RESERVE (WUI #s 178, 179, 187) COMMUNITY WILDFIRE PROTECTION PLAN

A Supplement to the CATRON COUNTY COMMUNITY WILDFIRE PROTECTION PLAN



A Continuing Effort by and for the Citizens of Catron County, New Mexico

Ed Wehrheim, Chairman, Catron County Commission
Don Weaver, Coordinator, Catron County CWPP Core Group
in partnership with the New Mexico State Forestry Dept. and Catron County Rural Fire Departments

Assisted by the San Francisco Soil & Water Conservation District, the U.S. Forest Service, the US Bureau of Land Management, Southwest Center for Resource Analysis at Western New Mexico University, University of New Mexico, and Northern Arizona University School of Forestry.

ACKNOWLEDGEMENT

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SIGNATURES

DECLARATION OF AGREEMENT AND CONCURRENCE

The following partners in the development of this Community Wildfire Protection Plan have reviewed and do mutually agree or concur with its contents:

Ed Wehrheim, Chairman, Catron County Commission	Date
Doug Boykin, Forester, New Mexico State Forestry Department	Date
Dave Stultz, Fire Chief, Rancho Grande Volunteer Fire Department	Date
Donal R. Weaver, Fire Chief, Reserve Volunteer Fire Department	Date
Zina Day-McGuire, Catron County Wildfire Prevention Coordinator and Fire Chief, Wild Horse Volunteer Fire Department	Date
Concurrence	
Pat Morrison, District Ranger, Glenwood	Date
Rogers Steed, District Ranger, Reserve	Date

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EXECUTIVE SUMMARY

The Reserve Community Wildfire Protection Plan (CWPP) is a supplement to the Catron County Community Wildfire Protection Plan. The County CWPP completed in October, 2005 assesses the wildfire threat and hazardous fuels treatment priorities on a landscape scale. The Reserve CWPP uses the data and findings of the County CWPP to assess the wildfire threat and treatment priorities specific to the Reserve Wildland Urban Interface (WUI #s 178, 179, 187). Mitigation which will reduce the threat of wildfire damage to property, life and the land are proposed. Project scale data from the County CWPP and other sources is presented to aid in planning and design of the proposed projects.

Introduction

Overview:

The Reserve WUI #s 178, 179, 187 includes 50,620 acres in the Reserve valley along the San Francisco River and also in valleys areas to the north and Leggett drainage. Gila National Forest and private land is included within the boundaries. There are 615 E911 address sites recorded for this WUI which includes private homes, businesses, a US Forest Service administration site and miscellaneous buildings. The Cottonwood USFS campground is located on the Southwest end of the WUIs. Because of the higher concentration of homes and businesses and the density of some of the surrounding ponderosa pine and pinyon/juniper, the three WUIs rated 6th, 7th and 28th respectively in priority for treatment out of the 196 WUI areas in the County.

The County CWPP contains a thorough presentation of how determinations of values at risk, risk of occurrence and fire threat were used to locate the areas and values most at risk from catastrophic wildfire in the County and to prioritize treatment needs. Please refer to the County CWPP for more information. It is not the intent of this plan to duplicate the County CWPP. The general outline of the County CWPP is followed in this CWPP, except where there is no supplement necessary to the County CWPP.

Goals And Objectives

As a supplement to the County CWPP, the main objective of the Reserve CWPP is to propose work needed to reduce and mitigate fire threat. To accomplish this objective this supplement continues the collaboration started in the County CWPP, coordinating the needed work with past efforts, the various land owners and other interest.

Future Desired Condition and Relevant Fire Authorities

The desired condition for WUI areas as stated in the County CWPP is obtainable: "The desired condition for WUI areas is a fire safe environment around protected improvements that will provide "defensible space" for firefighters in the event of a wildfire in the surrounding area". There is some high fuel loading, but not as many complicating factors such as high elevation forests on steep slopes, Wilderness and Roadless Study areas and environment concerns such as the Mexican spotted owl as there are in some of the WUI areas in the County. There is an excellent opportunity to obtain the desired condition for this WUI area.

Relevant Authorities

No supplement to the County CWPP necessary.

Planning Area Boundaries

No modifications were made in the WUI boundary as established in the County CWPP.

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PLANNING PROCESS

History

Reserve, settled in the late 1800's is among the older communities in the County, however, in the last 10-15 years considerable subdivision of land and building of new homes has occurred. The first settlers were mostly ranchers. Logging in the surrounding Gila National Forest has supported in the past at least 2 large sawmills in the Reserve/Rancho Grande area. Cattle ranching and logging has been the main stay of the community in past years but environmental restrictions and lawsuits has greatly reduced activities in those two industries.

Except for the steeper inaccessible areas, all ponderosa pine areas on the National Forest in and surrounding the Reserve WUIs has been commercially harvested several times. There have been numerous non-commercial treatments also such as pre-commercial thinning and prescribed burns. Fire wood cutting has greatly altered the age class and species composition in wood cutter accessible areas.

Collaboration

Besides the meetings held around the County and one meeting at Community Center and Senior Center for the County Wildfire Protection Plan, the Reserve Ranger District of the Gila National Forest has had extensive contact with the private land owners concerning treatment needs and proposed projects. There has been numerous meetings with Reserve Ranger District personnel to coordinate the writing of this plan. Comments from all these meetings and contacts were incorporated in a rough draft. The rough draft was presented in public meetings at a Village Board meeting. It was also presented on June 16, 2007 at a Rancho Grande VFD meeting. Comments on the rough draft were incorporated in a draft which was sent out for a last review by the involved agencies before the final was signed.

Methodology

Most of the data used for this CWPP is from the County CWPP and was scaled to fit this WUI, Although the County CWPP was a landscape scale analysis, much of the data originated at a scale that fits the purpose of this CWPP (30x30 meter satellite imagery for example). All data presented in this WUI is from data sources that pre-date the Martinez Fire of June, 2006. The Martinez fire was 7934 acres, all but 28 acres of which was within these WUI areas. Much of the fire burned relatively cool, but there was also lots of near 100% tree mortality in both ponderosa pine and PJ areas. No attempt was made to modify the data from the County CWPP to reflect the changes made by this fire, mostly because there is no data available on the new vegetative conditions. The Martinez Fire boundaries are shown on most of the maps displayed in Appendix 3. We know that the treatment needs within the Martinez Fire area are now very low priority and that is reflected in the proposed treatment priorities and projects for these WUI areas.

Public Involvement

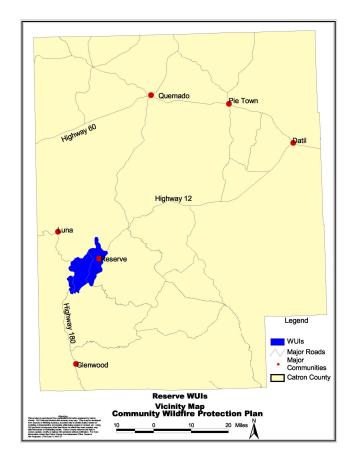
See Collaboration section above.

COMMUNITY PROFILE

WUI Description

The Reserve WUI areas include the communities of Reserve, Rancho Grande, Middle Frisco and Lower Frisco. The Arizona/New Mexico state line lies about 10 miles to the west of these WUIs. Access to the area is best over Federal Highway 180 and State Highway 12. Most of the land is National Forest (89%). The WUI is within the Reserve Ranger district on the Gila NF.

The lowest elevation on the San Francisco River is 5560 ft. and only 1.8 miles from the highest point of 7520 ft. The area straddles the transition zone between ponderosa pine and pinyon/juniper types. As can be seen in the table below over 56% of the ponderosa pine area was in a "closed" canopy condition before the Martinez Fire which is estimated to have reduced it to about 40%. See maps for Forest Type, Structural Stage and Regap Cover Types.



Reserve WUI (#s 178, 179, 187) Machine Accessibility by Ownership, Cover Type and Density

				Acres by	y Cover Ty	pe and Der	nsity			
				Ponderosa	Mixed	Mixed	Pinyon	Pinyon	Grass/	
WUI	Machine		Ponderosa	Pine	Conifer	Conifer	Juniper	Juniper	Shrub	
Number	Accessible	Owner	Pine Open	Closed	Open	Closed	Open	Closed	Other	Total
178	No	NF	1,108	1,031	4	15	3,503	905	117	6,684
178	No	Pvt	40	22	0	0	187	61	18	327
178	Yes	NF	1321	188	0	0	6444	1422	832	10,206
178	Yes	Pvt	179	51	0	0	2,874	879	426	4,410
		Totals	2,649	1,292	4	15	13,009	3,266	1,393	21,628
179	No	NF	1,881	4,150	38	83	3,698	1,848	11	11,710
179	No	Pvt	0	0	0	0	0	0	0	0
179	Yes	NF	1562	2689	9	9	5920	2121	471	12,780
179	Yes	Pvt	31	22	0	0	255	209	64	581
		Totals	3,474	6,861	48	92	9,873	4,178	546	25,071
187	No	NF	383	546	9	14	716	336	26	2,031
187	No	Pvt	17	26	0	0	111	68	8	231
187	Yes	NF	302	235	1	0	627	269	12	1,447
187	Yes	Pvt	8	18	0	0	56	89	44	215
		Totals	711	825	10	14	1,510	762	91	3,924
All	No	NF	3,372	5,728	52	112	7,917	3,089	154	20,425
All	No	Pvt	58	47	0	0	299	129	26	558
All	Yes	NF	3,185	3,112	10	9	12,991	3,811	1,315	24,433
All	Yes	Pvt	219	91	0	0	3,185	1,177	535	5,207
		Totals	6,834	8,977	62	121	24,392	8,207	2,030	50,623

Closed Density Summary

Machine Accessible	Closed
no	9,106
yes	8,200
Total	17,305

Fire Regime Condition Class (FRCC) within the WUI boundary is 69% class 1, 31% class 2 and 1% class 3. This means that about 1/3 of the WUI is in a moderately dense existing vegetation condition. More information on FRCC can be found in the County CWPP. Briefly, fire regime condition class is a classification of the amount of departure from the natural regime. The three classes for FRCC are:

- 1. Low, class 1, <=33% departure
- 2. Moderate, class 2, >33% to 66% departure
- 3. High, class 3, >66% departure

FRCC mapping of the abundance classes shows that about 2/3 (68%) of the Reserve WUI area is rated similar, 22% is rated moderate and high, and 11% is rated rare. Abundance class is a slightly different view of FRCC and is the amount of a vegetation-fuel class compared to the reference condition amount, classified into rare, similar, moderate and high. The management implication is to recruit more of the rare, maintain the existing rare and similar and reduce the moderate and high until theoretically all is "similar".

- 1. Rare, < -25% difference
- 2. Similar, > -25% and < +25% difference
- 3. Moderate, $\geq +25\%$ and $\leq +75\%$ difference
- 4. High, > +75% difference

FRCC mapping of the risk classes shows about 2/3 of the area in low risk and about 1/3 in moderate and high. The risk of a vegetative condition not being sustainable is shown by risk class which is an index based on the difference of vegetation-fuel class amount from the reference amount. Classified into low, moderate and high, it indicates the level of key ecosystem component risk of sustainability from unplanned disturbances, such as wildfire. The management implication is to reduce the amount of high and moderate risk to sustainability and maintain the low risk areas.

- 1. High, < -75% or > +75% difference
- 2. Moderate, -25% to -75% or +25% to +75% difference
- 3. Low, -25% to +25% difference

Reserve WUI #s 178, 179, 187
Fire Regime Condition Class Mapping Summary

	Class	Acres	% of Total	Total Check
FRCC	0(null)	141	0	
	1	34,711	69	
	2	15,480	31	
	3	291	1	50,623
			100	
Risk	Null	141	0	
	Low	34,331	68	
	Moderate	7,228	14	
	High	8,924	18	50,623
			100	
Abundance	Null	141	0	
	Rare	5,468	11	
	Similar	34,331	68	
	Moderate	1,816	4	
	High	8,868	18	50,623
			100	

In the County CWPP, slope steepness was mapped in 4 classes. The area of each slope class in this WUI is as shown in the following table. Also see map Slope % Classes.

Reserve WUI Slope Classes

Slope%	Acres
0-10	17846
11-20	13370
21-35	12998
35+	6408

Fire threat was modeled and mapped in the County CWPP to rate the fire threat within each WUI area as compared to the fire threat in other WUI areas. These WUIs rated all high and moderate fire threat. See map for Fire Threat.

Past occurrence of lighting and man-caused fires was mapped and considered in determining treatment priorities in the County CWPP. These WUIs were mapped at

about 1/3 high, 1/3 moderate and 1/3 low combined human/lightning risk. See Map 6, "Risk of Human and Lightning Caused Wildfire" in the County CWPP.

Treatment priority was modeled and mapped in the County CWPP to rate the treatment priority within each WUI area as compared to the treatment priorities in other WUI areas and also to show a weighted average of the treatment priority ratings within each WUI. The weighted average treatment priority places WUI 178 as 6th, WUI 179 as 7th and WUI 187 as 28th in need for treatment out of 196 WUI areas in the County. The Reserve WUIs are moderate and high priority for treatment as compared to the other 196 WUI areas in the County. See map Treatment Priorities. There are other considerations on determining treatment priorities not considered at the County CWPP landscape scale. One of these considerations is proximity to endangered structures. There is a need for some balance between treatment priorities as determined in the County CWPP and other concerns about priority such as proximity. In determining the priority of proposed projects in this plan, the priority generally decreases with increased distance from the value at risk. Since the Martinez Fire of 6/06 burned about 1/3 of WUI 179, the treatment priority if recalculated would be lower, however, the 2/3 not burned is the areas closest to the private lands and values at risk on those lands.

There are three Threatened and Endangered species in this WUI (as per County CWPP), bald eagle stream habitat, one Leopard frog site and Mexican spotted owl critical habitat and management areas cross the WUI boundary in one spot for a very small amount of acres. Threatened and Endangered species were considered as part of the other values at risk in the modeling of treatment priorities. The NEPA process will need to deal with the restrictions, guidelines and protection of those species. It is not within the scope of this plan to resolve the conflict between the actions needed to return the vegetation to a more natural condition and the restrictions meant to protect species by preserving the existing condition.

Recreational use, after homes and businesses, is by far the most important human use of this area and is an important contributor to the economy of the County. Recreational use was rated over the County in the County CWPP. Recreational Use was rated above average for all but the interior inaccessible areas of these 3 WUIs. See map Recreational Use for the ratings in this area as compared to the remainder of the County.

There are presently 615 addresses recorded in the County E911 address GIS records. All structures except the USFS administrative site are located on about 5,765 acres of private land. Safe evacuation in the event of a fast moving wildfire burning under high or extreme fire danger would be possible with proper planning and implementation. There is not many "dead-end road" and no escape zone" situations. See appendix table "Community Subdivision Ratings of Various Attributes by Fire Dept.".

Cottonwood, a developed USFS campground is on the southwest end in WUI 187. Development in the campground consists of small toilet buildings and tables with parking spots.

A small part of one watershed which has a State 303d listed water bodies is in these WUIs.

Fire protection services are supplied by the Reserve and Rancho Grande Volunteer Fire Dept.s and the Forest Service Reserve Ranger District with Apache Creek Fire Dept. providing automatic mutual aid on all structure fires. Defensible space for most of the structures in the 3 WUIs already exists or can be improved upon with some reduction in fuels. Water sources are excellent to fair in both Fire districts. The Village of Reserve has a hydrant system while Rancho Grande has one hydrant and access to 3 large ponds. There has been no structure vulnerability surveys completed in this WUI. See appendix table "Community Subdivision Ratings of Various Attributes by Fire Dept.". Also see appendix table "Fire Dept. Inventory". Wildland firefighting safety and numbers of volunteer members are concerns. The Reserve Ranger District of the Gila National Forest provides wildland fire protection in the area. Availability of resources depend on the severity of the fire season, time of year and priorities (Forest, Regional and National).

PLANNING FOR THE FUTURE

Recap Of Objectives

The objectives of the Catron County Community Wildfire Protection Plan were:

- Create a county-wide, landscape level plan
- Locate the highest areas at risk from catastrophic wildfire in the County
- Prioritize these areas based on the values of the citizens of the County
- Suggest mitigation actions for the protection of life, property, critical infrastructure and wildlands in the County, based on
 - Optimum treatment efficiency
 - Lowest treatment cost
 - Highest benefit to local economy
- Follow-through to on-the-ground level by developing local Wildfire Protection Plans for implementation of objectives of this County-wide Plan

The objective of the Reserve Community Wildfire Protection Plan is to propose work needed to reduce and mitigate fire threat.

Implementation/Mitigation

Several mitigations are proposed to reduce and mitigate fire threat within the Reserve WUI and are summarized in the following 2 tables. Mitigation needs are listed by priority in the first table and are as shown on Map 14: Proposed Mitigation Priorities in Appendix Volume 3. Proposed mitigation projects are listed in the second table. These same tables will be used to track accomplishments.

Mitigation Needs by Priority for the Reserve WUI (# 178, 179, 187) Last update: 3/26/2007

	MITIGATION PRIORITIES										
		IVI	HIGATION FRIORITIES								
No.	Mitigation Name	Owner	Description of Needs								
	Fuel Hazard Reduction	_									
	Rancho Grande	PVT	some lots need thin, pile/burn, chip though most open grass								
	Rancho Grande	NF	thin, pile/burn, chip, prescribed fire								
	Boy Scout	PVT	small amount of thin, pile/burn, chip								
	Boy Scout	NF	thin, pile/burn, chip, prescribed fire outside Leggett burn								
	N Slope	NF	thin, pile/burn, chip, prescribed fire								
	Horse Pasture	PVT	small amounts of pile, burn/chip, prescribed fire								
4	Horse Pasture	NF	thin, pile/burn, chip, prescribed fire								
	Griffin	PVT	small amounts of pile, burn/chip, prescribed fire. (Some Pvt land missing on Map)								
5	Griffin	NF	thin, pile/burn, chip, prescribed fire								
6	Cottonwood	PVT	some thin, pile/burn, chip								
6	Cottonwood	NF	thin, pile/burn, chip, prescribed fire, (lot of steep ground)								
7	East Leggett	NF	thin, pile/burn, chip, prescribed fire								
9	East Reserve	PVT	mostly open river bottom								
9	East Reserve	NF	would be difficult to treat because of terrain, minimal return								
8	Martinez Ranch	PVT	some thin, pile/burn, chip								
8	Martinez Ranch	NF	mostly steep slopes, prescribed fire								
	Pueblo Ranch	PVT	Treated or open grass								
	Pueblo Ranch	NF	some pile, burn, prescribed fire but mostly open grass								
	Lower Frisco	PVT	mostly open river bottom								
	Lower Frisco	NF	mostly steep slopes, prescribed fire								
	Upper Frisco	PVT	mostly in river bottom with little need								
	Upper Frisco	NF	prescribed fire								
	SE Slopes	NF	none								
13	Martinez Burn	NF	none								
	Fire										
	Suppression/Prevention										
	Pvt. Owner Education		CWPP, firewise, demonstration projects								
	Improve Suppression		need wildland fire training								
	Improve Response Times		need better station coverage								
4	Improve water supply		need stategically located storage tanks								
	Better water delivery and										
	Attack equipment		need water tenders and wildland gear								
6	Protect wood industries		need Substation at lower Frisco mill site								
	Prevent structure fire										
7	extension to wildland		need quick, efficient attack of structure fires								

Project Accomplishments for the Reserve WUI (#s 178, 179, 187)

Last update: 6/18/2007

PROJECTS

Mitigation Priorities Included	Name or Description	Status and Remarks	Plan Acres		Accomp	lishme	ent
		Fuel Hazard Reduction Projects		CY	Fire Acres	CY	Other Acres
1	Reserve WUI	Commercial Sale, by Reserve RD to sell in 07	340				
1	Rancho Grande fuelbreak	completed thinning, pile/burned,by Reserve RD, Maintenance needed of sprouting	160			05	160
1	5-Bar fuelbreak	mostly completed thinning, pile/burned,by Reserve RD	80	07	80	06	80
1	RG Problem Lots	thinning, pile/burn, chip of about 3 lots, by Rancho Grande VFD and State	6				
1	Airport 2	BioMass Demo NMAC grants	11			07	11
2	Airport 1	BioMass Demo NMAC grants	15			07	15
1,2,3,7	Free Use	USFS consider Free Use Green Fuelwood cutting to encourage thinning, Could include slash disposal for thinning					
4	Admin Site	Completed thinning, pile/burn, prescribed fire on Reserve RD admin site.	111			05	111
4	Garfield	thinning, pile/burn, chip prescribed fire west of cemetery and around Garfield property, by Reserve VFD and State	7				
4	Reserve East Slope	slopes facing east between school and downtown need thinning, pile/burn, chip and/or prescribed fire, by Reserve VFD and State Drainage sw of main rd needs thinning, pile/burn,	10				
4	2nd Mesa Canyon	chip and/or prescribed fire, by Reserve VFD and State	3				
4	Magdalena Canyon	Slope of Canyon (between 1st, 2nd mesa) needs thinning, pile/burn, chip and/or prescribed fire, by Reserve VFD and State	5				
4	Rivers West	thinning, pile/burn, needed in 1/3 to 1/2 of subdivision, by Reserve VFD and State	20				
5 & 10	McCarty	thinning, clean-up river bottom debris, pile/burn, chip, by Reserve VFD and State	10				
5	Griffin	some clean-up on upper Griffin PVT, by Reserve VFD and State	3				
6	Cottonwood	some thinning, pile/burning completed on NF around both PVT. More needed around middle PVT. owner cooperative? Glenwood RD Burned piles NF GRD 2/07	15	07			
8	West Leggett	Prescribed Burn, Reserve WUI EA					
8	Pueblo Ranch	thinning/pile/burn done on PVT					

Martinez Ranch	some thinning, pile/burning possible on both PVT Saliz Canyon bottom, by Rancho Grande VFD and State completed	30			06	30
Lower Frisco	Small amount clean-up completed during Martinez fire along west bndy of PVT.					
Martinez Fire	Fire use burned 06/06	NA	06	7934		
	Fire Suppression/ Prevention Projects	Acres		Year Co	mplete	ed
07 Grant Demo	RFP being advertised for sites near Rancho Grande	NA		0	6	
Wildland Fire Training	ongoing, coordinated at 20 Communities meetings	NA				
Water Tender	1 water tender, for main station, by Rancho Grande VFD @ \$150,000	NA				
Lower Frisco Station	concept approved by Village and County for location at mill site, by Reserve VFD, \$80,000	NA				
5-Bar Station	attempt to find location unsuccessful to date, by Rancho Grande VFD, \$80,000	NA				
Lower Frisco Tank	80,000-120,000 gal tank needed after station completed, by Reserve VFD, \$60,000	NA				
5-Bar Tank	80,000-120,000 gal tank needed after station completed, by Rancho Grande VFD, \$60,000	NA				
Water Tender	1-2 water tenders, after 5-Bar Station completed, by Rancho Grande VFD @ \$150,000	NA				
wildland gear	forestry/urban interface hoses, etc., by Rancho Grande VFD (Reserve VFD equipped), \$20,000	NA				
Class A engine	1 engine for new substation, by Rancho Grande VFD, \$180,000	NA				
Class A engine	1 engine for new substation, by Rancho Grande VFD, \$180,000	NA				
Evacuation Routes	alternate evacuation routes for Rancho Grande to east	NA				
Airport water supply	Water Supply at Airport for air ops on Wildfires	NA				
Pond Draft site	Additional pumper draft site on pond near old store	NA				
Pond Access	Culvert at new red gate for access to ponds	NA				
Community Chipper	Chipper bought for use by Community(ies)	NA				
	Lower Frisco Martinez Fire 07 Grant Demo Wildland Fire Training Water Tender Lower Frisco Station 5-Bar Station Lower Frisco Tank 5-Bar Tank Water Tender wildland gear Class A engine Class A engine Evacuation Routes Airport water supply Pond Draft site Pond Access Community	Martinez Ranch Lower Frisco Martinez Fire Fire use burned 06/06 Fire Suppression/ Prevention Projects O7 Grant Demo Wildland Fire Training Water Tender Lower Frisco Station Lower Frisco Tank S-Bar Tank S-Bar Tank Water Tender S-Bar Tank S-Bar Tank Completed, by Reserve VFD, \$80,000 Water Tender S-Bar Station Lower Frisco Tank S-Bar Station S-Bar Tank S-Bar Tank S-Bar Tank S-Bar Station S-Bar Station S-Bar Station Lower Frisco Tank S-Bar Station S-Bar Statio	Martinez Ranch Lower Frisco Martinez Fire Fire use burned 06/06 Fire use burned 06/06 RFP being advertised for sites near Rancho Grande Wildland Fire Training Mater Tender Lower Frisco Station Lower Frisco Station Lower Frisco Station State Station Sylva Sylv	Martinez Ranch Lower Frisco Martinez Fire Fire suppression/ Prevention Projects Acres O7 Grant Demo Wildland Fire Training Mater Tender Water Tender Water Tender Chass A engine Class A engine Evacuation Routes Acres Statio Statio Small amount clean-up completed during Martinez fire along west bndy of PVT. NA O6 Acres NA Acres NA Acres NA Acres NA Acres NA I water tender, for main station, by Rancho Grande VFD @ \$150,000 NA Attempt to find location unsuccessful to date, by Rancho Grande VFD, \$80,000 NA Attempt to find location unsuccessful to date, by Rancho Grande VFD, \$80,000 NA 80,000-120,000 gal tank needed after station completed, by Reserve VFD, \$60,000 NA 80,000-120,000 gal tank needed after station completed, by Rancho Grande VFD, \$60,000 NA 1-2 water tenders, after 5-Bar Station completed, by Rancho Grande VFD @ \$150,000 NA 1-2 water tenders, after 5-Bar Station completed, by Rancho Grande VFD @ \$150,000 NA 1 engine for new substation, by Rancho Grande VFD, \$180,000 NA 1 engine for new substation, by Rancho Grande VFD, \$180,000 NA Airport water supply Water Supply at Airport for air ops on Wildfires NA Additional pumper draft site on pond near old store Pond Access Culvert at new red gate for access to ponds NA	Martinez Ranch Lower Frisco Training Mater Tender Lower Frisco Station Lower Frisco Tank Station Stati	Martinez Ranch Lower Frisco Fire along west bndy of PVT. Martinez Fire Fire Suppression/ Prevention Projects Fire Suppression/ Prevention Projects RFP being advertised for sites near Rancho Grande Wildland Fire Training Ongoing, coordinated at 20 Communities meetings 1 water tender, for main station, by Rancho Grande VFD @ \$150,000 Station Lower Frisco Station Station Lower Frisco Tank Sear Station Lower Frisco Tank Sear Station Lower Frisco Tank Sear Station Lower Frisco Tank Sear Station Lower Frisco Tank Sear Station Lower Frisco Tank Sear Station Lower Frisco Tank Sear Station Lower Frisco Tank Sear Station Lower Frisco Tank Sear Station Lower Frisco Tank Sear Station Lower Frisco Tank Sear Station Lower Frisco Tank Sear Station Lower Frisco Tank Sear Station Lower Frisco Tank Sear Station Lower Frisco Tank Sear Station Lower Frisco Tank Sear Station Lower Frisco Tank Sear Station Completed, by Reserve VFD, \$80,000 NA Sear Station Lower Frisco Tank Sear Station Sear Station Completed, by Reserve VFD, \$80,000 NA Sear Station Lower Frisco Tank Sear Station Completed, by Rancho Grande VFD, \$80,000 NA Sear Station Sear Station Completed, by Rancho Grande VFD, \$60,000 NA Sear Sear Station Completed, by Rancho Grande VFD, \$60,000 NA Sear Sear Station Completed, by Rancho Grande VFD, \$60,000 NA Sear Sear Station Completed, by Rancho Grande VFD, \$180,000 NA Sear Sear Station Completed, by Rancho Grande VFD, \$180,000 NA Sear Sear Station Completed, by Rancho Grande VFD, \$180,000 NA Sear Sear Sear Station Completed, by Rancho Grande VFD, \$180,000 NA Sear Sear Sear Station Completed, by Rancho Grande VFD, \$180,000 NA Sear Sear Sear Sear Station Completed, by Rancho Grande VFD, \$180,000 NA Sear Sear Sear Sear Sear Sear Sear Sear

The above priorities are subject to change for numerous reasons such as funding limitations, kind of funding, fire use and wildfire. The above table will be updated as needed to reflect current priorities and proposals. The proposed mitigation may be implemented in stages, split up, or combined to form projects either entirely or partly within the WUI.

Funding for the above proposed mitigation will be coordinated between the Forest Service, County and State Forestry.

RESERVE COMMUNITY WILDFIRE PROTECTION PLAN

APPENDIX VOLUME 2

Data

Supplement to the CATRON COUNTY COMMUNITY WILDFIRE PROTECTION PLAN

Table: Vegetation Types

Reserve WUI CWPP Vegetation Types/Reference Conditions Crosswalk Reference Condition Composition per Cover Type

	C	over Typ	e Value	es			•	Prece	nt Comp	osition	
Regap class	CWPP class	PNVG	Cover Type	0-24 Value	Base 3 Value	Р	NV/GIS Code	Early	Open	Closed	Acres in County
30	MC	MCAN	S032	22	2.7500		340	10	80	10	150
32	MC	MCAN	S034	21	2.6250		340	10	80	10	33
Mixed	Conife	r Totals a	nd We	ighted A	4verage=	=		10.00	80.00	10.00	183
92	PJ	MAME	S112	14	1.7500		310	5	75	20	18878
36	PJ	PLME2	S039	13	1.6250		322	2	67	31	13568
95	PJ	MAME	S115	10	1.2500		120	5	75	20	88
45	PJ	MAME	S051	8	1.0000		310	5	75	20	9
64	PJ	PLME2	S075	9	1.1250		322	2	67	31	56
Pinyor	n/Junipe	r Totals a	ınd We	ighted A	Average	=		3.75	71.66	24.60	32,599
33	PP	MAME	S035	24	3.0000		310	5	75	20	513
34	PP	PPIN7	S036	23	2.8750		330	15	80	5	15,298
Ponder	osa Pine	e Totals ar	nd Weig	hted Av	erage=			14.68	79.84	5.49	15,811
5	О	ROCK	S006	0	0.0000						4
9	О	ROCK	S010	0	0.0000						136
15	О	ROCK	S016	0	0.0000						187
51	G/S	CHAP5	S057	3	0.3750						10
52	G/S	DGRA3	S058	3	0.3750						1,216
65	G/S	DGRA3	S077	3	0.3750						34
67	G/S	PLME2	S079	5	0.6250						24
76	G/S	PLME2	S090	3	0.3750						361
80	G/S	RWSL	S094	8	1.0000						57
											2,030

*listed under PPIN7 in one NF crosswalk and under CHAP5 in another. Type is definitely more a PJ woodland type than a Ponderosa Pine type.

The above table summarizes information about the regap cover types, relative fire threat and structural stage reference conditions. The column CWPP class shows the grouping of the regap classes into the groups: Ponderosa pine, Mixed Conifer, Pinyon/Juniper, Grass/Shrub and Other. Potential natural vegetation group (PNVG), Cover Type and GIS Code are designators used in various reference information. The 0-24 Value is a relative fire threat value assigned in the County CWPP analysis, i.e. the higher the value the higher the fire threat. The Base 3 Value is the 0-24 Value divided by 8. The reference condition is shown in the Percent Composition columns. Weighted average percent compositions are shown for each Cover Type group (except for the Other group). The weighted average is useful since there is most often an intermingled mix of regap classes. The "reference" condition is just

that.	It is one of the sources	s of reference	information	about the	condition ne	ecessary for	reduction of	of fire
threa	t and sustainable ecolo	gical health.						

Table: Community/Subdivision Ratings of Various Attributes for Reserve Fire Dept.

			Ra	ite fo	r Cor	nmui	nity/Sul	oivisions Onl	у	Rate Both		or Fire Only
			Protection Need									
	Data Entry Units=		None Low					miles				
	(See Attribute		Mod					to				
	,		1.05 1-	0-	0-	0-	0		\/ /\ -	4.40		
	Definitions)		High Evac.	10	10	10	Sum	nearest Fire	Yes/No Evac.	1-10	year	gallons Water
	Community or	WUI	Routes Safety	,	Vulne	erabil	lity	Station	Plan/ Struct.	Applicable	Vehicle Avg.	on
Fire Dept.	Subdivision	ID	Zones	R	С	D	Sum	Distance	Eval.	ISO rating	Age	Wheels
•	Cerros Locos De											
Reserve	Frisco	6s19w11	None				0	5.3	N/N	9		
Reserve	Christensen	6s19w11	None	3	8	1	12	1.5	N/N	6		
Reserve	Hudson Ranch	6s19w11	Mod	3	9	1	13	4.2	N/N	6		
Reserve	Kiehne Romero Addition	6s19w11	None	3	8	1	12	0.5	N/N	6		
Reserve	Largo Canyon	6s19w11	None	2	8	2	12	2.7	N/N	9		
Reserve	Lower Frisco	6s19w11	None	3	8	1	12	4.1	N/N	9		
Reserve	Middle Frisco Townsite	6s19w11	None	3	8	1	12	1.5	N/N	9		
Reserve	N-Bar/Negrito	6s19w11	Mod	3	8	1	12	35.0	N/N	10		
Reserve	North Slope	6s19w11	None	3	8	1	12	1.5	N/N	6		
Reserve	Reserve Townsite	6s19w11	None	3	8	1	12	0.5	N/N	6		
Reserve	Rivers East	6s19w11	None	0	0	0	0	3.5	N/N	9		
Reserve	Rivers West	6s19w11	Low	3	4	5	12	3.1	N/N	9		
Reserve	Sawmill	6s19w11	None	3	8	1	12	5.6	N/N	10		
Reserve	School Addition	6s19w11	None	3	8	1	12	0.5	N/N	6		
Reserve	Willow Creek	11s17w6	High	7	9	7	23	50.0	Y/N	10		
Reserve										6	1989	6960

Table: Community/Subdivision Ratings of Various Attributes for Rancho Grande Fire Dept.

			Ra	r Cor	Rate Both	Rate for Fire Dept. Only						
			Protection Need									
	Data Entry Units=		None Low					miles				
	(See Attribute		Mod					to				
	Definitions)		High	0- 10	0- 10	0- 10	Sum	nearest	Yes/No	1-10	year	gallons
	Deminions)		Evac.	10	10	10	Cum	Fire	Evac.	1 10	year	Water
	Community or	WUI	Routes	'	Vulnerabi		ity	Station	Plan/	Applicable	Vehicle	on
Fire Dept.	Subdivision	ID	Safety Zones	R	С	D	Sum	Distance	Struct. Eval.	ISO rating	Avg. Age	Wheels
Rancho Grande	Cottonwood	0-00-45	Mod				0	6.0	N/N	10		
Rancho	Cottonwood	8s20w15	IVIOU				U	6.0	IN/IN	10		
Grande	Five Bar Ranch	6s19w11	Low				0	2.5	N/N	9		
Rancho Grande	Ponderosa Estates	6s19w11	Low				0	3.0	N/N	9		
Rancho Grande	Rancho Grande Estate	6s19w11	Mod				0	0.2	Y/N	9		
Rancho Grande										9	1985	2150

Table: Reserve Volunteer Fire Department Equipment Inventory

		Туре		FGPM	Purpose		Feet of Hose Carried									
Year	Make/Model		Tank			Drive	Reel	1"	1.5+"	2.5"	3"	4"	5"	Hard Suction	Soft Suction	Porta Tank
1968	Ford/600	Pumper	1000	500	Structural	4x2	400	0	550	450	0	0	0	20	15	1000
1978	Ford/150	Pickup	na	na	Rescue	4x4	0	0	0	0	0	0	0	0	0	0
1981	Ford/900	Pumper	1000	750	Structural	4x2	400	0	600	500	0	0	8000	20	15	0
1987	Ford/350	Pumper	260	F250	Struc/Wild	4x4	200	0	200	500	0	0	0	20	15	0
1994	KME/Firefox	Pumper	500	1500	Structural	4x2	0	0	600	600	0	0	1200	10	25	0
1999	Chev/8500	Tender	2000	500	Struc/Wild	4x2	0	0	200	150	0	0	0	30	15	2000
2003	custom	Trailer	na	na	Special	na	0	0	0	0	0	0	0	0	0	0
2004	Freightliner	Tender	2200	500	Struc/Wild	4x2	0				·		0			2000

Table: Rancho Grande Volunteer Fire Department Equipment Inventory

							Feet of Hose Carried									
Year	Make/Model	Туре	Tank	FGPM	Purpose	Drive	Reel	1"	1.5+"	2.5"	3"	4"	5"	Hard Suction	Soft Suction	Porta Tank
1959	Ford/F600	Tender/Pumper	700	250	Structure	4x2	200		550	1000	0	0	0	20	0	2100
1989	Ford/F350	Pumper	260	250	Struc//wild	4x4	200		1200	0	0	0		20	0	0
1989	Ford/E350	Service	NA	NA	Support	4x2	0	0	600	400	0	0	0	0	0	1000
2001	Intl/4800	Pumper	1000	1000	Structure	4x4	200	0	650	1800	0	0	0	20	0	0

Subject List from Table Contents for Catron County CWPP

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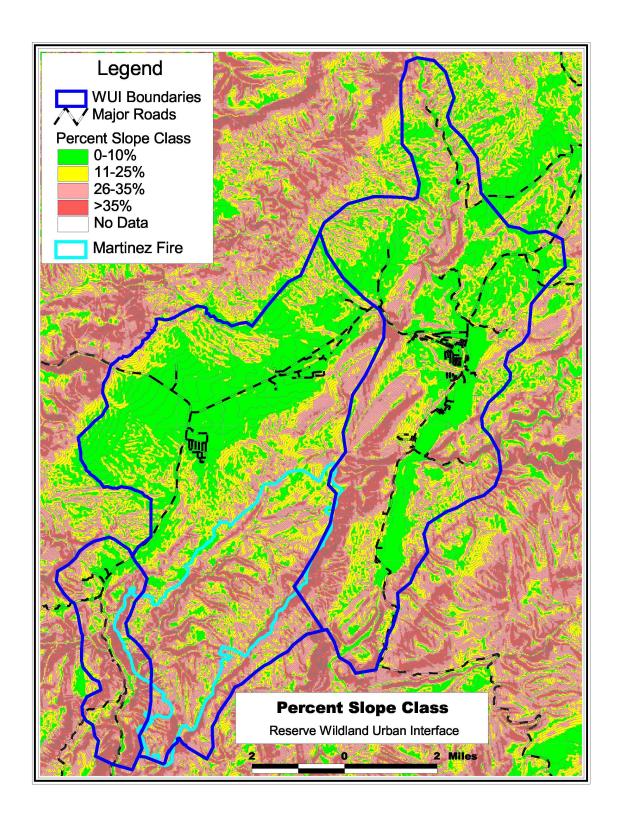
Bibliography/References

RESERVE COMMUNITY WILDFIRE PROTECTION PLAN

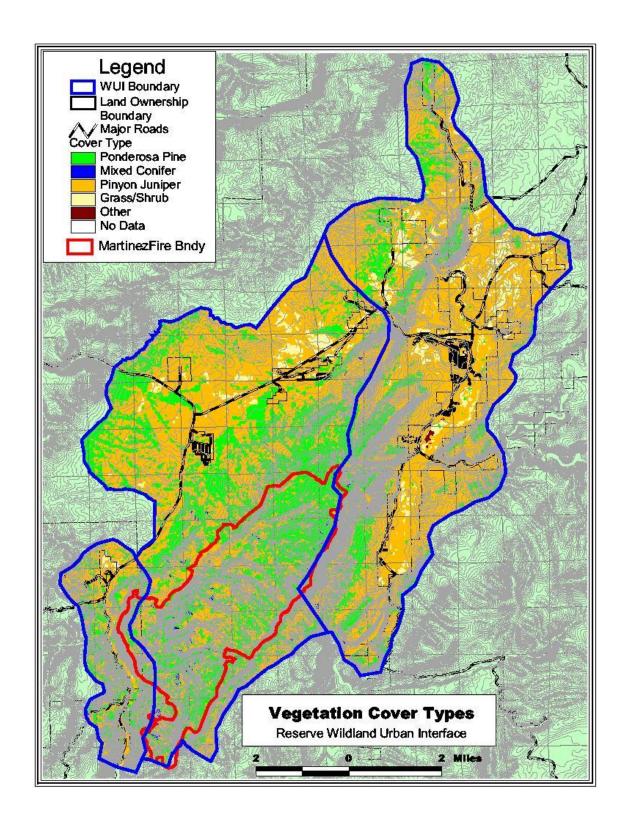
APPENDIX VOLUME 3

Maps

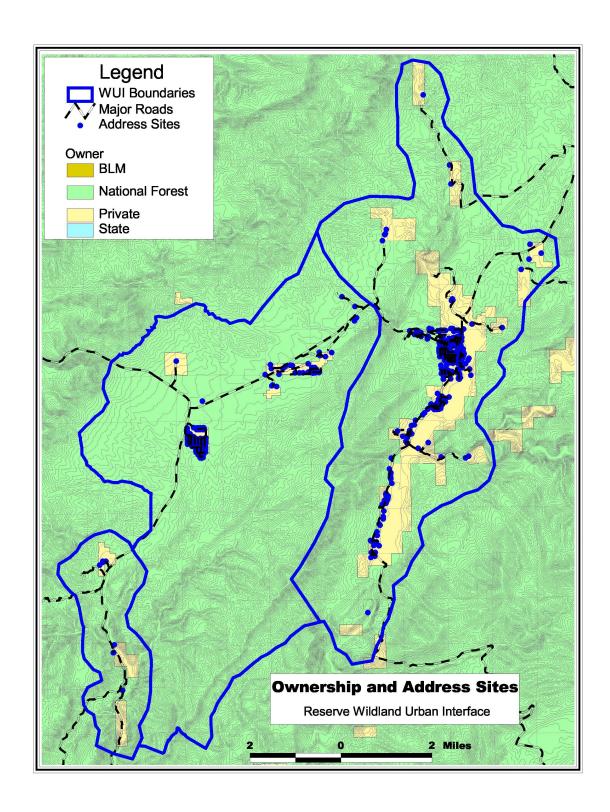
Supplement to the CATRON COUNTY COMMUNITY WILDFIRE PROTECTION PLAN



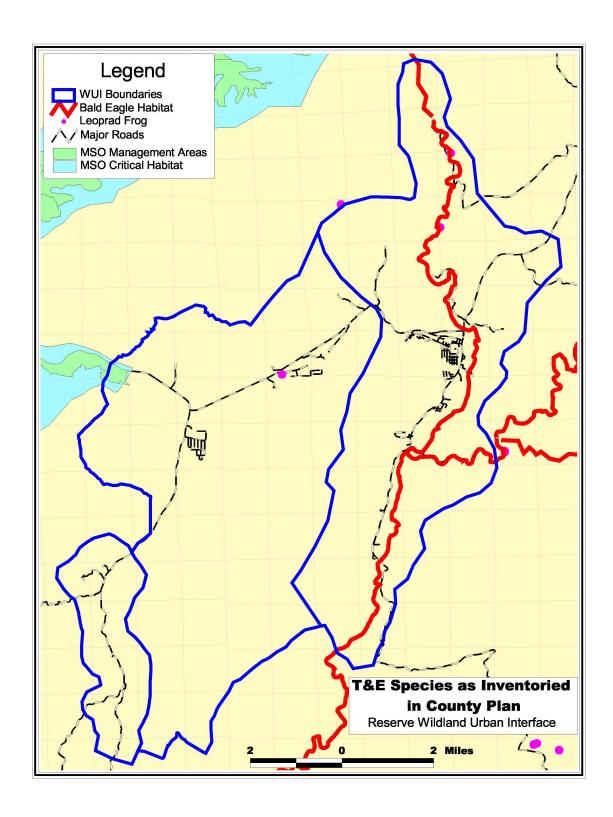
Map 1: Steepness of Slopes



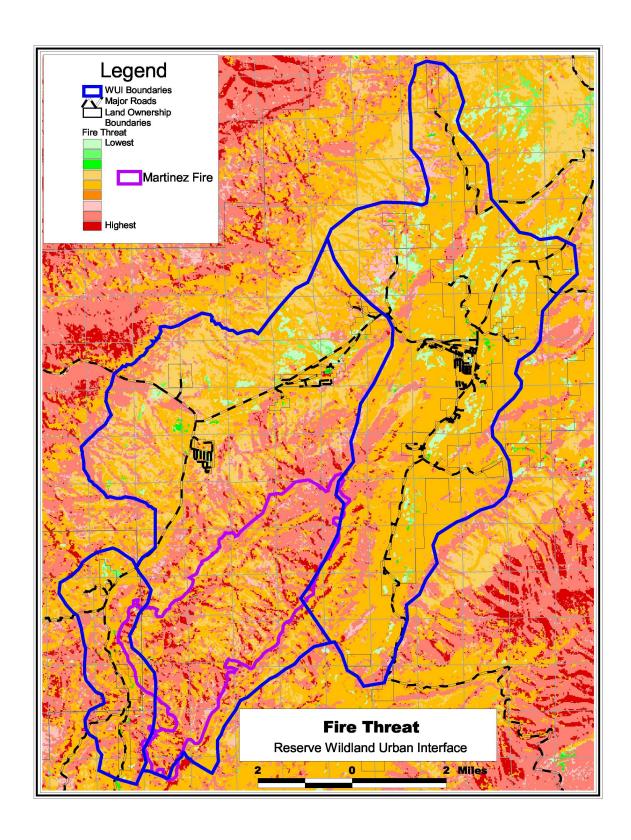
Map 2: Vegetative Type Groups



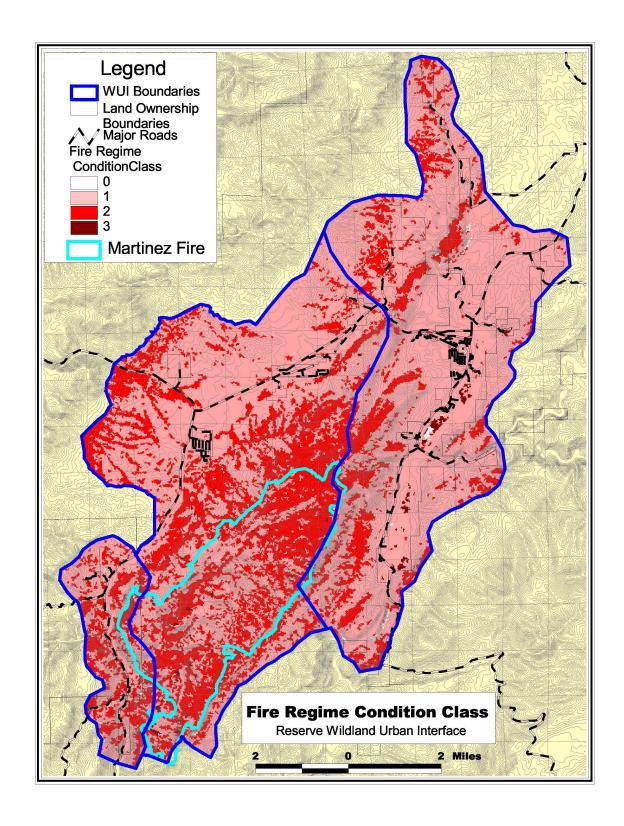
Map 3: Land Ownership



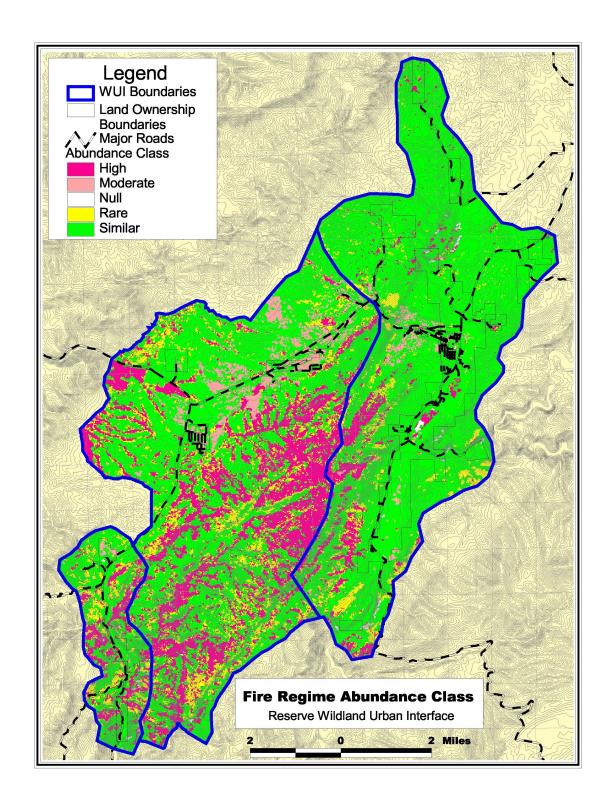
Map 4: Threatened and Endangered Species



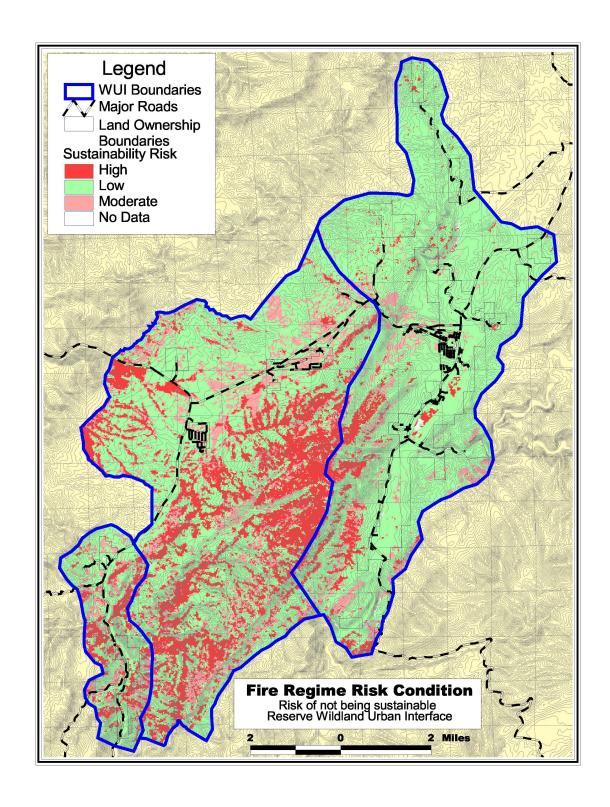
Map 5: FireThreat



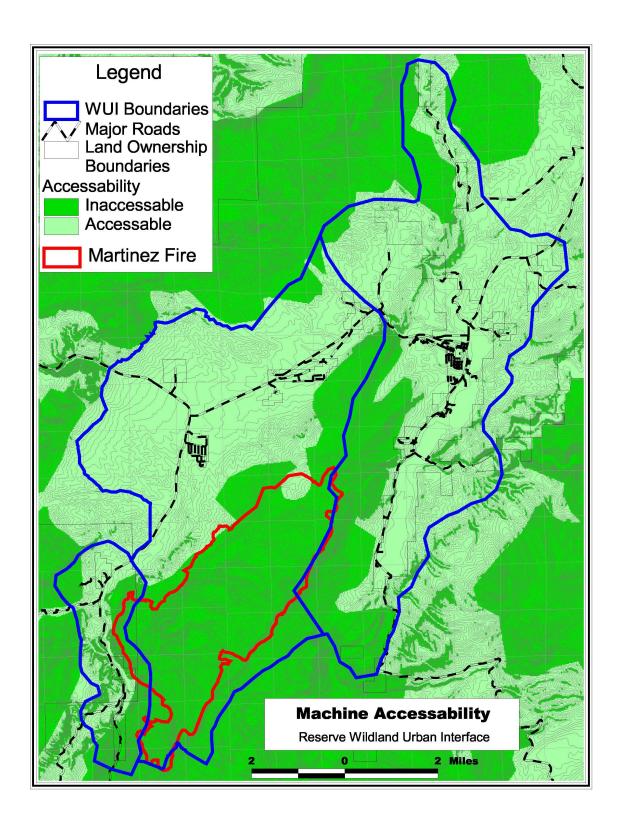
Map 6: Fire Regime Condition Class



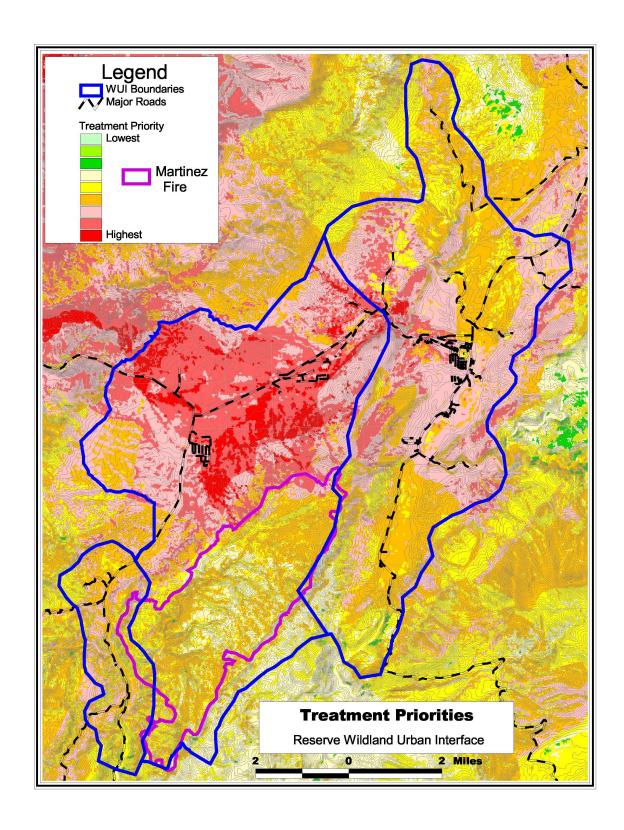
Map 7: FRCC Abundance Class



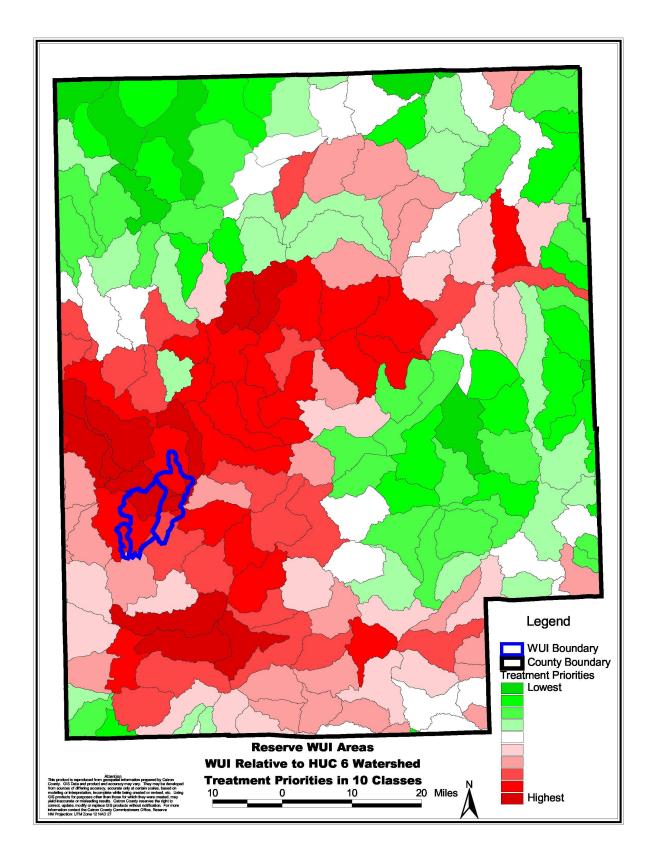
Map 8: FRCC Risk of Vegetative Condition Not Being Sustainable



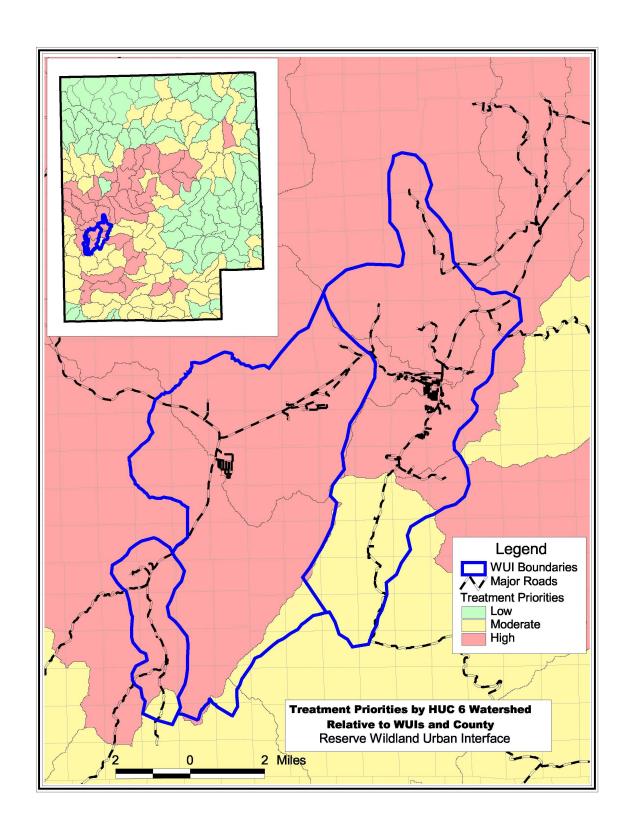
Map 9: Machine Accessible Areas



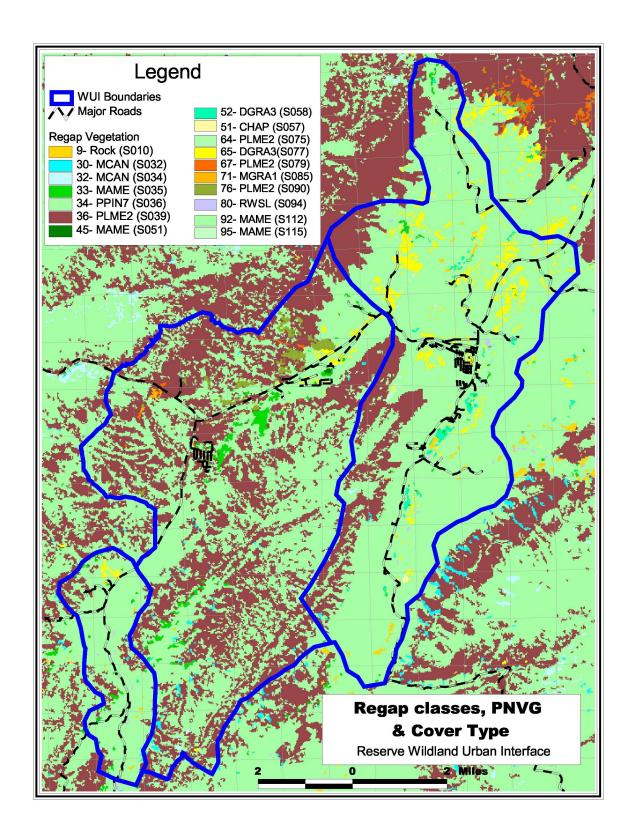
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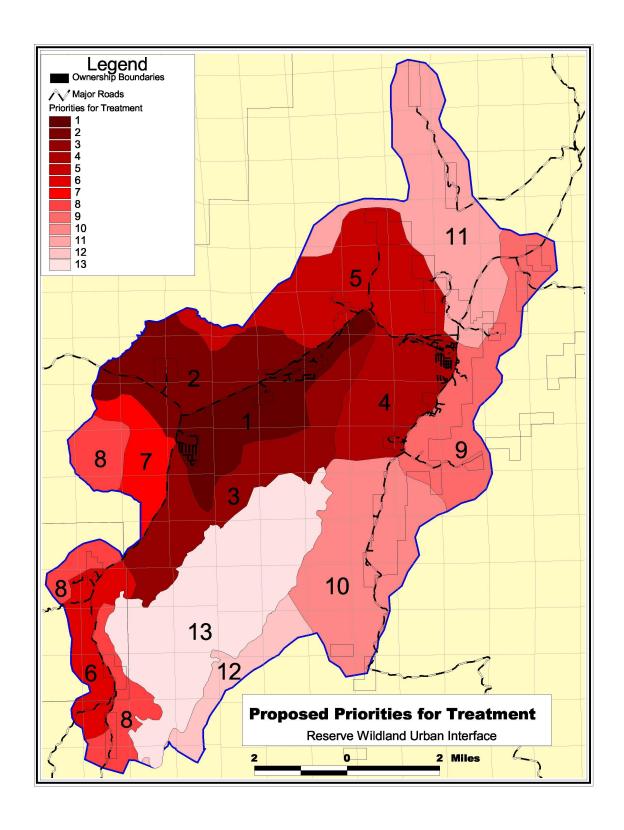
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Map 12: Treatment Priority by HUC 6 Watershed



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