threatened - Burrowing Owl, Lesse	r Prai	rie Chicken.			

# Travel Corridors

Area number5_		Rating: Riskl	H Hazard _M & L_ ValueH
RISK CO	MPONENTS (PO	TENTIAL FOR IGN	NITION) PRESENT IN THIS AREA:
_X_ Tra Rai Lig Ele Pov Con Off Rec Can Wa Hun Tra Nat	tional Park Activit	ermix or fishing ll/Winter)	Children with matches Electronic sites Oil/gas/mining/propane Construction sites Maintenance Projects/Canal Projects Dumps Agricultural burning Scenic Areas Fireworks Party areas Firewood cutting Other Wheat Harvest (June-July) Sunflower Harvest (October)
Fuels & <u>Topograp</u>	hy Low	<u>Medium</u>	<u>High</u>
Fuels	Non-Irrigated Cropland	Short grass prairie Medium grass Prairie Prairie Sand/Sage Fence Row Tweeds	Riparian (cottonwood, tamarisk) CRP grass/NPS Weeds/tumbleweeds
Dwellings (as fuel)	0 per section	1-5per section	Greater than 5 per section
Windbreak Living Sno Fences		1-5 per section	Greater than 5 per section

	People/Life Residential/commercial development Wildlife habitat Wilderness (designated) Wild & Scenic rivers Visual resources Political values		Rare and endangered wildlife Rare and endangered plants Water/riparian areas Watershed Soils Minerals Cultural resources			
	Range/grazing		Timber			
	Scenic byways		Developed recreation			
	Hog Farms		Dispersed recreation			
	NPS		Windbreaks, living snow fences			
*Prairie Wildlife – All High Value – Assess with DOW, as applying mitigation strategies						
<b>Nation</b>	nal Threatened and Endangered List – Least T	ern, P	iping Plover.			
Nation	nal Species of Concern – Mountain plover, Bland	acktai	led Prairie Dog, Swift Fox,			
Ferrug	ginous Hawk, Massasauga Rattlesnake, Arkan	sas Re	ed Darter (fish).			
Colora	ado State Threatened - Burrowing Owl, Lesse	r Prai	rie Chicken.			

# River Drainages

Area numbe	er6		Rating: Risk	L HazardH ValueH		
	RISK COMP	PONENTS (PO	TENTIAL FOR IGN	NITION) PRESENT IN THIS AREA:		
	Debris burning (Trash/Pit burning) Travel corridors Railroads Lightning Electric fences Power lines Community/rural intermix Off-highway vehicles Recreation Campgrounds Water Recreation &/or fishing Hunting (Seasonal Fall/Winter) Trails National Park Activities  HAZARD COMPONENT (POTENTIAL TO B			Children with matches Electronic sites Oil/gas/mining/propane Construction sites Maintenance Projects/Canal Projects Dumps Agricultural burning Scenic Areas Fireworks Party areas Firewood cutting Other Wheat Harvest (June-July) Sunflower Harvest (October)		
	Fuels & Topography	Low	Medium	<u>High</u>		
	Fuels	Non-Irrigated Cropland	Short grass prairie Medium grass Prairie Prairie Sand/Sage Fence Row Tweeds	Riparian (cottonwood, tamarisk) CRP grass/NPS Weeds/tumbleweeds		
	Dwellings (as fuel)	0 per section	1-5per section	Greater than 5 per section		
	Windbreaks, Living Snow Fences	1 per section	1-5 per section	Greater than 5 per section		

	People/Life		Rare and endangered wildlife			
	Residential/commercial development		Rare and endangered plants			
_X_	Wildlife habitat	_X_	Water/riparian areas			
	Wilderness (designated)	_X_	Watershed			
	Wild & Scenic rivers		Soils			
	Visual resources		Minerals			
	Political values		Cultural resources			
	Range/grazing		Timber			
	Scenic byways		Developed recreation			
	Hog Farms		Dispersed recreation			
	NPS		Windbreaks, living snow fences			
*Prairie Wildlife – All High Value –						
Assess with DOW, as applying mitigation strategies						
National Threatened and Endangered List – Least Tern, Piping Plover.						
National Species of Concern – Mountain plover, Blacktailed Prairie Dog, Swift Fox,						
Ferruginous Hawk, Massasauga Rattlesnake, Arkansas Red Darter (fish).						
<u>Colorado State Threatened</u> – Burrowing Owl, Lesser Prairie Chicken.						

# High Value Agricultural Areas

Area number7	-	Rating: Riskl	HazardL ValueH
RISK COMP	PONENTS (PO	TENTIAL FOR IGN	ITION) PRESENT IN THIS AREA:
Travel Railro Lightn Electri Power Comm Off-hi Recrea Campa Water Huntir Trails Nation	ing c fences lines nunity/rural inte ghway vehicles ation grounds Recreation &/o ng (Seasonal Fa hal Park Activiti	ermix or fishing ll/Winter)	Children with matches Electronic sites Oil/gas/mining/propane Construction sites Maintenance Projects/Canal Projects Dumps Agricultural burning Scenic Areas Fireworks Party areas Firewood cutting Other Wheat Harvest (June-July) Sunflower Harvest (October)
Fuels & <u>Topography</u>	Low	Medium	<u>High</u>
Fuels	Non-Irrigated Cropland	Short grass prairie Medium grass Prairie Prairie Sand/Sage Fence Row Tweeds	Riparian (cottonwood, tamarisk) CRP grass/NPS Weeds/tumbleweeds
Dwellings (as fuel)	0 per section	1-5per section	Greater than 5 per section
Windbreaks, Living Snow Fences		1-5 per section	Greater than 5 per section

	People/Life Residential/commercial development Wildlife habitat Wilderness (designated) Wild & Scenic rivers Visual resources Political values		Rare and endangered wildlife Rare and endangered plants Water/riparian areas Watershed Soils Minerals Cultural resources			
	Range/grazing		Timber			
	Scenic byways		Developed recreation			
_X_	Hog Farms		Dispersed recreation			
	NPS		Windbreaks, living snow fences			
*Prairie Wildlife – All High Value – Assess with DOW, as applying mitigation strategies National Threatened and Endangered List – Least Tern, Piping Plover.						
National Species of Concern – Mountain plover, Blacktailed Prairie Dog, Swift Fox,						
<u> </u>						
Ferruginous Hawk, Massasauga Rattlesnake, Arkansas Red Darter (fish).						
<u>Colorado State Threatened</u> – Burrowing Owl, Lesser Prairie Chicken.						

# Rural Areas

Area numbe	er8	-	Rating: Riskl	L Hazard _M & L_ ValueH		
]	RISK COMP	ONENTS (PO	TENTIAL FOR IGN	NITION) PRESENT IN THIS AREA:		
- - - - -	Travel Railroa Lightn Electri Power Comm Off-hig Recrea Campg Water Huntin Trails Nation	ing c fences lines lunity/rural inte ghway vehicles ation grounds Recreation &/o ng (Seasonal Fa hal Park Activiti	ermix or fishing ll/Winter)	Children with matches Electronic sites Oil/gas/mining/propane Construction sites Maintenance Projects/Canal Projects Dumps Agricultural burning Scenic Areas Fireworks Party areas Firewood cutting Other Wheat Harvest (June-July) Sunflower Harvest (October)		
	<b>Topography</b>	Low	<u>Medium</u>	<u>High</u>		
]	Fuels	Non-Irrigated Cropland	Short grass prairie Medium grass Prairie Prairie Sand/Sage Fence Row Tweeds	Riparian (cottonwood, tamarisk) CRP grass/NPS Weeds/tumbleweeds		
	Dwellings (as fuel)	0 per section	1-5per section	Greater than 5 per section		
]	Windbreaks, Living Snow Fences	1 per section	1-5 per section	Greater than 5 per section		

People/Life Residential/commercial development Wildlife habitat Wilderness (designated) Wild & Scenic rivers Visual resources Political values Range/grazing Scenic byways		Rare and endangered wildlife Rare and endangered plants Water/riparian areas Watershed Soils Minerals Cultural resources Timber Developed recreation				
Hog Farms		Dispersed recreation				
NPS		Windbreaks, living snow fences				
*Prairie Wildlife – All High Value –						
Assess with DOW, as applying mitigation strategies						
National Threatened and Endangered List – Least Tern, Piping Plover.						
National Species of Concern – Mountain plover, Blacktailed Prairie Dog, Swift Fox,						
Ferruginous Hawk, Massasauga Rattlesnake, Arkansas Red Darter (fish).						
<u>Colorado State Threatened</u> – Burrowing Owl, Lesser Prairie Chicken.						

Area number		Rating:	Risk	Hazard	Value	
RISK COM	MPONENTS (PC	TENTIAL	FOR IGN	IITION) PRESEN	NT IN THIS AREA:	
Trav Rail Ligl Elec Pow Com Off Rec Can Wat Hur Trai Nati	vel corridors roads ntning etric fences verlines nmunity/rural intendighway vehicles reation npgrounds eer Recreation &/o etting (Seasonal Falls fonal Park Activit	ds ng e fences ines unity/rural intermix hway vehicles ion rounds Recreation &/or fishing g (Seasonal Fall/Winter)		Children with matches Electronic sites Oil/gas/mining/propane Construction sites Maintenance Projects/Canal Projects Dumps Agricultural burning Scenic Areas Fireworks Party areas Firewood cutting Other Wheat Harvest (June-July) Sunflower Harvest (October)		
Fuels & <u>Topograph</u>	<u>v</u> Low	Medium		<u>High</u>		
Fuels	Non-Irrigated Cropland	Short grass Medium gr Prairie San Fence Row	ass Prairie d/Sage	Riparian (cottony tamarisk) CRP grass/NPS Weeds/tumblewe		
Dwellings (as fuel)	0 per section	1-5per section		Greater than 5 pe section	r	
Windbreaks Living Sno Fences		1-5 per section		Greater than 5 pe section	r	

People/Life Residential/commercial development Wildlife habitat Wilderness (designated) Wild & Scenic rivers Visual resources Political values Range/grazing		Rare and endangered wildlife Rare and endangered plants Water/riparian areas Watershed Soils Minerals Cultural resources Timber				
Scenic byways		Developed recreation				
Hog Farms		Dispersed recreation				
NPS		Windbreaks, living snow fences				
*Prairie Wildlife – All High Value – Assess with DOW, as applying mitigation strategies						
National Threatened and Endangered List – Least Tern, Piping Plover.						
National Species of Concern – Mountain plover, Blacktailed Prairie Dog, Swift Fox,						
Ferruginous Hawk, Massasauga Rattlesnake, Arkansas Red Darter (fish).						
<u>Colorado State Threatened</u> – Burrowing Owl, Lesser Prairie Chicken.						

## **Appendix B:**

## 2008 Annual Workplan 2013/14 Workplan

## Kiowa County Community Wildfire Protection Plan 2008 Annual Workplan

The purpose of the Community Wildfire Protection Plan is to provide stakeholders and those living in Kiowa County with an overview of the wildland fire risks, hazards and values within the planning area; recommend possible courses of action to reduce the impacts of wildfire in the planned area; and to share a current action plan.

The main goals for 2008 are to: 1) share the CWPP and Mitigation Assessment Map with the community at large (via club presentations, media, local events, and the County Fair); 2) educate homeowners and rural businesses on Firewise concepts (via club presentations, media, local events, and the County Fair); 3) purchase and place low/medium/high fire danger signage at ten appropriate highway locations entering the county; and, 3) provide Firewise educational materials to elementary school teachers and students during Fire Prevention Week.

The funding for this plan and 2008 action items are provided by a FY07 IMR National Fire Plan Community Assistance Grant from the Department of Interior, National Park Service (\$10,000).

To this end, the CWPP group has identified action items and completion dates for 2008. Action items are generally categorized under - 1) Education and Outreach; 2) Rules/Restrictions/Ordinances, and Enforcement; 3) Prevention Planning; 4) Fuel Mitigation; 5) Suppression; or 6) Grants and Administration.

#### A. Education and Outreach

1. Firewise Educational Material to K-3 RE-1 & RE-2 Schools in Kiowa County.

Who - Donna Davis, Allyn Miller & Team

What - Firewise Educational Material

Where - Eads RE-1 and Plainview RE-2 Schools

When - 3<sup>rd</sup> Quarter (October)

Costs - To be determined after signage component

2. Kiowa County Fair information booth (Fall).

Who - Donna Davis & Team

What - Work with existing clubs at fair to display CWPP/Firewise

Where - Kiowa County Fair
When - 3<sup>rd</sup> Quarter (September)

Costs - To be determined after signage component

3. Pamphlets/handouts for above Fair.

Who - Donna Davis & TeamWhat - Firewise Pamphlets

Where

When - 3<sup>rd</sup> Quarter

Costs - To be determined after signage component

3. CWPP/Map & Plains Firewise booklets and distribution

Who - Donna Davis & Team

What - Print material & distribution mailing

Where - Key communities, fire departments, agencies/governments in county

When - 3<sup>rd</sup> Quarter

Costs - To be determined after signage component

4. Civil/Ag Club Presentations (& support for above Fair/Distributions)

Who - Donna Davis & Team

What - Firewise presentations & CWPP planning/plan (3)

Where - Kiowa County When - 3<sup>rd</sup> & 4<sup>th</sup> Quarter

5. Media Releases

Who - Chris Sorensen & Team

What - CWPP planning initial stages; Kiowa County Mitigation Assessment Map; Annual Plan

Implementation; Highway Signages; School Prevention materials

Where - Kiowa Press, others (Lamar Daily); www sites

When - 3<sup>rd</sup> & 4<sup>th</sup> Quarter

6. Other Local Events

Who - Donna Davis & Team

What - Potential civic/agricultural club follow-ups

Where - To be determined

When - To be determined after signage component

### B. Ordinances/Rules/Restrictions & Enforce

1. Update of highway signages

Who - Forrest Frazee, Sheriff's Department

What - Maintain rating level on highway signages

Where - Ten highway locationsWhen - As conditions change

#### C. Mitigation and Revegetation (as applicable)

1. Ten Fire Danger Signages (Low/Medium/High) on all major highways in Kiowa County

Who - Forrest Frazee, Sheriff & Chris Sorensen, OEM

What - Identify, purchase, arrange for installation of signage.

Where - Ten highway locations

When - 2008

Costs - Approximately \$9,600

2. Fuel Mitigation on NPS SAND National Historic Site -

Who - Sand Creek National Historic Site, National Park Service

What - 12' Mower, gyro track for tumbleweed mulching around boundary

Revegetation, as needed

Where - SAND When - Yearly Costs - Internal

#### D. Grants and Administration

1. Current Grant Administration - FY07 IMR National Fire Plan Community Assistance Grant

(\$10,000 – approximately \$300 Administration, \$300 Educational Materials \$9600 Fuels treatment)

Who - Kiowa County

What - Pay incoming invoices; Maintain balance on line item grant funds

Where - Kiowa County Courthouse
When - As invoices are received

2. Desired Future Conditions planning – NPS SAND National Historic Site –

Who - Sand Creek National Historic Site, National Park Service

What - Desired Future Conditions Planning

(Including potentials for grazing, mechanical treatments, prescribed burning)

Where - SAND

When - In process 2008

Costs - Internal

## Kiowa County Community Wildfire Protection Plan 2013-14Annual Workplan

#### A. Education and Outreach

1. Continue to share the CWPP, Mitigation Assessment Maps & 2013/14 Annual Workplans, Firewise U.S.A. criteria with the community-at-large.

Who - Donna Davis and Team
What - Attend meetings to share

Where - County Commissioners, Chamber of Commerce, Haswell, Eads,

Sheridan Lake, Towner, fire departments, conservation district.

When - Year-round 2013/14

Costs - TBD

2. Share a Kiowa County Fair information booth with partners (September 4-7, 2013). Use Firewise banner/pamphlets/handouts. Firewise.org site offers many handout opportunities.

Consider additional Firewise.org informational handout opportunities - Youth Fishing Day in May at Jackson's Pond (Eads), Art in the Park in July (Eads), Art/Craft Show (Eads) and a North Cheyenne Healing Run (Sand Creek) both in November, and the Chili Supper in December (Eads).

Consider Firewise.org bookmarks – library, county courthouse, etc.

### Senior Center presentations

Who - Donna Davis & Team

What - Work with existing clubs at fair to display CWPP/Firewise

Where - Kiowa County Fair
When - 3<sup>rd</sup> Quarter (September)

Costs - TBD

#### 3. Media Releases

Who - Team

What - CWPP - Kiowa County Mitigation Assessment Maps and 2013/14

Annual Plan; Firewise messages, as needed.

Where - Kiowa Press, www sites

When - 2013/14

4. Fire Prevention Education - Firewise.org educational material

Who - Fire Departments

What - Fire Prevention Education

Where - Local Schools

When - Fire Education Week

Costs - TBD

5. Fire Ecology Educational Box; Firewise.org educational material;

Firewise Program – Engaging Youth in Reducing Wildfire Risk

Who - Donna Davis & Team/Teachers
What - Teacher Educational Material

Where - At Lamar Division of Wildlife Office

When - As available Costs - No Cost

#### B. Ordinances/Rules/Restrictions & Enforce

1. News releases during high fire danger (review Planning and Zoning ordinances)

Who - Team

What - News Release(s)
Where - Local media

When - As conditions change

## C. Mitigation and Revegetation (as applicable)

1. Fuel Mitigation on NPS SAND National Historic Site –

Who - Sand Creek National Historic Site, National Park Service

What - 12' Mower, gyro track for tumbleweed mulching around boundary

Revegetation, as needed

Where - SAND When - Yearly Costs - Internal

2. Identify and compile list of mitigation projects already done – consider application of future partnerships and grants.

Who - Team

What - Identify completed projects for future partnering and grants

Where - Countywide When - 2013/14 Costs - TBD

3. Firewise review and mitigation assessment exercise on property with each interested entities.

Who - Donna Davis & Team

What - Review Firewise and do an on ground mitigation assessment on a

property.

Where - Countywide When - 2013/14 Costs - TBD

### D. Grants and Administration

1. Current partnership and grant application.

Who - Team

What - Partner with six-county region Homeland Security Board pursuing grants

when applicable.

Where - Countywide When - 2013/14 Costs - TBD

2. Meetings/CWPP maintenance

Who - Team

What - updates/developments

Where - TBD When - Annually Costs - TBD

### 3.Grants

Who - Team

What - Apply for grant(s) as partners and educational &/or mitigation as opportunities arise.

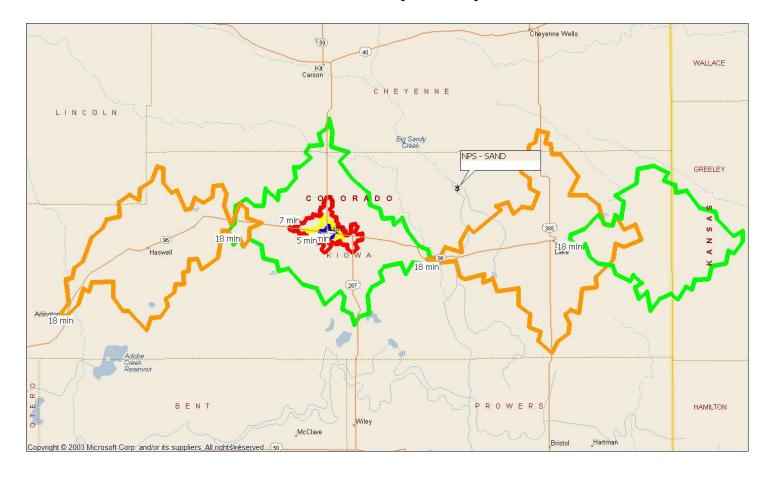
Communities do various mitigation projects – Mowing, area cleanups (Towner), for example.

Various mitigation projects in the county were suggested. They included - weed mowing in various locations, railroad right-a-ways mowing, highway right-a-ways mowing, tamarisk removal and elm-groove thinning where applicable. The Firewise message to landowners, along with individual fuel mitigation, was an ongoing mitigation interest throughout the county.

# **Appendix C:**

## Fire Department 20 Minute Response Map

Appendix C: Fire Department 20-Minute Response Map



**Appendix C (continued):** 

**CWPP Kiowa County Maps** 

# Kiowa County Community Wildfire Protection Plan



## Legend

- 1 Communities
- 2 NPS Sand Creek
- 3 Seasonal Lakes/Recreation
- 4 Railraod/Primary Travel Corridors
- 5 Secondary Travel Corridors
- 6 River Drainages
- 7 High Value Agricultural Areas
- 8 Rural Areas (Remaining)
- County Boundry







# Kiowa County Wildlife Component



#### Legend

Wildlife - Arkansas Darter

P Plover/L Tern/S Plover

Wildlife - Lesser Prairie Chicken

Wildlife - Mountain Plover

— 4 - Railraod/Primary Travel Corridors





# Kiowa County Roads







County Boundry
County Roads



