

Rio Puerco Field Office

2010

Fire Management Plan



Developed By: \_\_\_\_\_  
Field Office Fire Management Officer Date

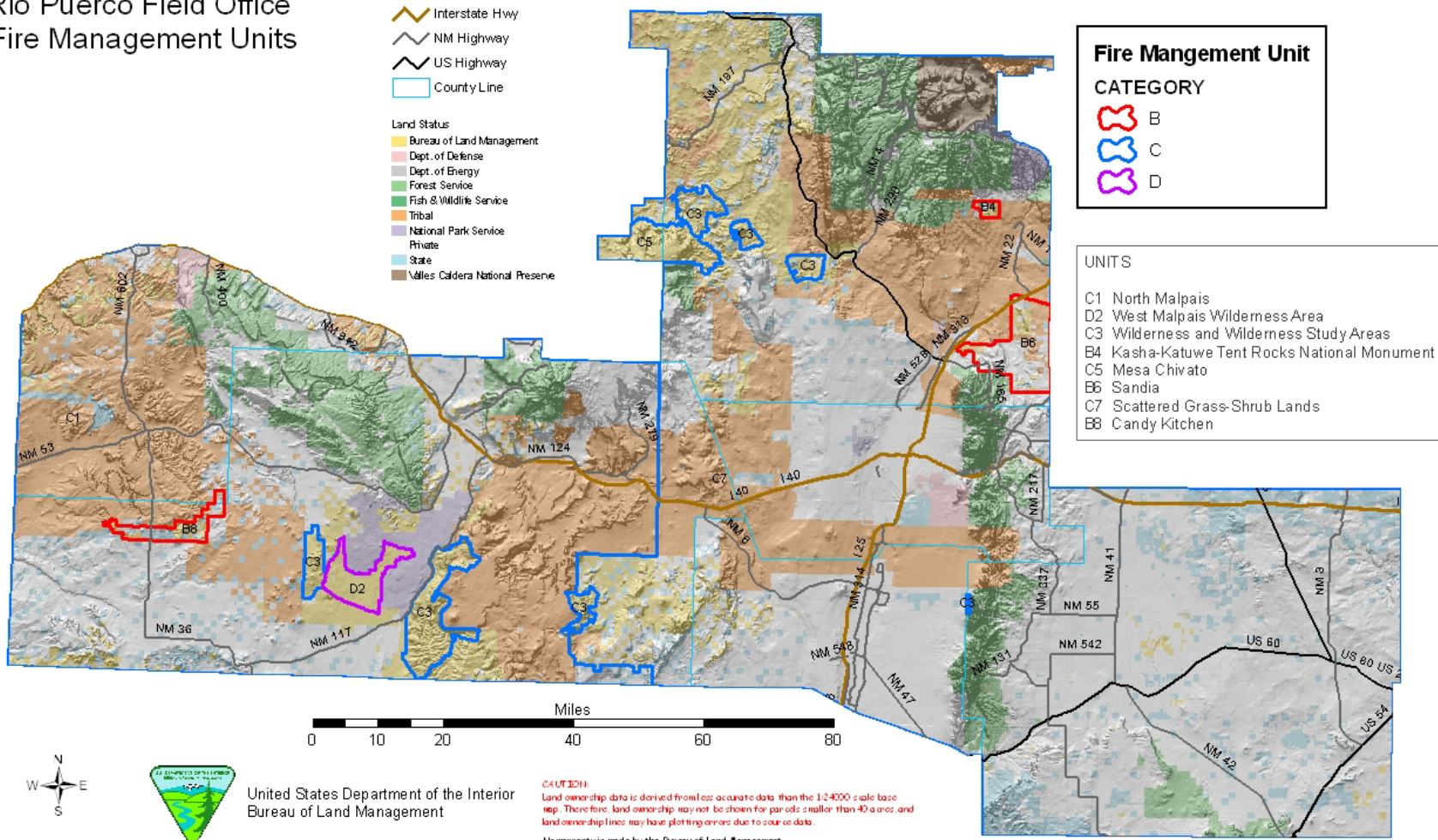
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# Rio Puerco Field Office Fire Management Units



## **I Introduction**

### **A. Purpose**

The purpose of the Rio Puerco Field Office Fire Management Plan (FMP) is to identify and integrate all Wildland fire management guidance, direction, and activities required to implement national fire policy and fire management direction from the following: Federal Wildland Fire Management Policy and Program Review-1995 and 2001; and A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: 10-Year Comprehensive Strategy Implementation Plan.

Every area with burnable vegetation must have an approved Fire Management Plan. Fire Management Plans are strategic plans that define a program to manage wildland and prescribed fires based on the area's approved land management plan. Fire Management Plans must provide for firefighter and public safety; include fire management strategies, tactics and alternatives; address values to be protected and public health issues; and be consistent with resource management objectives, activities of the area, and environmental laws and regulations.

The FMP was developed around a Field Office fire management program and addresses all aspects of it, including wildland urban interface (WUI), rural fire assistance, prescribed fire, fuels management, prevention, and suppression. The FMP identifies a fire program that meets identified fire management objectives.

### **B. Relationship to environment Compliance**

All fire management objectives, constraints, and activities contained within this plan are consistent with the following source documents: the Rio Puerco Resource Management Plan (RMP) 1989 and the RMP Amendment for Fire And Fuels Management on Public Land in New Mexico and Texas, the El Malpais National Conservation Area Management Plan and the El Malpais Joint Fire Plan Environmental Assessment.

### **C. Collaboration**

A public meeting was held to discuss the 2004 statewide RMP amendment for fire management. A public meeting was also held for the El Malpais Joint Fire Plan Environmental Assessment. At both of the public meetings, the public supported the goals of both plans.

A private meeting was held with the Zia Pueblo to discuss the 2004 RMP amendment.

#### **D. Authorities**

- Protection Act of September 20, 1922 (42 Stat. 857; U.S.C. 594).
- Taylor Grazing Act of June 28, 1934 (48 Stat. 1269; U.S.C. 315).
- Reciprocal Fire Protection Act of May 27, 1955(69 Stat. 66; 42 U.S.C. 1856, 1856a).
- Economy Act of June 30, 1932 (47 Stat. 417; 31 U.S.C. 686).
- The Federal Land Management and Policy Act of 1976 (FLPMA) (Public Law 94-579; 43 U.S.C. 1701).
- Disaster Relief Act, Section 417 (Public Law 93-288).
- 2001 Annual Appropriations Acts for the Department of the Interior.
- United States Department of the Interior Manual (910 DM 1.3).
- 2001 Updated Federal Wildland Fire Management Policy (1995 Federal Wildland Fire Management Policy Update).
- 1998 Departmental Manual 620 Chapter 1, Wildland Fire Management General Policy and Procedures.
- 2004 Healthy Forest Initiative and Healthy Forest Restoration Act Interim Field Guide.

#### **II. Relationship to Land Management Planning and Fire Policy**

The Fire Management Plan has been tiered to decisions contained within the Rio Puerco Resource Management Plan, the El Malpais Plan, the El Malpais Joint Fire Plan Environmental Assessment, the Interim Wilderness Guidance, and the Federal Wildland Fire Policy. These plans provide the basis for the development of fire management goals and objectives.

The FMP carries forward the decisions made in the El Malpais Joint Fire Management Plan Environment Assessment for Wildland Fire Use in the West Malpais Wilderness Area.

The FMP derives overall program guidance from the following:

- July 2008 “Interagency Prescribed Fire Planning and Implementation Procedures Reference Guide” provides standardized procedures, specifically associated with the planning and implementation of prescribed fire.
- 2009 “Instruction Memorandum No. 2009-014 Prescribed Fire Management” Provides information on the BLM supplement to the Interagency Prescribed Fire Planning and Implementation Procedures Reference Guide.
- September 2000, “Managing the Impacts of Wildfires on Communities and the Environment.”
- October 2000, National Cohesive Strategy goal is to coordinate an aggressive, collaborative approach to reduce the threat of wildland fire to communities and to restore and maintain land health.
- August 2001, “Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment -10 Year Comprehensive Strategy” provides a foundation for wildland agencies to work closely with all levels of government, tribes, conservation, and commodity groups and community-based restoration groups to reduce wildland fire risk to communities and the environment.
- May 2002, “Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment, 10 Year Comprehensive Strategy – Implementation Plan” provides a foundation for wildland agencies to work closely with all levels of government, tribes, conservation, and commodity groups and community-based restoration groups to reduce wildland fire risk to communities and the environment.
- August 2002, “Healthy Forests - An Initiative for Wildfire Prevention and Stronger Communities.”

#### Goals Related to Fire and Fuels Management from the Resource Management Plan

- Human Life: Protect human life, both the public and firefighters. This is the single, overriding priority in fire management.
- Property and Resources: Protect human communities, their infrastructure, and the natural resources on which they depend. Other property and improvements will be protected.
- Setting priorities among human communities, other property, and natural resources will be based on the values to be protected, human health and safety, and the costs of protection. The risk of wildfire to communities and property will be reduced using the full range of options available to fire managers, including prescribed fire, wildland fire for resource benefit, and mechanical fuels reduction.

- Ecosystem Sustainability: Where possible, allow wildland fire to function as an essential ecological process and natural change agent in fire-dependent ecosystems.
- Wildlife components, including Special Status Species (Federally Threatened, Endangered, Proposed, and Candidate Species, BLM Sensitive Species and State Species of Concern): Protect, maintain, preserve, and/or restore habitats necessary for the conservation of species, and the ecosystems upon which they depend, to maintain viable and diverse populations of native terrestrial and aquatic species including.
- Vegetation components: Improve ecosystem health and maintain or restore the range of ecological conditions in which native floral and herbaceous components thrived and evolved.
- Cultural, Historical and Paleontological: Protect high value cultural, historical and paleontological resources.
- Designated Special Areas: Protect the characteristics that warranted designation of Areas of Critical Environmental Concern (ACECs), Special Recreation Management Areas (SRMAs), Wilderness Areas, Wilderness Study Areas (WSAs), National Monuments and National Conservation Areas.

### **Natural and Biological Resource Objectives**

- Air: Meet federal and state air quality standards through proper management of emissions.
- Flora and Fauna– Threatened and Endangered Species (T&E): Ensure that BLM actions will not reduce the likelihood of survival or recovery of any listed species or destroy or adversely affect or modify designated critical habitat to those species.
- Water: Meet Federal and State water quality standards and prevent degradation through Best Management Practices during and after fires and vegetative treatments.
- Visual: Meet established Visual Resource Management (VRM) class objectives through appropriately planning fuel reduction treatments. VRM will be a consideration for any post-fire erosion control and other burned area rehabilitation and restoration needs.
- Public Lands Health: Meet Standards for Public Lands Health through appropriately planning fuel reduction treatment projects.

## **Resource Use Objectives**

Vegetation: Fire and fuels management and related actions will reduce the amount of forest, shrub, and grass lands that are characterized as Fire Regime Condition Class (FRCC) 2 and 3.

- where fire regimes have been moderately to significantly altered from their historical ranges
- where there is a moderate to high risk of losing key ecosystem components
- where vegetative attributes have been significantly altered from their historical range
- where fire return frequencies have departed from their historical frequencies by more than one return interval

Wilderness/Wilderness Study Areas: Fire and fuels management actions will meet the wilderness non-impairment mandate for Wilderness Areas. For Wilderness Study Areas fire and fuels management will strive to avoid unnecessary impairment that would affect the suitability toward wilderness designation of these areas. The ultimate goal would be to return fire to its natural role in these ecosystems.

### **III. Wildland Fire Management Strategies**

#### **A. General Management Considerations**

BLM is a partner in the “New Mexico Wildland Fire Management Joint Powers Agreement (JPA). This is an agreement among the Federal wildland fire management agencies and the New Mexico State Forestry Division to coordinate wildland fire management activities. Under the JPA, New Mexico is divided into initial attack areas. In each of these areas, one agency agrees to take the lead in providing initial attack protection to all lands, regardless of ownership. This provides an equitable exchange of protection and workload, and allows the use of the “closest forces” concept for fire suppression. The net result is a more efficient and effective interagency suppression organization throughout the state.

The Rio Puerco Field Office has been re-organized with the Socorro Field Office under a District program. The Albuquerque District Fire Program includes Rio Puerco Field Office, Socorro Field Office and Grants Field Station. The re-organization is reflected in the table of organization (Appendix A). Positions associated with the District are shared and oversight is at the District level.

Within the Albuquerque District the Socorro Field Office is located within the Gila / Las Cruces Zone serviced by Silver City Interagency Dispatch Center (NM-SDC). Rio Puerco Field Office is located within the Albuquerque Zone serviced by Albuquerque Interagency Dispatch Center (NM-ABC).

The Rio Puerco Field Office participates in the interagency coordination of wildland

fire operations on the Albuquerque Zone Interagency Operations Zone Board. Fire Management Officers from the Cibola National Forest, NPS El Malpais National Monument, BIA Southern Pueblos, , ZuniRamah and Laguna Agencies, and the State of New Mexico are members of the Zone Board. The Zone Board coordinates interagency efforts on fire prevention and education, dispatching, training, fuels management, suppression, rural fire assistance and preparedness. A steering group made up of agency line officers meets regularly to guide the operations of the Zone Board.

The Albuquerque Zone Boards and the interagency approach it represents is guided by the 2001 update of the 1995 Federal Wildland Fire Management Policy, the Wildland and Prescribed Fire Management Policy, the Implementation Procedures Reference Guide, the Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment and the 10-Year Comprehensive Strategy. Currently, the Zone Board will represent the participating federal agencies and will provide local governments the assistance necessary to address wildland fire management issues.

The fire management program is based on a foundation of sound science. Research will support ongoing efforts to increase our scientific knowledge of biological, physical and sociological factors. Information needed to support fire management will be developed through an integrated interagency fire science program. Scientific results of these efforts will be made available to managers and will be used in the development of the FMP and implementation plans.

## **B. Wildland Fire Management Goals**

The goals of the Fire Management Program are:

- Firefighter and public safety are the highest priority in every fire management activity.
- Identify appropriate management response (AMR) goals, objectives, and constraints by specific Fire Management Units (FMU) within field office. All wildland fire management activities will be managed as described in the FMU guidance outlined in Chapter III, section D.
- Work collaboratively with communities at risk within the Wildland Urban Interface (WUI) to develop plans for risk reduction.
- Allow wildland fire to protect, maintain and enhance public resources, and as nearly as possible, be allowed to function in its ecological role when appropriate for the site and situation.
- Create an integrated approach to fire and resource management across the landscape and agency boundaries. This approach will be designed to meet the desired outcomes of Land and Resource Management Plans.
- To provide a program that fosters interagency interaction, cooperation and effectiveness for all fire management activities. The program should be evident within all levels of the agencies, cooperators, and other public entities.

## C. Wildland Fire Management Options

### Fire Suppression

Fire management specialists in concert with resource specialists from other disciplines determined fire management categories, management objectives and the appropriate management response for each FMU. The fire management categories within the Rio Puerco Field Office are as follows:

- Category B - Fire plays a natural role in the function of the ecosystem, however these are areas where an unplanned ignition could have negative effects unless some form of mitigation takes place.

Negative effects include risks to private lands, urban interfaces, important cultural resources, high visitor use areas and federally owned facilities. Mitigation efforts could include fuel reduction through mechanical means or prescribed fire to reduce fuel loading around private land and urban interfaces, creation of agreements to allow fire to cross from public to private lands, cultural resource inventories, and preparation of rehabilitation plans prior to a fire event.

All unplanned ignitions will require a fire management response that will have emphasis put on fire fighter and public safety, minimizing suppression costs, and resource values to be protected.

FMU's categorized as B are, Tent Rocks, Sandia and Candy Kitchen.

- Category C - Areas where wildland fire is desired, but there are significant constraints that must be considered for its use.

Fire is a desirable component of the ecosystem, however, ecological, social or political constraints must be considered. These constraints could include air quality standards, threatened and endangered species, identified cultural, archeological, or historic resources or wildlife habitat considerations. Mitigation programs should focus on potential threats to values before ignitions occur and the reduction of unwanted human ignitions.

Ecological and resource constraints along with human health and safety factors are considered in determining the appropriate management response. This is performed on a case by case basis by the incident commander or line officer. Areas in this category would generally receive lower suppression priority in instances where multiple wildland fire situations arise than would B areas.

Cultural Resource Surveys, private land owner agreements and Fuels Reduction treatments such as Prescribed fire and non-fire fuels treatments, may be utilized to ensure these constraints are met. These methods also may be used to reduce any

hazardous effects of an unwanted wildfire.

FMU's categorized as C are North Malpais, Wilderness/Wilderness Study Areas, Mesa Chivato and the Scattered Grass and Shrub Lands.

- Category D - Areas where an unplanned wildland fire and prescribed fire may be used to achieve desired objectives. Objectives could include improving herbaceous components and improving wildlife habitats or watershed conditions.

These areas offer the greatest opportunity to take advantage of the full range of options available for managing wildland fire under the appropriate management response. Health and safety constraints will apply. Considerations similar to those described for category C may be identified if needed to achieve resource objectives. Areas in this category would be the lowest suppression priority in a multiple wildland fire situation.

There is generally less need for hazardous fuel treatment in this category. Prescribed fire for hazardous fuel reduction is not a priority except where there is a threat to resources or public safety. If treatment is necessary, both fire and non-fire treatments may be utilized, as allowed by the resource management plan. Prescribed fire will be used to obtain desired resource/ecological conditions where appropriate.

The Field Office will implement programs aimed at reducing unwanted human-caused ignitions, as needed.

The West Malpais Wilderness Area is the only FMU in this category and shares a common boundary with the El Malpais National Monument as described in the El Malpais Joint Fire Plan Environmental Assessment.

For all FMU's suppression objectives including the target acreages were defined by the following criteria: the fire intensity level fire (FIL) that would be expected within the FMU, the size of the public land and its proximity to private inholdings, the FMU's level of use by the public, the FMU's proximity to private residences and communities, the FMU's wilderness values, the FMU's historic fire regime, and the unique biological, cultural, historical or archeological resources within the FMU.

### **Wildland Fire For Resource Benefit**

In the Rio Puerco Field Office wildland fire for resource benefit is approved for the West Malpais Wilderness, FMU D. Category C FMU's list Wildland Fire for Resource Benefit as an option with considerable constraints such as location, weather, time of year, WUI and input from resource managers, fire managers and BLM partners. Chapter IV describes the process to determine if a wildland fire is allowed to burn for resource benefits in these FMUs. The Interagency Standards for Fire and Fire Aviation Operations, Chapter 9 contains operational and implementation details (WFDSS).

## **D. Descriptions of the Wildland Fire Management Strategies by Fire Management Unit**

### Common to All FMUs:

#### **Fire regime/condition class**

Advanced succession and woody plant encroachment have caused undesired ecological changes within the field office. These changes include increased stand density in ponderosa pine forests, loss of perennial grasslands, and expansion of pinyon-juniper woodlands. These type conversions often correspond to losses of native biodiversity, decreased sustainability, and altered fire regimes.

The dominant vegetation types occurring in the Field Office include Southwestern ponderosa pine, desert grassland, desert shrubland, and pinyon-juniper forests. Each vegetation type evolved with a distinct fire frequency, severity, and suite of effects which provided for long-term sustainability. Within these vegetation types, management activities such as fire suppression, livestock grazing, urbanization, and the spread of invasive species have changed these fire regimes. Fuel treatment applications outlined in this FMP are intended to move landscapes and fire regimes closer to their historic conditions.

For a given vegetation type, the fire regime condition class (FRCC) concept describes the degree of departure in: (1) vegetation structure, and (2) fire frequency/severity. This measure describes both the health of the fire regime, and also the appropriateness of the vegetation community for the site. Condition Class 1 corresponds to landscapes where these variables are intact, while Condition Class 3 landscapes have highly altered ecological integrity. Condition Class 2 includes lands having moderate departure in fire regime health and structural integrity. At this point in time the Field Office does not have an exact break down on condition class by FMU but is currently working with the State fire ecologist and Landfire data to develop the fire regime condition class by FMU. However, Landfire data in FMU's C1-North Malpais, C3-Wilderness & Wilderness Study Areas (Chain of Craters WSA & Cebolla Wilderness), and FMU D2-West Malpais Wilderness is incorrect and will not be of any use until the Landfire Refresh data is made available in 2010.

#### **4. Values at Risk**

Historic homestead structures, saw mills and logging camps are commonly found in ponderosa pine forests which were logged in the 1900's. These sites are vulnerable to fire and suppression efforts and should be protected. All suppression tactics and support actions will be selected commensurate with potential fire behavior while minimizing impacts.

## 6. Fire Management Objectives

**Goal: Hazard reduction around the urban interface.**

### Objectives

Reduce hazardous fuels by the use of mechanical and prescribed fire where applicable around communities at risk from wildfire. Continue and expand fuels reduction projects adjacent to communities and subdivisions within Catron, Cibola, and Sandoval Counties. Continue implementing community based preparedness planning in communities with greater risk of wildfire potential. Community Wildfire Protection Planning has been completed and implementation is ongoing in all three counties.

**Goal: Suppress all unwanted wildland fires with minimum cost, using an appropriate suppression response, while protecting values at risk.**

### Objectives

Use an Appropriate Management Response (AMR) to manage all fires in accordance with management objectives based on current conditions and locations.

**Goal: Establish or update cooperative agreements to maximize coordination with cooperators.**

### Objectives

Review all existing agreements annually, updating or changing them as necessary to promote full cooperation in mutual fire management.

## 7. Fire Management Strategies

The full range of available responses are available to implement protection objectives for unplanned ignitions:

- Monitoring and holding actions to check or confine spread.
- Monitoring actions with pre-planned contingency actions,
- Control and extinguishment

### **Criteria to use for developing a management response:**

Risk to firefighters and public health and safety

Land and Resource Management Objectives

Weather

Fuel Conditions

Threats and values to be protected

Cost efficiencies

Management strategies and action points will be based on fire activity and location. Normally, specific actions or combinations of actions will be determined on site by the incident commander or fire use manager.

### **Fuel Management Treatment Target Acreage**

It is expected that the 2004 RMP amendment for fire and fuels management will be in place for 20 years until updated again. In the description of each FMU the acres treated for wildland fire for resource benefit, prescribed fire and non fire treatments are based on this best case scenario from the RMP update. The acres treated are based on an annual target. Some years no acres may be treated in a given FMU but in other years more acres may be treated but over the 20 years it should average out.

Fuel treatment priorities by FMU may be modified at any time.

Once the burn acre target has been met, from either planned or unplanned ignitions, a review of objectives and strategies will be initiated to develop new suppression criteria on all wildland fires.

## Fire Management Unit (FMU) Description

**Fire Management Unit Name:** North Malpais

**Category/Number:** C/1

### 1. Location

The FMU consist of five planning units from the EL Malpais Plan (2001) and other areas surrounding the National cConservation area for a total of 225,746 acres, the FMU interfaces 182,000 of private land.

The El Malpais National Monument administered by the National Park Service is in the center of the FMU.

Cerritos de Jaspe is located in the North Central portion of the El Malpais National Conservation Area (NCA).

Neck is located on the north by Interstate 40 and along the west by State Route (SR) 53 and the community of San Rafael. The eastern edge of the unit runs along (SR) 117.

Spur is located along the eastern edge of the NCA. It is located south of the Neck between (SR) 117 and the Pueblo of Acoma lands to the east.

Brazo Non NCA is located in the extreme southeastern corner of the NCA.

Breaks Non NCA is located just west and south of the Cebolla Wilderness generally along County Road 41.

### 2. Characteristics

Cerritos de Jaspe –This FMU is a mixture of volcanic flows and sandstone dominated ridges. These ridges define the south end of the Zuni Mountains and are the southernmost point of the Rocky Mountain uplifts. These sandstone ridges support a diverse biological environment that includes douglas fir, ponderosa pine, pinyon, juniper and aspen. Many of the species found here are at lower elevations than usually expected.

Neck – The Neck is a basalt-floored valley between the Zuni Mountains on the west and the La Ventana Ridge on the east. Vegetation is mostly woody shrubs and grasses.

Spur – The Spur consists of sandy-bottomed valleys with rocky mesa topography. Grass and shrub dominate the bottomlands; Pinon-Juniper Woodlands dominate the rocky lower slopes while the higher elevations are dominated by open ponderosa

pine.

Brazo Non NCA – The Brazo Non NCA consists of sandstone mesas, canyons, buttes and wide grassy valleys with Pinon-Juniper Woodlands and scattered Ponderosa Pine forest.

Breaks Non NCA – The Breaks Non NCA consists of mesas canyons and buttes, vegetation consist of grasses and shrubs.

The FMU includes areas of scenic value and development, including a boundary shared with Acoma Pueblo lands along SR 117.

The main improved road access into the FMU is through SR 117, 53, and Cibola county road 41 and 42. In addition, there are numerous unimproved two-tract roads that transect the area.

The BLM manages and owns a visitor center on SR 117.

There is only one known occupied site of a listed Endangered Species in the FMU. The southwestern willow flycatcher located in the Bluewater Canyon area. Habitat for the flycatcher is primarily riparian i.e. cottonwood-willow. It is not expected that any fuel treatment projects will be undertaken in this vegetation type within the FMU. If projects are planned in the Bluewater area the conservation measures for the Willow Flycatcher need to be reviewed in the Biological Assessment and Evaluation dated July 2004, for the 2004 RMP amendment for fire and fuels management. The Field Office T&E Coordinator will also need to be consulted during the project planning preparation phase of the project.

Air and water quality in the FMU meet national standards.

### **3. Wildland Fire History**

Lightning is the predominate cause of unplanned wildfires in the FMU. Between 1984 and 2006 the following fires and burned acres were reported.

	Number of Fires	Acres Burned
Lightning	94	12,133
Human	16	18

Fire season can start as early as mid-April and last until monsoon onset in mid-July, with a few isolated fires from lightning in early October. Spring rains, from March through May significantly contribute to the severity of the summer fire season. This is due to precipitation encouraging the growth of one hour fuels such as grasses. The FMU supports a variety of fuel complexes, including grass, sage, pinyon/juniper, oakbrush/grass, ponderosa pine and ponderosa pine/mixed-conifer.

Fire behavior can range from extreme in the pinyon/juniper under 20 foot wind speeds of over 20 mph and high temperatures and low relative humidity's with rates of spread of 80 chains per hour plus with crowning and torching beyond direct attack capability. Fire behavior in timber litter in ponderosa pine stands will exhibit more moderate fire behavior of 7 chains per hour mainly staying on the surface with some torching and short crown runs based on ladder fuels and pinyon encroachment. Fires intensity in the grass and sage are dependant on spring rains and the amount of herbaceous growth from year to year.

**4. Values at Risk/Resource Protection Constraints**

Cultural resource values are the greatest concern for protection. Hogans, homesteads and pre-historic sites are especially common in the Breaks and Spur Area. Appropriate cultural resource clearances will be required before any fuels management activities are initiated.

Completed Cultural Resource Surveys within the North Malpais FMU:

<b>Planning Unit</b>	<b>Project</b>	<b>Year</b>	<b>Acres</b>
Cerritos de Jaspe	De Jaspe RX	2002	323
Cerritos de Jaspe	Bright's Well	2004	130
Brazo	Wild Horse	2002	180
Brazo / Breaks	Section Six	2002-2003-2006	1,210
Brazo / Breaks	Cebolla Springs	2003	234
Brazo	Cebolleta Mertz	2007	8,600
Other	Cerro Rendija	2003 – 2004	1,450
Other	Cerro Comadre	2005	1,500
Other	Zuni Mt	2005	440
Other (Brillante)	Headquarters	2005	1,000
Other (Picnic)	Picnic Area	2008	150
Other (Brillante)	Brillante RX	2009	2,840
Neck	East Encerito	2009	70
<b>Total</b>			<b>18,127</b>

A resource advisor will be assigned to any fire that escapes initial attack.

In-holdings of private property and structures are intermingled throughout the FMU. Efforts will be made to stop any unplanned ignitions from burning on to private land or improvements.

Community education and outreach on prudent firewise practices will be offered to the communities within the FMU.

## **5. Communities at Risk**

There are three communities of concern within the FMU. None of the communities are currently listed on the Federal Register as communities at risk.

Wild Horse is located on the southern boundary of the FMU. A fuel break adjacent to the community was completed in 2003. In 2005 the Rio Puerco Field Office completed a Community Wildfire Protection Plan (CWPP) for the Wild Horse Community and in 2007 a Healthy Forest Restoration Act (HFRA) Environmental Analysis was completed on a 25,000 acre Project Area. In addition Catron County completed a County wide Community Wildfire Protection Plan in 2006.

Zuni Mountain is located on the northern boundary of the FMU. In 2005 a Healthy Forest Initiative (HFI) Categorical Exclusion was completed on approximately 1,000 acres. In 2006 and 2007 two stewardship thinning contracts were awarded for approximately 440 acres.

Oso Ridge is located on the northwest boundary of the FMU. In 2003, a 104-acre fuel break adjacent to the community was completed. In 2004, 2005, and 2006 an additional 280 acres were thinned to expand the fuel break and, approximately 150 acres have been hand piled and burned.

Both Zuni Mountain and Oso Ridge are located in Cibola County. Cibola County completed a County wide Community Wildfire Protection Plan in 2006

## **6. Fire Management Objectives:**

**Goal: Reduce wildland fire hazard around identified cultural sites.**

### Objectives

Apply mechanical fuel reduction and prescribed fire where applicable around vulnerable prehistoric and historic resources to reduce damage from wildland fire.

**Goal: Use planned and unplanned fire and surrogate fire treatments to restore and maintain primary natural resources and their processes where applicable in order to move FRCC 3 and 2 to FRCC 1.**

## Objectives

### **1. Ponderosa pine**

Establish and maintain a vegetative structure and mosaic within the natural range of variability for southwestern ponderosa pine forest ecosystems.

### **2. Pinyon-juniper woodland**

Establish and maintain a vegetative structure and mosaic within the natural range of variability for southwestern pinyon-juniper woodlands.

### **3. Grasslands**

Restore fire as a key natural process that encourages native grassland ecosystems.

### **4. All types**

- Reduce established noxious and non-native plant cover.
- Employ, under agency guidelines, an appropriate management response strategy that considers the management of naturally-ignited wildland fire for resource benefit in areas of the Unit where current fire environment conditions warrant.
- Ultimately manage the FMU to allow for maximized wildland fire presence to the fullest extent possible, while protecting values at risk (i.e., wilderness).
- An appropriate suppression response will be utilized for all wildland fires that do not meet resource objectives or prescriptive criteria.

## **7. Fire Management Strategies**

Suppression - The priority is to prevent wildland fires from spreading to private land, cultural resources or improvements on BLM lands and other agencies lands. Manage all fires in accordance with management objectives based on current conditions and fire location.

Annually fire personnel will be briefed on conservation measures for fire suppression activities for Southwestern Willow Flycatcher found in the Biological Assessment and Evaluation for the Fire and Fuels Management Plan, RMP Amendment July 2004.

All fires occurring at a Fire Intensity Level (FIL) 1-3 will be suppressed at less than 300 acres 90 percent of the time. All fires occurring at FIL 4-6 will be suppressed at less than 2000 acres 75 percent of the time.

Wildland Fire For Resource Benefit – Implement WFU as an option with constraints developed by the Field Office Resource Specialists. Fire Management will assess fuels, weather, ability to hold and contain, socio-political and those local factors that may constrain or promote the use of fire as a tool for the specific event.

Prescribed Fire – Treat 7,829 acres annually in the FMU. Prescribed fire will be used to treat woodlands and non-woodlands to move FRCC 2 and 3 lands to FRCC 1. Fire will also be used to maintain FRCC 1 lands as well and to treat slash created by mechanical treatments.

Prescribed Fire Treatments within the North Malpais FMU as of February 2010:

Project	Year	Acres Planned	Acres Accomplished
De Jaspe RX	2003	320	320
Wild Horse	2004	150	150
Cebolla Springs	2004-2006	234	265
Cerro Rendija	2005-2006	1,450	1,280
Stair Case	2005-2015	384	150
Brillante	2007-2011	14,122	200
Bright's Well	2008-2015	130	
Mertz Ranch	2008-2015	44,000	4,030
Cerro Comadre	2010	1500	
Zuni Mt	2012	500	
Section Six	2006-2015	1000	610
Picnic Area	2010-2015	200	
	Total	64,490	7,035

Non-fire treatments:

Mechanical tree thinning – will be used to reduce stand density and crown closure to move FRCC 3 and 2 woodlands into FRCC 1. In some areas, multiple treatments will be required. In some instances, a combination of mechanical and prescribed fire will be used. Mechanical treatments can be applied to 4000 acres annually in the FMU.

Mechanical Treatments within the North Malpais FMU as of February 2010:

Project	Year	Acres Planned	Acres Accomplished
Sand Canyon	2002	260	260
Section Six	2003-2009	1,210	860
Cebolla Springs	2004-2006	234	234
Stair Case	2004-2010	640	384
Rendija	2005-2010	500	388
Cerro Comadre	2006-2011	1,500	680
Zuni Mt	2006-2010	960	300
Picnic	2008-2009	120	130
Cebolleta	2008-2011	1,000	80
Mertz	2009	500	75

Total	6,924	3,391
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Chemical or biological treatments may be considered as needed by a site-specific plan. Approximately 4,000 acres could be treated annually.

Chemical Treatments within the North Malpais FMU as of February 2010:

Project	Year	Acres Planned	Acres Accomplished
Mertz Ranch	2009-2012	17,285	
Cerro Brillante	2008-2012	13,691	7,100
Total		30,976	7,100

Post Fire Rehabilitation and/or actions needed for Restoration – an inter-disciplinary team will develop plans for post fire rehabilitation. Post fire rehabilitation and restoration will be used to facilitate reestablishment of the potential natural community of the site. In addition, the following rehabilitation concerns should be addressed:

- Slopes of 15% or greater where surface erosion is likely
- Temporary fences in areas where grazing pressure may inhibit re-establishment of native plants following wildfire.
- Road obliteration or restoration where the road created by the suppression activity does not meet resource objectives for the area or may cause erosion.

Fire Management Unit (FMU) Description

**Fire Management Unit Name:** West Malpais Wilderness Area  
**Category/Number:** D/2

**1. Location**

The FMU is located north and east of County Road (CR) 42 and southwest of the El Malpais National Monument. The wilderness area encompasses approximately 39,980 acres, with private in-holdings of 2,300 acres.

**2. Characteristics**

Volcanic landscapes dominate. Lava flows 800,000 years old and portions of younger flows from the National Monument are found in and around the area. Where older basalt flows meet with more recent lava flows, an ecological edge effect can be seen in the vegetation. A border of tall ponderosa pine with a grass, shrub, juniper and pinon understory characterizes this particular edge effect in the West Malpais Wilderness. This species combination does not occur elsewhere in the West Malpais Wilderness. The lava soils and outcrops support at least seventy species of lichens of varied colors and textures. The rolling open grasses and shrubs support antelope, coyotes, jackrabbits and reptiles, and many species of birds.

Vehicle access along the west side of the area is dependant on the conditions of CR 42 that can be impassable in wet weather. A graded road is “cherry stemmed” out of the southeast portion of the wilderness. This road travels a northwesterly direction through sections 2, 11 and 12 (T.6 N, R. 12 W.) for approximately 2 miles to the intersection with the northern boundary of section 2 (T. 6N. R. 12 W.)

An analysis of Threatened and Endangered Species for the El Malpais Joint Fire Plan (2001) found no issues for this area.

Air and water quality in the FMU meet national standards.

**3. Wildland Fire History:**

Lightning is the predominate cause of unplanned wildfires in the FMU. Between 1984 and 2006 the following fires and burned acres were reported.

	Number of Fires	Acres Burned
Lightning	16	4,556
Human	1	.1

Fire season can start as early as mid-April and last until monsoon onset in mid-July. Spring rains, from March through May significantly produce fine fuels which contribute to the severity of the summer fire season. Spring green-up lasting into monsoon season

also contributes to the severity of fire season.

The FMU supports two major fuel complexes, grass with shrubs and scattered woodlands.

Fire behavior can be extreme in the grass fuel types when there has been enough spring rains and the herbaceous growth is heavy. Under these conditions rates of spread could be 60 chains per hour plus with flame lengths over 10 feet . During drought years fire behavior would be a lot more manageable. Fire behavior in the woodlands would exhibit more moderate fire behavior of 7 chains per hour mainly staying on the surface with some torching depending and short crown runs based on ladder fuels and pinyon encroachment.

#### **4. Values at Risk/Resource Protection Constraints:**

In-holdings of private property and structures within the FMU are key resources to protect.

The priority is to prevent wildland fires from spreading to private land.

For wildland fires requiring an incident management team, a Resource Advisor (RA) will be assigned to the incident commander to ensure wilderness protection objectives are met.

Under extreme fire danger conditions (generally PL-4 and 5), advance approval may be granted by the District Office Manager to allow motorized access for suppression purposes. Limitations will be set on type, number, and extent of use. Unlimited motorized access will not be permitted.

Under no conditions should motorized access be permitted following a successful initial attack, or subsequent monitoring.

All suppression tactics and support actions will be selected commensurate with potential fire behavior and minimizing impacts to values to be protected. These decisions will be based on interdisciplinary inputs, with respect to conditions on the ground.

#### **5. Communities at Risk**

None.

#### **6. Fire Management Objectives:**

- In identified areas where fuels accumulations exceed the historical range of variability, reduce crown fire/high severity wildland fire potential.
- Employ, under agency guidelines, an appropriate management response strategy that considers the management of naturally-ignited wildland fire for resource benefit in areas of the unit where current fire environment conditions warrant.

- Where necessary to meet fuels reduction objectives, utilize approved fuels management techniques which include prescribed fire treatments, to reduce localized fuels concentrations back to a more natural range of variability.
- Ultimately manage the FMU to allow for maximized wildland fire presence to the fullest extent possible, while protecting values at risk (i.e., wilderness).

## **7. Fire Management Strategies.**

**Suppression** - An AMR will be utilized for all wildland fires that do not meet resource objectives or prescriptive criteria for wildland fire for resource benefit.

All wildfires occurring at a Fire Intensity Level (FIL) 1-3 will be suppressed at less than 1500 acres 90 percent of the time. All wildfires occurring at (FIL) 4-6 will be suppressed at less than 2500 acres 75 percent of the time.

Management strategies and action points will be based on fire activity and location. Normally, specific actions or combinations of actions will be determined on site by the incident commander.

**Wildland Fire For resource benefit** – Wildland Fire for Resource Benefit was analyzed and approved in the 2001 (Joint Interagency Fire Management Plan with El Malpais National Park). Treating up to 100% of the FMU through Wildland Fire For resource benefit is acceptable. Specific actions or combinations of actions will be determined on site by the incident commander.

**Prescribed Fire:** Treat 2000 acres in the FMU. Prescribed fire will be used to treat woodlands and non-woodlands to move FRCC 2 and 3 lands to FRCC 1. Fire will also be used to maintain FRCC 1 lands as well.

**Non-fire treatments:** No Non-Fire treatments are anticipated. However, if a need does arise these treatments should be addressed by a site-specific environmental assessment.

**Post Fire Rehabilitation and/or actions needed for Restoration** – an inter-disciplinary team will develop plans for post fire rehabilitation. Post fire rehabilitation and restoration will be used to facilitate reestablishment of the potential natural community of the site. All rehabilitation actions will be commensurate with wilderness values using the minimum tool concept. The following rehabilitation concerns should be addressed:

- Slopes of 15% or greater where surface erosion is likely
- Temporary fences in areas where grazing pressure may inhibit re-establishment of native plants following wildfire.
- Road obliteration or restoration where the road created by the suppression activity does not meet resource objectives for the area or may cause erosion.

## Fire Management Unit (FMU) Description

**Fire Management Unit Name:** Wilderness and Wilderness Study Areas  
**Category/Number:** C/3

### **1. Location**

This FMU is scattered throughout the entire Field Office. It represents Wilderness Study Areas (WSA) and the Cebolla Wilderness Area for a total of 137,775 acres. Within the FMU there are 2,400 acres of private land and 2,600 acres of State owned land. Most of the WSA's border private land and many border Indian Reservation lands.

**Cebolla Wilderness Area** – Located along the east side of State Route 117 from The Narrows to County Road 41 in the El Malpais National Conservation Area. The wilderness encompasses 62,000 acres, of which 99 percent is BLM land.

The northern portion of the FMU is adjacent to Acoma Indian Reservation lands.

**Chain of Craters WSA** – Located west of CR 42 in the southwestern corner of the El Malpais National Conservation Area. The WSA contains 24,699 acres of BLM land.

Some private land is adjacent to the area on the northern and eastern side of the WSA.

**Petaca Pinta WSA** – Located in T. 6 and 7 N., R. 6 and 7 W. The WSA is 20 air miles south of Laguna Pueblo and 50 air miles west-southwest of Albuquerque. The WSA contains 11,688 acres.

**Ojito WSA** - Located 5 miles southwest of San Ysidro in T. 15 N., R. 1 E, and 1 W. The WSA contains 10,903 acres of BLM land.

**Cabezon WSA** – Located 15 miles due west of San Ysidro in T. 15 and 16 N., R. 2 and 3 W. The WSA contains 8,159 acres of BLM land.

**Empedrado WSA** – Located 4 miles southwest of the village of Guadalupe in T. 16 and 17 N., R. 3 and 4 W. The WSA contains 9007 acres of public land.

**La Lena WSA** – Located 7 miles north of the village of Guadalupe in T. 16 and 17 N., R.3 and 4 W. The WSA contains 10,438 of public land.

**Manzano WSA** – Located 16 air miles east-southeast of Los Lunas. The Manzano Wilderness administered by the Cibola National Forest surrounds the WSA on two sides and private land is adjacent on the north side. The WSA consists of approximately 881 of BLM managed lands.

## **2. Characteristics**

**Cebolla Wilderness** – The numerous mesas, canyons, buttes and broad valleys that characterize the area support a complicated pattern of open mesa, conifer forest, Pinyon Juniper Woodlands and grasslands. This diversity allows for a wide variety of wildlife. Sandstone forms a cliff face along the east side of the unit and the base of Cebollita Mesa.

The western boundary parallels SR 117, the Sand Canyon/Cebolla Spring road bi-sects the area.

The area is rich in cultural and historical resources.

An analysis of Threatened and Endangered Species for the El Malpais Joint Fire Plan (2001) found no issues for this area.

**Chain of Craters (WSA)** – The area consists of a series of volcanic cones and craters aligned along a large-scale zone of structural strain along to the Continental Divide. No perennial streams flow within the area. Vegetation consists of Ponderosa pine, pinyon-juniper woodlands and grama-galleta steppe.

Access to the area is through CR 42 numerous two-track roads within the area are still accessible by the permittee and other administrative uses.

The area is rich in cultural and historical resources.

An analysis of Threatened and Endangered Species for the El Malpais Joint Fire Plan (2001) found no issues for this area.

**Petaca Pinta WSA** – Landforms vary from gentle grassland to extremely rugged mesas and canyons, Petaca Pinta Mesa dominates the WSA. The area also contains a maze of box canyons, badlands environment and a lava flow to the north. Vegetation mainly consists of scrub-grassland with scattered one-seed juniper and some pinyon pine. The tree component is more prevalent on the north-facing slopes.

Access to the area is through the Arroyo Colorado Allotment via a two-track road that is 7 miles south of SR 55.

There is no known State or Federally listed threatened or endangered species in this WSA.

**Ojito WSA** – Principal landforms in the WSA are Bernalillito Mesa and the southern end of Cucho Mesa, The overall geomorphology of the WSA is formed by arroyos cutting sandstone-capped mesas. Vegetation mainly consists of scrub-grassland with scattered One-Seed Juniper and some Pinyon Pine.

Access to the area is off of SR 550 onto a county maintained dirt road.

There are no known State or Federally listed threatened or endangered species in this WSA.

**Cabezon WSA** – Three principle landforms occur within the area: 1) the eroded volcanic neck of Cabezon Peak; 2) the talus-covered slopes at the base of the neck; 3) the incised mesa topography characterizing the remainder of the area. Vegetation consists of grasses, shrubs and a scattering of One-Seed Juniper and Pinyon.

Access to the area is from CR 279, 19 miles south of Cuba off of SR 550.

There are no known State or Federally listed threatened or endangered species in this WSA.

**Empedrado WSA** – A little over 500 feet of relief exists in the area, from a low elevation of close to 6,000 feet in Torreon Wash to 6,552 feet on a mesa top. Major drainages include Arroyo Piedra Lumbre, Arroyo Empedrado, Torreon Wash and Arroyo Chico. The over geomorphology consist of sandstone hills cut by arroyos. The WSA is river bottom sites supporting riparian habitat vegetation consisting of; Cottonwood, Salt Cedar, willow, Russian Olive the upland vegetation consists of grasses and scattered One Seed Juniper and Pinyon.

Access to the area is available from the west from SR 550 and two track roads.

There are no known State or Federally listed threatened or endangered species in this WSA.

**La Lena WSA** – Landforms in the area consist of mesas, cuevas, rock terraces, retreating escarpments, canyons and arroyos. The overall geomorphology of the area is formed by arroyos cutting sandstone-capped mesas. Vegetation consists of grasses, Juniper Pinyon Woodlands, and Sagebrush

There are no known State or Federally listed threatened or endangered species in this WSA.

**Manzano WSA** – Landforms consists of a mountain peak and an alluvial fan. Vegetation consists of scattered pinyon-juniper with grasses.

There are no known State or Federally listed threatened or endangered species in this WSA.

Air and water quality in the FMU meet national standards.

### **3. Wildland Fire History**

Lightning is the predominate cause of unplanned wildfires in the FMU. Between 1984 and 2006 the following fires and burned acres were reported.

	Number of Fires	Acres Burned
Lightning	33	2,523
Human	2	.2

Fire season can start as early as mid-April and last until monsoon onset in mid-July, with a few isolated fires from lightning in early October. Spring rains, from late February through April significantly contribute to the severity of the summer fire season. The FMU supports a variety of fuel complexes, including grass, sage, pinyon/juniper, oakbrush/grass, ponderosa pine and ponderosa pine/mixed-conifer.

Fire behavior can range from extreme in the pinyon/juniper under 20 feet wind speeds of over 20 mph and high temperatures and low relative humidity's with rates of spread of 80 chains per hour plus with crowning and torching beyond direct attack capability. Fire behavior in timber litter in ponderosa pine stands will exhibit more moderate fire behavior of 7 chains per hour mainly staying on the surface with some torching and short crown runs based on ladder fuels and pinyon encroachment. Fires intensity in the grass and sage are dependant on spring rains and the amount of herbaceous growth from year to year.

### **4. Values at Risk/Resource Protection Constraints**

The priority for Appropriate Management Response (AMR) is to prevent wildland fires from spreading to private, tribal land and other agencies' land and burnable historical cultural resources.

The Cebolla Wilderness Area has a high density of pre-historic and historic features that are vulnerable to fire and suppression efforts and should be protected. All suppression tactics and support actions will be selected commensurate with potential fire behavior while minimizing impacts. If a fire is expect to exceed 160 acres in size the Field Office Archeologist will notified of the fire location. If an Incident Management Team is assigned to the fire an Archeologist will be assigned to the team as a Resource Advisor.

The Chain of Craters WSA has a light density of well preserved historic structures that are vulnerable to fire and suppression efforts and should be protected. All suppression tactics and support actions will be selected commensurate with potential fire behavior while minimizing impacts.

Completed Cultural Resource Surveys within the Chain of Craters WSA:

<b>Planning Unit</b>	<b>Project</b>	<b>Year</b>	<b>Acres</b>
Chain of Craters	Units 1 - 5	2003	5,000
Chain of Craters	Unit 6	2005	3,800
Chain of Craters	Unit 7	2005	7,000
Total			15,800

Ojito and Empedrado WSA have high densities of pre-historic features that are vulnerable to suppression efforts and should be protected. All suppression tactics and support actions will be selected commensurate with potential fire behavior while minimizing impacts.

Completed Cultural Resource Surveys within the Empedrado WSA:

<b>Planning Unit</b>	<b>Project</b>	<b>Year</b>	<b>Acres</b>
Empedrado	Rincon Grande	2001	160
Empedrado	Rincon Grande 2	2001	540
Empedrado	Bear Mouth	2001	455
Total			1,155

For wildland fires requiring an incident management team with multiple resources, RA's will be assigned to the incident commander to ensure wilderness protection objectives are met.

Under extreme fire danger conditions (generally PL-4 and 5), advance approval may be granted by the Field Office Manager to allow motorized access for suppression purposes. Limitations will be set on type, number, and extent of use. Unlimited motorized access will not be permitted.

Under no conditions should motorized access be permitted following a successful initial attack, or subsequent monitoring.

All suppression tactics and support actions will be selected commensurate with potential fire behavior and minimizing impacts to values to be protected. These decisions will be based on interdisciplinary inputs to the extent possible, with respect to conditions on the ground.

**5. Communities at Risk**

None

**6. Fire Management Objectives:**

- Employ, under agency guidelines, an appropriate management response strategy that considers the management of naturally-ignited wildland fire for

resource benefit in areas of the Unit where current fire environment conditions warrant, while protecting values at risk (i.e.,wilderness).

- Where necessary to meet fuels reduction objectives, utilize approved fuels management techniques which include prescribed fire treatments, to reduce localized fuels concentrations back to a more natural range of variability.
- Ultimately manage the FMU to allow for maximized wildland fire presence to the fullest extent possible, while protecting values at risk (i.e., wilderness).
- An appropriate suppression response will be utilized for all wildland fires that do not meet resource objectives or prescriptive criteria.

**7. Fire Management Strategies.**

**Suppression:** The priority for Appropriate Management Response (AMR) is to prevent wildland fires from spreading to private, cultural resources or improvements on BLM lands and other agencies lands. Use AMR to manage all fires in accordance with management objectives based on current conditions and fire location.

All fires occurring at a Fire Intensity Level (FIL) 1-3 will be suppressed at less than 2000 acres 90 percent of the time. All fires occurring at FIL 4-6 will be suppressed at less than 3000 acres 75 percent of the time.

**Wildland Fire: For Resource Benefit:** Implement as an option of Appropriate Management Response with constraints developed by the Field Office Staff . Fire Management will assess fuels, weather, ability to hold and contain, socio-political and those local factors that may constrain or promote the use of fire as a tool for the specific event.

**Prescribed Fire:** Treat 2000 acres annually within the FMU. Prescribed fire will be used to treat woodlands and non-woodlands to move FRCC 2 and 3 lands to FRCC 1. Fire will also be used to maintain FRCC 1 lands as well.

Prescribed Fire Treatments within the Wilderness FMU as of April 2009:

Project	Year	Acres Planned	Acres Accomplished
Chain of Craters	2004-2011	15,800	5,000
Rincon Grande	2010	700	
Bear Mouth	2010	455	
	Total	16,955	5,000

**Non-fire treatments:** The need for mechanical thinning will be analyzed in areas where site prep is required before prescribed fire treatments can be applied, to reduce stand densities and ladder fuels that could potentially contribute to high intensity crown fires.

Post Fire Rehabilitation and/or actions needed for Restoration – an inter-disciplinary team will develop plans for post fire rehabilitation. Post fire rehabilitation and restoration will be used to facilitate reestablishment of the potential natural community of the site. All rehabilitation actions will be commensurate with wilderness values using the minimum tool concept. The following rehabilitation concerns should be addressed:

- Slopes of 15% or greater where surface erosion is likely
- Temporary fences in areas where grazing pressure may inhibit re-establishment of native plants following wildfire.
- Road obliteration or restoration where the road created by the suppression activity does not meet resource objectives for the area or may cause erosion.

## Fire Management Unit (FMU) Description

**Fire Management Unit Name:** Kasha-Katuwe Tent Rocks National Monument  
**Category/Number:** B/4

### 1. Location

The FMU is located about 55 road miles northeast of Albuquerque and 40 miles southwest of Santa Fe. The FMU consist of 5,089 acres of BLM land. Within the boundaries of the FMU are 757 acres of private land and 521 acres of New Mexico State owned land.

### 2. Characteristics

The FMU is part of a volcanic complex located in the southern Jemez Mountains. The topography is characterized by a general northwest to southeast drainage pattern leading to Peralta Canyon, resulting in a series of steep canyons and ridges.

Vegetation consists of juniper pinyon woodlands with scattered ponderosa pine with shrubs and grass understory and grasslands. Since 2002, a major insect epidemic and drought has killed over 75% of the pine.

Several diverse resources occur in the FMU. These include volcanic tuff formations, a popular regional recreation site, habitat for non-game birds and cultural resources attributable to prehistoric Pueblo, modern Pueblo, and historic use. The BLM has developed a picnic area, a visitor overlook, and numerous hiking trails.

Access to the FMU is through Interstate 25 to SR 22 to Cochiti Tribal Route 92.

There is no known State or Federally listed threatened or endangered species in this FMU.

Air and water quality in the FMU meet national standards.

### 3. Wildland Fire History

This area has been under a protection exchange with the Bureau of Indian Affairs and this may be the reason why there has not been a recorded fire in the area for the planning period.

The major fuel type in this area is a timber type represented by juniper and pinyon woodlands with heavy standing dead and dying trees. Many of the trees have lost their foliage and will not support crown fire but as new stands die off and new "red" crowns appear that could support crown fire the potential for erratic fire behavior does exists within the FMU Over time as dead trees decay, the vertical arrangement of dead fuels

transfers to ground litter which if left untreated increases surface fire intensity and hinders direct attack suppression efforts.

#### 4. Values at Risk/Resource Protection Constraints

Cultural resource values are the greatest concern for protection in the FMU. Appropriate cultural resource clearances will be required before any fuels management activities are initiated. A resource advisor will be assigned to any fire that escapes initial attack. Fire crews are briefed on cultural resource issues prior to the start of each fire season.

Completed Cultural Resource Surveys within the Tent Rocks National Monument:

Planning Unit	Project	Year	Acres
Tent Rocks	Peralta Canyon	2004	227
Tent Rocks	Tent Rocks 1	2006	50
	Total		277

All suppression tactics and support actions will be selected commensurate with potential fire behavior and minimizing impacts to values to be protected. These decisions will be based on interdisciplinary inputs to the extent possible, with respect to conditions on the ground.

This is an area of high visitor use safety of the public is a major concern. The size of unplanned wildfires be minimized to protect public safety.

#### 5. Communities at Risk

Pueblo De Cochiti is on the 2001 Federal Register as a community at risk from wildfire. In 2005 a Healthy Forest Initiative (HFI) Categorical Exclusion was completed on approximately 1,000 acres.

#### 6. Fire Management Objectives:

**Goal: Reduce wildland fire hazard around identified cultural sites and recreational facilities.**

##### Objective

Apply mechanical fuel reduction and prescribed fire where applicable around vulnerable prehistoric, historic resources and recreational facilities to reduce damage from wildland fire.

**Goal: Use approved fire and surrogate fire treatments to restore and maintain primary natural resources and their processes where applicable in order to move FRCC 3 and 2 to FRCC 1.**

Objective

**1. Ponderosa pine**

Establish and maintain a vegetative structure and mosaic within the natural range of variability for southwestern ponderosa pine forest ecosystems.

**2. Pinyon-juniper woodland**

Establish and maintain a vegetative structure and mosaic within the natural range of variability for southwestern pinyon-juniper woodlands.

**3. Grasslands**

Restore fire as a keystone natural process that encourages native grassland ecosystems.

**4. All types**

Reduce established noxious and non-native plant cover.

**7. Fire Management Strategies**

Suppression - The priority for Appropriate Management Response (AMR) is to prevent wildland fires from spreading to private, cultural resources or improvements on BLM lands, other agencies lands and to protect the public users. Use AMR to manage all fires in accordance with management objectives based on current conditions and fire location.

All fires occurring at a Fire Intensity Level (FIL) 1-3 will be suppressed at less than 1 acre 90 percent of the time. All fires occurring at FIL 4-6 will be suppressed at less than 50 acres 75 percent of the time.

Wildland Fire For Resource Benefit – Wildland Fire for Resource benefit is not planned for this FMU and is not an option in Category B FMU’s as per the RMP amendment for fire and fuels.

Prescribed Fire – Treat 125 acres within the FMU with prescribed fire. Prescribed fire will be used to treat woodlands and non-woodlands to move FRCC 2 and 3 lands to FRCC 1. Fire will also be used to maintain FRCC 1 lands as well and to treat slash created by mechanical treatments.

Prescribed Fire Treatments within the Tent Rocks FMU as of April 2009:

Project	Year	Acres Planned	Acres Accomplished
Peralta Canyon	2006-2015	100	
Tent Rocks 2	2010-2012	50	

Non-fire treatments:

Mechanical tree thinning – will be used to reduce stand density and crown closure and to remove dead trees to move FRCC 2 and 3 woodlands into FRCC 1. In some areas, multiple treatments will be required. In some instances, a combination of mechanical and prescribed fire will be used. Treat 30 acres by mechanical means each year within the FMU.

Mechanical Treatments within the Tent Rocks FMU as of February 2010:

Project	Year	Acres Planned	Acres Accomplished
Peralta Canyon	2004-2010	227	115
Tent Rocks 2	2009-2010	50	0
NW Tent Rocks	2010	405	
	Total	682	115

Chemical or biological treatments may be considered as needed by a site-specific plan.

Post Fire Rehabilitation and/or actions needed for Restoration – an inter-disciplinary team will develop Plans for post fire rehabilitation. Post fire rehabilitation and restoration will be used to facilitate reestablishment of the potential natural community of the site. In addition, the following rehabilitation concerns should be addressed:

- Slopes of 15% or greater where surface erosion is likely
- Temporary fences in areas where grazing pressure may inhibit re-establishment of native plants following wildfire.
- Road obliteration or restoration where the road created by the suppression activity does not meet resource objectives for the area or may cause erosion.

## Fire Management Unit (FMU) Description

**Fire Management Unit Name:** Mesa Chivato  
**Category/Number:** C/5

### 1. Location

This FMU is comprised of the Ignacio Chavez and Chamisa Wilderness Study Areas.

This area is located approximately 25 miles west of San Ysidro and 50 air miles northwest of Albuquerque. The Chamisa and Ignacio Chavez WSAs' is are bounded on the north and west by public and private lands, on the south by the Cibola National Forest and on the east by other public lands. The FMU consist of 58,436 acres of BLM lands and 567 acres of private land.

### 2. Characteristics

Landforms common to the northern part of the area include mesas, cuevas, rock terraces, retreating escarpments, canyons and arroyos. These landforms are striking to the southern part of the area where landforms consists of basalt plains, cinder cones, exhumed plugs and dikes and extensive talus slopes.

Vegetation - Ponderosa pine forests exist at the higher elevations and drainages around Mesa Chivato. These ponderosa pine stands are found growing in irregular, uneven-aged stands ranging from only a few trees to stands occupying large areas. Stand composition in the Ignacio Chavez WSA is estimated at 47 percent ponderosa pine, 46 percent woodland (pinyon/juniper), and 7 percent other species (including gambel's oak, Douglas fir, white fir, and aspen). Stand composition in the Chamisa WSA is primarily woodland (75 percent) and 20 percent ponderosa pine which can be found in the drainages of the Chamisa WSA. At least 80 percent of the stands have been logged at least once, reducing the average volume per acre. Roughly, 55 to 65 percent of the ponderosa pine in the Rio Puerco Resource Area is contained in these WSA's, as well as 20 to 25 percent of the woodland resources. The ponderosa pine, pinyon, and juniper can be found in and around what were at one time large park like meadows. These park like meadows are now being encroached upon by the ponderosa pine, pinyon, and juniper.

The herbaceous vegetation within the project area consists of a blue gramma, galleta, bottlebrush squirreltail, and Arizona fescue. The herbaceous production in the understory of ponderosa pine, pinyon and juniper ranges from 50 to 375 lbs/acre, and 600 to 1000 lbs/acre in the open meadows. Shrubs include fourwing saltbrush, snakeweed, mountain mahogany, and rabbit brush.

Access is available by proceeding southwest from SR 550 onto State-maintained gravel road on the north, east, south, and west of the Ignacio Chavez WSA, and on the north and south of Chamisa WSA.

There are no known Threatened and Endangered Species within the FMU.

Air and water quality in the FMU meet national standards.

### **3. Wildland Fire History:**

Between 1984 and 2009 the following fires and burned acres were reported.

	Number of Fires	Acres Burned
Lightning	6	529
Human	1	640

Fire season can start as early as mid-April and last until monsoon onset in mid-July, with a few isolated fires from lightning in early October. Spring rains, from mid- February through April significantly contribute to fine fuel loadings. Thus help determine the severity of the summer fire season. The FMU supports a variety of fuel complexes, including grass, sage, pinyon/juniper, oakbrush/grass, ponderosa pine and ponderosa pine/mixed-conifer.

Fire behavior can range from extreme in the pinyon/juniper under 20 feet wind speeds of over 20 mph and high temperatures and low relative humidity's with rates of spread of 80 chains per hour plus with crowning and torching beyond direct attack capability. Fire behavior in timber litter in ponderosa pine stands will exhibit more moderate fire behavior of 7 chains per hour mainly staying on the surface with some torching and short crown runs based on ladder fuels and pinyon encroachment. Fires intensity in the grass and sage are dependant on spring rains and the amount of herbaceous growth from year to year.

### **4. Values at Risk/Resource Protection Constraints**

For wildland fires requiring an incident management team a Resource Advisor will be assigned to the incident commander to ensure wilderness protection objectives are met.

Under extreme fire danger conditions (generally PL-4 and 5), advance approval may be granted by the Field Office Manager to allow motorized access for suppression purposes. Limitations will be set on type, number, and extent of use. Unlimited motorized access will not be permitted.

Under no conditions should motorized access be permitted following a successful initial attack, or subsequent monitoring, etc.

Existing inventories within the FMU suggest that the potential for cultural resources in the area is low. All suppression tactics and support actions will be selected commensurate with potential fire behavior while minimizing impacts to existing cultural and historic resources.

Completed Cultural Resource Surveys within the Mesa Chivato FMU:

<b>FMU</b>	<b>Project</b>	<b>Year</b>	<b>Acres</b>
Mesa Chivato	Arroyo	2002	3,270
Mesa Chivato	Medio Tank	2002	1,150
Mesa Chivato	Seco Tank	2003	1,300
Mesa Chivato	Chamisa Losa	2004	2,615
Mesa Chivato	West Seco	2006	925
Mesa Chivato	Toro tank	2007	2,938
Mesa Chivato	Ned Tank	2008	2,915
		<b>Total</b>	<b>15,113</b>

All suppression tactics and support actions will be selected commensurate with potential fire behavior and minimizing impacts to values to be protected. These decisions will be based on interdisciplinary inputs to the extent possible, with respect to conditions on the ground.

**5. Communities at Risk**

None

**6. Fire Management Objectives**

**Goal: Use planned fire use and surrogate fire treatments to restore and maintain primary natural resources and their processes where applicable in order to move FRCC III and II to FRCC I.**

Objectives

**1. Ponderosa pine**

Establish and maintain a vegetative structure and mosaic within the natural range of variability for southwestern ponderosa pine forest ecosystems.

**2. Pinyon-juniper woodland**

Establish and maintain a vegetative structure and mosaic within the natural range of variability for southwestern pinyon-juniper woodlands.

**3. Grasslands**

Restore fire as a key natural process that encourages native grassland ecosystems.

**4. All types**

- Reduce established noxious and non-native plant cover.
- Ultimately manage the FMU to allow for maximized wildland fire presence to the fullest extent possible, while protecting values at risk (i.e., wilderness).

## 7. Fire Management Strategies

Suppression - The priority for Appropriate Management Response (AMR) is to prevent wildland fires from spreading to private, cultural resources or improvements on BLM lands and other agencies lands. Use AMR to manage all fires in accordance with management objectives based on current conditions and fire location.

All fires occurring at a Fire Intensity Level (FIL) 1-3 will be suppressed at less than 2000 acres 90 percent of the time. All fires occurring at FIL 4-6 will be suppressed at less than 3000 acres 75 percent of the time.

Wildland Fire For Resource Benefit - Implement as an option of Appropriate Management Response with constraints developed by the Field Office Staff . Fire Management will assess fuels, weather, ability to hold and contain, socio-political and those local factors that may constrain or promote the use of fire as a tool for the specific event.

Prescribed Fire: Treat 2,000 acres annually within the FMU. Prescribed fire will be used to treat woodlands and non-woodlands to move FRCC 2 and 3 lands to FRCC 1. Fire will also be used to maintain FRCC 1 lands as well.

Prescribed Fire Treatments within the Mesa Chivato FMU as of February 2010:

Project	Year	Acres Planned	Acres Accomplished
Arroyo	2002	3,270	946
Blanco	2003	1,489	1,150
Medio Tank	2003-2009	1,150	814
Seco Tank	2005-2010	1,300	1,250
Chamisa Losa	2004	2,615	1,200
West Seco	2007-2011	925	
Torro Tank	2009-2012	2,938	2,130
Heifer Tank	2010-2012	2,000	
Ned Tank	2010-2012	2,915	370
Total		18,602	7,860

Non-fire treatments: Mechanical tree thinning – will be used to reduce stand density and crown closure to move FRCC 2 and 3 woodlands into FRCC 1. In some areas, multiple treatments will be required. In some instances, a combination of mechanical and prescribed fire will be used. Treat 250 acres annually by mechanical means within the FMU as approved in the Mesa Chivato Hazardous Fuels Reduction Environmental Analysis (2002).

Mechanical Treatments within the Mesa Chivato FMU as of April 2009:

Project	Year	Acres Planned	Acres Accomplished
Medio Tank	2002-2010	800	518
Seco Tank	2009-2010	500	46
Total		1,200	564

Chemical or biological treatments will be addressed in a site specific environmental assessment.

Post Fire Rehabilitation and/or actions needed for Restoration – an inter-disciplinary team will develop plans for post fire rehabilitation. Post fire rehabilitation and restoration will be used to facilitate reestablishment of the potential natural community of the site. All rehabilitation actions will be commensurate with wilderness values using the minimum tool concept. The following rehabilitation concerns should be address:

- Slopes of 15% or greater where surface erosion is likely
- Temporary fences in areas where grazing pressure may inhibit re-establishment of native plants following wildfire.
- Road obliteration or restoration where the road created by the suppression activity does not meet resource objectives for the area or may cause erosion.

## Fire Management Unit (FMU) Description

**Fire Management Unit Name:** Sandia  
**Category/Number:** B/6

### 1. Location

This FMU consist of scattered parcels of BLM administered lands primarily in Sandoval County east of Interstate 25, with most contiguous lands located in and around the village of Placitas. BLM administers 11,063 in this FMU, the FMU interfaces with 42,000 acres of private land and 10,000 acres of state land.

### 2. Characteristics

Common landforms in the area are rolling hills, arroyos and small valleys. Vegetation in the FMU consists of Grasslands and scattered Pinyon Pine and Juniper woodlands.

Access to the area is from Interstate 25 to CR 22.

There are no known Threatened and Endangered Species within the FMU.

Air and water quality in the FMU meet national standards.

### 3. Wildland Fire History:

There has not been a reported fire for the planning period for this FMU. This may be due to the State of New Mexico having had initial attacked responsibility for this area. The Field Office still has the responsibility for fire protection for this area and will hold pre-season operating plan meetings with the state that will cover fire reporting.

Fire season can start as early as mid-April and last until monsoon onset in mid-July. Spring rains, from mid- February through April significantly contribute to fine fuel loadings and the severity of the summer fire season. The FMU supports two major fuel complexes, grass with shrubs and scattered woodlands.

Fire behavior can range from extreme in the grass fuel types when there has been enough spring rains and the herbaceous growth is heavy. Rates of spread could be over 60 chains per hour plus with flame lengths over 10 feet. During drought years fire behavior would be a lot more manageable. Fire behavior in the woodlands would exhibit more moderate fire behavior of 7 chains per hour mainly staying on the surface with some torching and short crown runs based on ladder fuels and pinyon encroachment.

#### **4. Values at Risk/Resource Protection Constraints**

In holdings of private property and structures are intermingled throughout the FMU. An Appropriate Management Response (AMR) will be used to stop any unplanned ignitions from burning on to private land or improvements.

Community education and outreach on prudent firewise practices will be offered to the communities within the FMU.

#### **5. Communities at Risk**

There are numerous unnamed subdivisions and the village of Placitas within the FMU.

None of the communities is currently listed on the Federal Register as communities at risk

#### **6. Fire Management Strategies**

Suppression - The priority for Appropriate Management Response (AMR) is to prevent wildland fires from spreading to private, cultural resources or improvements on BLM lands and other agencies lands. Use AMR to manage all fires in accordance with management objectives based on current conditions and fire location.

All fires occurring at a Fire Intensity Level (FIL) 1-3 will be suppressed at less than 100 acres 90 percent of the time. All fires occurring at FIL 4-6 will be suppressed at less than 300 acres 75 percent of the time.

#### **7. Fire Management Objectives**

Wildland Fire For Resource Benefit – Wildland Fire for Resource Benefit is not planned for this FMU.

Prescribed Fire – Prescribed fire treatments will be limited to hand and machine pile burning. Debris and material created from mechanical thinning would be hand or machined piled to break up the continuity of fuels.

Non-fire treatments:

Mechanical tree thinning – will be used to reduce stand density and crown closure to move FRCC 2 and 3 woodlands into FRCC 1. In some areas, multiple treatments will be required. In some instances, a combination of mechanical and prescribed fire will be used. Treat 17 acres annually by mechanical means within the FMU.

Chemical or biological treatments may be considered as needed by a site-specific plan.

Post Fire Rehabilitation and/or actions needed for Restoration – an inter-disciplinary team will develop Plans for post fire rehabilitation. Post fire rehabilitation and restoration will be used to facilitate reestablishment of the potential natural community of the site. In addition, the following rehabilitation concerns should be addressed:

- Slopes of 15% or greater where surface erosion is likely
- Temporary fences in areas where grazing pressure may inhibit re-establishment of native plants following wildfire.
- Road obliteration or restoration will take place where roads were created by the suppression activity.

## Fire Management Unit (FMU) Description

**Fire Management Unit Name:** Scattered Grass-Shrub Lands  
**Category/Number:** C/7

### 1. Location

This is the largest FMU for the planning area.

The northern portion area is defined as being bordered to the north by the Jicarilla Apache Indian Reservation, to the east by Santa Fe National Forest, to the south by the Jemez Indian Reservation and the escarpments that define Mesa San Luis as it wraps to the west and enters into the Navajo Nation forming the west boundary.

The southern portion consists of all BLM lands southwest of Albuquerque to the boundary of FMU C1. The BLM administers 507,468 acres in this FMU. The FMU interfaces with over 300,000 acres of private land.

### 2. Characteristics

Landforms in the area are plateaus, mesas, deep canyons, arroyos and broad valleys.

Vegetation consists of Big Sage Brush/Grass, shrub land, scattered pinyon pine and juniper woodlands with isolated stands of Ponderosa Pine forest.

The northern portion of the FMU can be accessed by SR 550 and SR 197; the southern portion can be access off Interstate 40.

There is only one known occupied site of a listed Endangered Species in the FMU. The Southwestern Willow Flycatcher located in the San Luis Mesa Area along the Rio Puerco and south of San Ysidro along the Rio Salado. Habitat for the flycatcher is primarily riparian i.e. cottonwood-willow it is not expected that any fuel treatment projects will be undertaken in this vegetation type within the FMU. If projects are planned in the Bluewater area the conservation measures for the Willow Flycatcher need to be reviewed in the Biological Assessment and Evaluation dated July 2004, for the 2004 RMP amendment for fire and fuels management. The Field Office T&E Coordinator will also need to be consulted during the project planning preparation phase of the project.

Air and water quality in the FMU meet national standards.

### 3. Wildland Fire History

Lightning is the predominate cause of unplanned wildfires in the FMU. Between 1984 and 2006 the following fires and burned acres were reported.

	Number of Fires	Acres Burned
Lightning	45	16,733
Human	22	97

Fire season can start as early as mid-April and last until monsoon onset in mid-July, with a few isolated fires from lightning in early October. Spring rains, from March through May significantly contribute fine fuel loadings and to the severity of the summer fire season. The FMU supports a variety of fuel complexes, including grass, sage, pinyon/juniper, oakbrush/grass, ponderosa pine and ponderosa pine/mixed-conifer. \

Fire behavior can range from extreme in the pinyon/juniper under 20 feet wind speeds of over 20 mph and high temperatures and low relative humidity's with rates of spread of 80 chains per hour plus with crowning and torching beyond direct attack capability. Fire behavior in timber litter in ponderosa pine stands will exhibit more moderate fire behavior of 7 chains per hour mainly staying on the surface with some torching and short crown runs based on ladder fuels and pinyon encroachment. Fires intensity in the grass and sage are dependant on spring rains and the amount of herbaceous growth from year to year.

#### 4. Values at Risk/Resource Protection Constraints

Cultural resource values are the greatest concern for protection in the FMU, historic features such as homesteads and pre-historic sites have been found. Appropriate cultural resource clearances will be required before any fuels management activities are initiated.

Completed Cultural Resource Surveys within the Grass-Shrub Lands FMU:

FMU	Project	Year	Acres
Scattered Grass-Shrub Lands	Chijuilla Area	2001 & 2005	3,209
Scattered Grass-Shrub Lands	Coal Creek	2002-2005	1,081
Scattered Grass-Shrub Lands	South Cuba	2005 & 2007	924
Scattered Grass-Shrub Lands	Fork Rock	2002	1,415
Total			6,629

Homestead activity was prevalent in the Arroyo Chijuilla area on both sides of the Continental Divide. Well preserved historic structures occur in this area. These structures are vulnerable to fire and suppression efforts and should be protected. All suppression tactics and support actions will be selected commensurate with potential fire behavior while minimizing impacts.

Pre-historic sites are common in the Regina area. All suppression tactics and support actions will be commensurate with potential fire behavior while minimizing impacts.

South and west of Cuba are other areas of high pre-historic site density. All suppression tactics and support actions will be selected commensurate with potential fire behavior while minimizing impacts.

Any fire support activities i.e. fire camps, staging areas planned in the vicinity of the pre-historic community of Guadalupe will have to be approved by the Field Office archeologist before proceeding.

Rio Puerco and Rio Senorito riparian restoration projects are included within this FMU.

In holdings of private property and structures are intermingled throughout the FMU. An Appropriate Management Response (AMR) will be used to stop any unplanned ignitions from burning on to private land or improvements.

Community education and outreach on prudent firewise practices will be offered to the communities within the FMU.

#### **5. Communities at Risk – Describe WUI concerns.**

The communities of Regina, La Jara, Cuba, San Luis, Cabezon, Torreon, and Ojo Encino are within the FMU boundary. The Village of Cuba has completed a CWPP which includes Cuba, NM, La Jara, NM, and Regina, NM.

None of the communities are currently listed on the Federal Register as communities at risk

#### **6. Fire Management Objectives**

**Goal: Reduce wildland fire hazard around identified cultural sites.**

##### Objectives

Apply mechanical fuel reduction and prescribed fire where applicable around vulnerable prehistoric and historic resources to reduce damage from wildland fire.

**Goal: Use planned fire use and surrogate fire treatments to restore and maintain primary natural resources and their processes where applicable in order to move FRCC 3 and 2 to FRCC 1.**

##### Objectives

#### **1. Ponderosa pine**

Establish and maintain a vegetative structure and mosaic within the natural range of variability for southwestern ponderosa pine forest ecosystems.

#### **2. Pinyon-juniper woodland**

Establish and maintain a vegetative structure and mosaic within the natural range of variability for southwestern pinyon-juniper woodlands.

### **3. Grasslands**

Restore fire as a key natural process that encourages native grassland ecosystems.

### **4. All types**

Reduce established noxious and non-native plant cover.

## **7. Fire Management Strategies**

Suppression - The priority for Appropriate Management Response (AMR) is to prevent wildland fires from spreading to private, cultural resources or improvements on BLM lands and other agencies lands. Use AMR to manage all fires in accordance with management objectives based on current conditions and fire location.

Annually fire personnel will be briefed on conservation measures for fire suppression activities for Southwestern Willow Flycatcher found in the Biological Assessment and Evaluation for the 2004 RMP amendment for fire and fuels management.

Fires in the Rio Puerco or Rio Seniorito riparian restoration projects will be kept to the smallest size possible.

If a fire is expect to exceed 160 acres in size the Field Office Archeologist will be notified of the fire location. If an Incident Management Team is assigned to the fire an Archeologist will be assigned to the team as a Resource Advisor.

All fires occurring at a Fire Intensity Level (FIL) 1-3 will be suppressed at less than 1000 acres 90 percent of the time. All fires occurring at FIL 4-6 will be suppressed at less than 2000 acres 75 percent of the time.

Wildland Fire For Resource Benefit - Implement as an option of Appropriate Management Response with constraints developed by the Field Office Staff . Fire Management will assess fuels, weather, ability to hold and contain, socio-political and those local factors that may constrain or promote the use of fire as a tool for the specific event.

Prescribed Fire: Treat 2956 acres annually within the FMU. Prescribed fire will be used to treat woodlands and non-woodlands to move FRCC 2 and 3 lands to FRCC 1. Fire will also be used to maintain FRCC 1 lands as well and to treat slash created by mechanical treatments.

Non-fire treatments:

Mechanical tree thinning – will be used to reduce stand density and crown closure to move FRCC 2 and 3 woodlands into FRCC 1. In some areas, multiple treatments will be required. In some instances, a combination of mechanical and prescribed fire will be used. Treat 500 acres annually by mechanical means within the FMU.

Chemical or biological treatments may be considered as needed by a site-specific plan. It is estimated 1,478 acres could be treated annually.

Post Fire Rehabilitation and/or actions needed for Restoration – an inter-disciplinary team will develop Plans for post fire rehabilitation. Post fire rehabilitation and restoration will be used to facilitate reestablishment of the potential natural community of the site. In addition, the following rehabilitation concerns should be addressed:

- Slopes of 15% or greater where surface erosion is likely
- Temporary fences in areas where grazing pressure may inhibit re-establishment of native plants following wildfire.
- Road obliteration or restoration where the road created by the suppression activity does not meet resource objectives for the area or may cause erosion

## Fire Management Unit (FMU) Description

**Fire Management Unit Name:** Candy Kitchen  
**Category/Number:** B/8

### 1. Location

The FMU is located about 45 road miles west of Grants. The FMU consists of 12,900 acres of BLM land. Within the boundaries of the FMU there are 5,700 acres of private land and 9,700 acres of New Mexico State owned land. Zuni and Ramah reservation lands adjoin the FMU to the north. Private lands adjoin the FMU to the East, west and south.

### 2. Characteristics

Landforms in the area are broad valleys, arroyos and mesas.

Vegetation consists of Juniper Pinyon Woodlands, Ponderosa Pine forest, grass and shrubs.

Access to the FMU is through Interstate 25 to SR 53 then a paved Bureau of Indian Affairs (BIA) road.

There is no known State or Federally listed threatened or endangered species in this FMU.

Air and water quality in the FMU meet national standards.

### 3. Wildland Fire History

Lightning is the predominate cause of unplanned wildfires in the FMU. Between 1984 and 2006 the following fires and burned acres were reported.

	Number of Fires	Acres Burned
Lightning	2	1

Fire season can start as early as mid-April and last until Monsoon onset in mid-July, with a few isolated fires from lightning in early October. Spring rains, from March through May significantly contribute to fine fuel loading and the severity of the summer fire season. The FMU supports a variety of fuel complexes, including grass, sage, pinyon/juniper, oakbrush/grass and ponderosa pine.

Fire behavior can range from extreme in the pinyon/juniper under 20 feet wind speeds of over 20 mph and high temperatures and low relative humidity's with rates of spread of 80 chains per hour plus with crowning and torching beyond direct attack capability. Fire behavior in timber litter in ponderosa pine stands will exhibit more moderate fire

behavior of 7 chains per hour mainly staying on the surface with some single tree torching and short crown runs based on ladder fuels and pinyon encroachment. Fires intensity in the grass and sage are dependant on spring rains and the amount of herbaceous growth from year to year.

#### **4. Values at Risk/Resource Protection Constraints**

Cultural resource values are the greatest concern for protection in the FMU. Appropriate cultural resource clearances will be required before any fuels management activities are initiated.

A resource advisor will be assigned to any fire that escapes initial attack. Fire crews are briefed on cultural resource issues prior to the start of each fire season.

All suppression tactics and support actions will be selected commensurate with potential fire behavior and minimizing impacts to values to be protected. These decisions will be based on interdisciplinary inputs to the extent possible, with respect to conditions on the ground.

#### **5. Communities at Risk**

Candy Kitchen is on the 2001 Federal Register as a community at risk from wildfire. Since 2004 approximately 1,095 acres of fuel reduction projects have been accomplished and additional projects are planned for out years.

In FY2006 the Rio Puerco Field Office and the Candy Kitchen community completed a Community Wildfire Protection Plan.

#### **6. Fire Management Objectives**

**Goal: Reduce wildland fire hazard around identified cultural sites and recreational facilities.**

##### Objectives

Apply mechanical fuel reduction and prescribed fire where applicable around vulnerable prehistoric, historic resources and recreational facilities to reduce damage from wildland fire.

**Goal: Use approved fire use and surrogate fire treatments to restore and maintain primary natural resources and their processes where applicable in order to move FRCC 3 and 2 to FRCC 1.**

Objectives

**1. Ponderosa pine**

Establish and maintain a vegetative structure and mosaic within the natural range of variability for southwestern ponderosa pine forest ecosystems.

**2. Pinyon-juniper woodland**

Establish and maintain a vegetative structure and mosaic within the natural range of variability for southwestern pinyon-juniper woodlands.

**3. Grasslands**

Restore fire as a keystone natural process that encourages native grassland ecosystems.

**4. All types**

Reduce established noxious and non-native plant cover.

**6. Fire Management Strategies**

Suppression - The priority for Appropriate Management Response (AMR) is to prevent wildland fires from spreading to private, cultural resources or improvements on BLM lands, other agencies lands and to protect the public users. Use AMR to manage all fires in accordance with management objectives based on current conditions and fire location.

All fires occurring at a Fire Intensity Level (FIL) 1-3 will be suppressed at less than 100 acre 90 percent of the time. All fires occurring at FIL 4-6 will be suppressed at less than 300 acres 75 percent of the time.

**7. Fire Management Objectives**

Wildland Fire For Resource Benefit – Wildland Fire Use for Resource benefits is not planned for this FMU.

Prescribed Fire – Treat 150 acres annually within the FMU. Prescribed fire will be used to treat woodlands and non-woodlands to move FRCC 2 and 3 lands to FRCC 1. Fire will also be used to maintain FRCC 1 lands as well and to treat slash created by mechanical treatments.

Prescribed Fire Treatments within the Candy Kitchen FMU as of February 2010:

Project	Year	Acres Planned	Acres Accomplished
Candy Kitchen 2	2005	90	90
Candy Kitchen 3	2007	35	1
Candy Kitchen 6	2009	175	175
Candy Kitchen 5	2008	30	
Candy Kitchen 7	2009	45	
Candy Kitchen 8	2010	35	
Candy Kitchen 9	2011	45	
	Total	455	267

Non-fire treatments:

Mechanical tree thinning – will be used to reduce stand density and crown closure and to remove dead trees to move FRCC II and III woodlands into FRCC I. In some areas, multiple treatments will be required. In some instances, a combination of mechanical and prescribed fire will be used. Treat 500 acres annually by mechanical means within the FMU.

Mechanical Treatments within the Candy Kitchen FMU as of April 2009:

Project	Year	Acres Planned	Acres Accomplished
Candy Kitchen 2	2005	218	218
Candy Kitchen 3	2005	230	230
Candy Kitchen 6	2006	207	207
Candy Kitchen 5	2007	120	120
Candy Kitchen 7	2008-2010	237	
Candy Kitchen 8	2008	218	160
Candy Kitchen 9	2009-2011	230	160
	<b>Total</b>	<b>1,460</b>	<b>1,095</b>

Chemical or biological treatments may be considered as needed by a site-specific plan.

Post Fire Rehabilitation and/or actions needed for Restoration – an inter-disciplinary team will develop Plans for post fire rehabilitation. Post fire rehabilitation and restoration will be used to facilitate reestablishment of the potential natural community of the site. In addition, the following rehabilitation concerns should be addressed:

- Slopes of 15% or greater where surface erosion is likely
- Temporary fences in areas where grazing pressure may inhibit re-establishment of native plants following wildfire.
- Road obliteration or restoration where the road created by the suppression activity does not meet resource objectives for the area or may cause erosion.

FMU Priority by Activity

FMU	Suppression	Prescribed Fire/NonFire Treatments	Community Assistance
North Malpais	High	High	High
West Malpais	Low	Low	Low
Wilderness/WSA	Low	Medium	Low
Tent Rocks	High	Medium	Medium
Mesa Chivato	Low	Low	Low
Sandia	High	Low	High
Scatter Grass and Shrubs	Medium	Medium	Medium
Candy Kitchen	High	High	High

## **IV. Wildland Fire Management Program Components**

### **A. Wildland Fire Suppression**

#### **Fire History**

Between 1984 and 2006 approximately 80 percent of fires in this Field Office were lightning caused and generally occur between the months of May and August. Human caused fires are usually associated with main travel corridors.

The twenty year annual average for all fire causes is 10 fires per year burning an average of 1615 acres per year.

Multiple fires days consisting of 2 fires or more per day have occurred 18 times with 3 fires occurring on one day and 4 occurring on another day.

The number of fires varies from year to year and is dependent on the amount of moisture associated with lightning-producing thunderstorms. The size of fires fluctuates from year to year depending on the availability of the primary fire carrier. Annual grasses and brush are the primary fire carriers in the lower to middle elevations, and their growth is dependent upon precipitation received during the late winter and spring months. At the higher elevations primary fire carriers are pine needles and litter.

Fire occurrence is most common in the El Malpais area. The probability of large fires (based on historical data) is also highest because of fuel continuity, and reduced access.

While the majority of this Field Office experiences primarily Class A, B and C, fires, the El Malpais area has a history of large fire activity a total of 8 Classes E & F fires ranging from 240 - 4,100 acres have occurred.

Mobilization of a Type II Incident Management Team has occurred twice during this time period for fires in the El Malpais area.

#### **Fire behavior**

The Field Office supports a variety of fuel types, including grass, sage, sage/grass, pinyon/juniper, oak-brush/grass, ponderosa pine, and ponderosa pine/mixed-conifer.

The following table represents best available information on fuels complexes within the Field Office and expected fire behavior during the fire season.

<b>Ponderosa Pine (Timber/Litter and Grass Fuel Group)</b>			
<b>Fuel Model</b>	<b>Rate of Spread, ch/hr</b>	<b>Flame Lengths, ft.</b>	<b>Fire Characteristics</b>
9	7 – 25	2.0 – 5.3	Surface fires only; potential for independent crownfire at high wind-speeds
<b>Pinyon-Juniper Woodland (Timber/Litter Fuel Group)</b>			
8	2 – 5	0.9 – 1.9	Only under low wind conditions
6	28 – 83	4.7 – 10	Only closed-canopy conditions under high wind speeds of over 20 mph at 20 feet.
<b>Grasslands/Sagebrush (Grass Fuel Group)</b>			
1	0 – 311	0 – 8.4	Fires burn out quickly
2	0 – 103	0 – 11	Continuous and rapid spread under high wind conditions

### **Suppression and Preparedness Actions**

Use AMR to suppress all wildfires in accordance with management objectives for the FMU based on current conditions and fire location. An appropriate response could vary from limiting a fire to the smallest size possible to monitoring.

The priority for a quick suppression response for the Field Office is to prevent wildland fires from spreading to private land, cultural resources and improvements on BLM lands. For any type of response, minimizing cost must be considered.

The Field Office has two small fire caches one in Albuquerque, NM and one in Grants, NM.

Requirements for fire operations can be found in the Interagency Standards for Fire and Fire Aviation Operations.

See Chapter V-A for a complete summary of the preparedness organization.

The Field Office has a Fire Danger Operating Plan (Appendix B.). As part of the plan a Preparedness and Dispatch Response Matrix was developed. On the next page is a copy of the matrix.

In some cases the engine crews will have to park their engine and hike into the fire for size up. If the distance is too great aerial observation may be required.

## Preparedness and Dispatch Level Matrix

<u>STAFFING CLASS PREPAREDNESS LEVEL</u>	<u>BURNING INDEX</u>	<u>FIRE DANGER</u>	<u>MANAGEMENT ACTIONS</u>
PL -1	0 – 10 (FIL -1)	<b><u>LOW</u></b> Initiating fires low intensity with low resistance to control; fine fuels drying	<ul style="list-style-type: none"> <li>•Normal tour of duty 0800 – 1630</li> <li>•One engine dispatched initial attack response</li> <li>•Phone &amp; radio monitored by AIDC until 1630 (or longer if initial attack is extended)</li> </ul>
PL-2	11 – 21 (FIL-2)	<b><u>MODERATE</u></b> Initiating fires moderate intensity with low-moderate resistance to control; heavy fuels drying	All above plus: <ul style="list-style-type: none"> <li>•Daily Roster/staffing reports to AIDC started</li> </ul>
PL-3	22 – 42 (FIL-3)	<b><u>HIGH</u></b> Initiating fires of moderate to moderate-high intensity with potential for spotting w/winds & passive crowning possible; all fuel classes available at high end BI	All Above Plus: <ul style="list-style-type: none"> <li>•Consider increased patrols following dry lightning storms;</li> <li>•Predicted LAL between 4 – 6, bump up to LEVEL IV</li> </ul>
PL-4	43 – 50 (FIL-4)	<b><u>VERY HIGH</u></b> Fires present moderate to high intensity and high resistance to control; escapes are common at high end BI; all fuels classes available for rapid combustion; air temps high, humidities low with high winds possible; spotting & intermittent crowning likely	All Above Plus: <ul style="list-style-type: none"> <li>•Briefings for Agency Administrators as needed;</li> <li>•Advise AIDC if extended staffing hours required;</li> <li>•Consider fire restrictions; fire safety messages distributed</li> <li>•Consider canceling planned prescribed-fires and postponing project work</li> </ul>
PL-5	51 + (FIL-5+)	<b><u>EXTREME</u></b> High to extreme intensities with crowning, short-long range spotting common; project fires likely under high wind conditions	All Above Plus: <ul style="list-style-type: none"> <li>•Consider: ordered-standby/cancel, annual leave, etc.</li> <li>•Consider daily Briefings for AA and press releases issued regularly</li> <li>•Review AA Briefing package</li> </ul>

The Preparedness and Dispatch Level Matrix is based on the National Fire Danger Rating System (NFDRS) Weather Stations El Malpais Lava Flow 290705 and Cuba 290705 data 1990 – 2003. Analysis used NFDRS Fuel Model C, Slope class 1 (0-25%), perennial herbs and climate class of 1 (semi-arid).

## **Prevention**

### **a. Annual Prevention Program**

Annual fire prevention activities include participation in the City of Grants, Fair/Parade, the New Mexico State fair, forestry camps, school programs and distribution of fire prevention materials from public areas and offices.

Prevention efforts will continue to increase into the future. The Field Office has the potential to participate in a wide variety of fire prevention activities due to the proximity of a large metro area and the numerous small communities that surround the office.

With the major emphasis on the Wildland Urban Interface the office will be involved in implementing Firewise Councils and partnerships, firewise evaluation and risk planning and assessments for the communities of Candy Kitchen, Pueblo de Cochiti, Wildhorse, Zuni Mountain, Regina and Albuquerque.

### **b. Special orders and closures**

The Field Office manager or delegated acting's have authority to issue restrictions and closures. Fire restrictions and closures are normally put into place after conferring with other agencies within Albuquerque Zone. Generally, restrictions are instituted during times of high fire danger, occurrence or both, and in time of drawdown of fire personnel due to high fire activity in the Geographic Area.

### **c. Fire Training**

Agency administrators will ensure that their employees are trained, certified and made available to participate in the wildland fire program locally, regionally, and nationally as the situation demands. Employees with operational, administrative, or other skills will support the wildland fire program as necessary. Agency administrators are responsible and will be held accountable for making employees available.

### **d. Detection**

Detection of fires within the Rio Puerco Field Office is generally dependent upon reports from other agencies lookouts, Field Office employees and the public. Post-high lightning activity patrols in high probability areas within the Field Office are routinely conducted on the ground, with some fire detection flights at

dry times of the year. Interagency cooperation through the zones provides aerial detection coverage by coordinating flights for all the agencies. Each agency within the zone contributes to their fair share of the cost of detection flights.

**e. Fire Weather and fire danger**

The Field Office has two permanent Remote Automatic Weather Stations (RAWS) that are used for NFDRS. The office also has two Portable Micro-RAWS that are used for prescribed fire projects. The Field Office Fire Danger Operating plan can be found in Appendix B.

**f. Aviation Management**

The Fire Management Officer (FMO) has been designated as the Unit Aviation Manager. All flight involving Field Office employees need to be coordinated through the FMO. Local vendors are available and are ordered through NM-ABC.

The unit aviation plan can be found in Appendix C.

**g. Initial Attack**

All fires within the Field Office will be managed with suppression actions consistent with preplanned dispatch protocols in conformance with resource management objectives identified in this plan. Tactics and strategies will be based on the current and predicted weather and fire behavior. Objectives and constraints will be input into WILDCAD and used to aid in the FMP implementation. Firefighter and public safety is always the first priority, Use the following information for determining initial attack priorities.

The highest priority FMU's within the Field Office for initial attack are ranked as:

- 1) Tent Rocks
- 2) Sandia
- 3) Candy Kitchen
- 4) North Malpais
- 5) Grass/Shrub
- 6) Mesa Chivato
- 7) Wilderness/WSA
- 8) West Malpais

The operational roles of the BLM in the wildland/urban interface are wildland firefighting, hazardous fuels reduction, cooperative prevention and education, and technical assistance. Structural fire suppression is the responsibility of tribal, State, or local governments, as described in the Interagency Standards for Fire and Fire Aviation Operations.

As fire complexity increases, additional staffing will be requested as appropriate and consistent with incident complexity.

Initial attack dispatch and fire reporting procedures are located in the NM-ABC Annual Operating Plan in Appendix D.

**f. Extended Attack**

Extended attack positions that are available within NM-ABC such as Incident Commander Type III (ICT3), Task Force Leader (TFLD), Strike Team Leader Crews (STCR) and other positions are reported to NM-ABC daily. These resources can be ordered as needed by the initial attack Incident Commander.

Direction for extended attack operations can be found in the Interagency Standards for Fire and Fire Aviation Operations.

**IV. - B. Wildland Fire for Resource Benefit**

The West Malpais FMU, the North Malpais FMU and the Chain of Craters WSA are approved for wildland fire for resource benefit as part of the Joint Fire Management Plan and Environmental Assessment with the El Malpais National Monument that was completed in 2001. Other FMU's to consider wildland fire for resource benefit include; Mesa Chivato, Scattered Grass / Shrub Lands, and the Wilderness and Wilderness Study Area FMU's

See the 2010 Interagency Standards for Fire and Fire Aviation Operations, Chapter 9 for operational details for wildland fire response.

**IV. – C. Prescribed Fire**

Since the advent of the National Fire Plan in 2001 prescribed fire planning has increased each year. Drought conditions, Planning Levels 4 and 5 and wildfire activity curtailed planned projects in 2002, 2004, 2005, and 2006. Focus has been treating FRCC 2 and 3 lands.

Acres treated by prescribed fire:

2001	1592
2002	1137
2003	4251
2004	3,815
2005	1,398
2006	1,757
2007	1,510
2008	1246
2009	4,175
2010	4,633 (Planned)

All burns were on FRCC 2 lands with about 70 percent moving to FRCC 1 after the burn.

Burning within the Field Office takes place year round. The majority of pile burning takes place during the winter and late spring. Burn season starts before green-up in the late winter for burns taking place in the sagebrush communities. Burning can continue into the late spring in the Ponderosa then start again before the monsoon season in early July in the Pinyon fuel type. These fuels have the tightest windows for opportunity as they require the warmest and driest parameters to meet objectives. Hand pile burning can take place during the monsoon season then limited under-burning in Ponderosa can start in the fall before snowfall. Hand pile burning can resume again during the winter months.

The fire management staff initiates most of the prescribed fire projects. Resource specialist input is developed through the weekly Environmental Analysis Team meeting where the core team for the office meets to discuss up-coming projects.

Prioritization of projects is determined by the following:

- 1) Fuels Reduction around communities with completed Community Wildfire Protection Plans (CWPP's).
- 2) Fuels Reduction around a federally listed community at risk from wildfire (Candy Kitchen and Pueblo de Cochiti)
- 3) Fuels reduction around communities of interest (Oso Ridge, Wildhorse, Regina and Zuni Mountains etc.)
- 4) FRCC 3 lands
- 5) FRCC 2 lands
- 6) Maintenance of FRCC 1 lands

Collaboration is on going with adjoining landowners such as the Ramah Navajo Chapter, Pueblo of Zuni, State of New Mexico Division of Forestry, TheCandy Kitchen Rural Fire Department on projects in the Candy Kitchen area, Pueblo de Cochiti for projects around Tent Rocks. Collaboration is on going with the Wildhorse landowners association for projects around Wildhorse and the National Park Service for projects in the El Malpais area.

The office also conducts wildlife enhancement projects with contributed funds from the SIKES Act. Since 2001 the office has received about \$40,000 per year.

The office has five large programmatic Environmental Assessments that cover fuels management activities:

North Sagebrush (2001) - Approximately 176,000 of sagebrush communities in the Upper Rio Puerco Watershed prescribed fire only.

El Malpais NCA (2001) – 226,000 acres for prescribed fire and mechanical fuels treatments

IC Grant (2002) – 22,000 acres for prescribed fire and mechanical fuels treatment.

Candy Kitchen HFRA (2005) – 10,000 acres for prescribed fire and mechanical fuels treatment.

Wild Horse HFRA (2007) – 25,000 acres for prescribed fire and mechanical fuels treatment.

South Cuba HFRA (2006) – 2,500 acres of prescribed fire and mechanical fuels treatment.

Going into the future, most projects outside of the large programmatic EA's will qualify under the Healthy Forest Initiative Categorical Exclusions (2003). Five of these have been completed for projects in Tent Rocks, Candy Kitchen, Naranjo, Zuni Mt, and the Picnic Area. All of which are Wildland Urban Interface projects.

Cooperative agreements between the grazing permittee(s) and the BLM are handled by a collaborative effort between the Fuels Management Specialist and the Range Conservationist responsible for the allotment where the project is planned.

The smoke management permit requirements or the proximity to public areas dictates the need for news releases. This is accessed on a project-by-project basis.

Smoke Management Permits are request at least 2 weeks prior to burning but the goal for the office is to request the permit as soon as the burn plan is completed.

Positions needed for the prescribed fire workload are 3 qualified Type 2 Burn Bosses, 2 qualified Firing Bosses and 3 holding specialists.

Prescribed burn bosses are required to evaluate prescribed burns each day after completion of burning to assess results and effectiveness of the burn as implemented. These evaluations are maintained as part of the project file. The fuels specialist per the field office-monitoring plan accomplishes long term effectiveness monitoring. (Appendix F.)

Maps displaying prescribed fire treatments since 2001 are maintained in Geographical Information System (GIS) by the state office fire GIS staff.

## **Smoke Management/ Air Quality**

There are no Class I airsheds or non-attainment areas within the Field Office. However, the San Pedro Parks Wilderness in Rio Arriba County is adjacent to the northeast corner of the Field Office. The cumulative effects of power plants and oil and gas development in the northwestern area of New Mexico coupled with prescribed burning have the potential to create air quality degradation within the San Pedro Parks.

The Field Office complies with the New Mexico Environmental Department (NMED) Air Quality Bureaus Smoke Management Program and regulations (20.2.65 NMAC).

Burning under good or better ventilation is allowed without a waiver from the NMED/Air Quality Bureau. Burning under fair or poor ventilation conditions can be implemented under the State Wide Waiver for broadcast and pile burns as long as all conditions of the waiver are met. The ventilation index requirement has a potential to affect pile-burning opportunities during the winter months due to poor ventilation.

Emission reduction techniques are used whenever possible to minimize smoke production. These techniques include firewood removal, using slash for erosion control, leaving unburned pockets of fuel, and burning cured and dry slash.

### **D. Non-Fire Fuel Applications**

Approximately six mechanical hand thinning projects totaling between 1000 – 1500 acres are planned each year across the field office.

Since 2003, the Field Office has contracted out five mechanical thinning fuels reduction projects for 868 acres. The National Fuels Management IDIQ contract was used. Currently this contract does not have any New Mexico contractors on it.

Since 2007 the Field Office has completed fuels reduction projects under Stewardship contracts for a total of 362 acres.

In fiscal year 2003, and 2005 the Field Office entered into Assistance Agreements for mechanical fuels management work with the Ramah Navajo Chapter, Pueblo de Cochiti, Zuni, and the Village of Cuba. Through these Assistance Agreements the Rio Puerco Field Office has accomplished 1,522 acres of mechanical thinning since FY 2003.

Since the advent of the National Fire Plan the mechanical fuels reduction workload has increased dramatically:

2001	222	2008	1,095
2002	472	2009	742
2003	574	2010	1,012 (planned)
2004	1,063		
2005	653		
2006	812		
2007	1,111		

Approximately 5,044 acres of FRCC 3 were moved to FRCC 2. Approximately 1700 acres of FRCC 2 were moved to FRCC 1.

Due to the remoteness of most of the projects and the issues surrounding the National Conservation Area and the IC Grant projects within the Wilderness Study Area only 1,698 acres of firewood were removed from these projects.

The Congressional Act that created the El Malpais National Conservation Area prohibits any commercial activities so large scale firewood removal has been limited in the NCA where a majority of the mechanical treatments takes place. Collaboration with local non-profits in the Grants area has lead to free firewood days where firewood is given away free to charitable organizations. After the free firewood, days have been exhausted limited amounts of personal firewood permits are sold.

The fire management organization for the Field Office is responsible for the Field Office firewood program The Field Office has been approved to hire a Term Forester so it is anticipated that the fire management organization will work closely with the Forester in planning and implementation of the firewood program.

### **Fuel Treatment Summary RMP 2004 Update**

A goal of treating 23,000 acres by prescribed fire and non-fire treatments annually for the Field Office was developed in the RMP Amendment in 2004. The acreage figure was based on a full funding and staffing scenario. It is expected that this Amendment to the RMP that specifically covered Fire and Fuels Management would be in place for 20 years until updated again. In the description of each FMU the acres treated is based on this best case scenario from the RMP update. These numbers are based on an annual target. Some years no acres may be treated in a given FMU but in other years more acres may be treated but over time it should average out. At any time further analysis such as the fuels module in the Fire Program Analysis (FPA) or other models such as Landfire are developed fuel treatment priorities by FMU may be

modified.

Once the burn acre target has been met, from either planned or unplanned ignitions, a review of objectives and strategies will be initiated to develop new management criteria on all wildland fires.

Proposed Annual Fuels Treatments by FMU:

	<b>Prescribed Fire</b>	<b>Mechanical</b>	<b>Chemical</b>
North Malpais	7,829	4,000	4,000
West Malpais	2,000	0	0
Wilderness/WSA	2,000	0	0
Tent Rocks	35	30	0
Mesa Chivato	2,000	250	0
Sandia	0	17	0
Grass/Shrub	2,956	500	1,428
Candy Kitchen	<u>150</u>	<u>500</u>	<u>0</u>
	16,970	5,297	5,428

**E. Emergency Rehabilitation and Restoration**

The Field Office has had one fire rehabilitation project over the last 20 years. The Field Office does not have a Normal Fire Rehabilitation Plan. If emergency rehabilitation or restoration is needed, an interdisciplinary-burned area rehabilitation team will be formed, and plans will be developed at that time. Emergency fire rehabilitation based on FMU requirements should be focused on:

- Slopes of 40% where surface erosion from water is likely
- Temporary fences should be considered in areas where grazing pressure may inhibit re-establishment of native plants following wildfire.
- Re-seeding of natural vegetation to restore plant communities.
- Road obliteration or restoration.

**F. Community Protection/Community Assistance**

There are two communities Candy Kitchen and Pueblo de Cochiti within the Field Office that are listed on the Federal Register as communities at risk from wildfire and 5 communities of interest within the Field Office that are at risk from wildfire.

Communities of Interest include Regina, Zuni Mountains, Oso Ridge, Wild Horse, Placitas and numerous unnamed subdivisions scattered through out the field office.

The Rio Puerco Field Office and the Candy Kitchen and Wild Horse communities have completed Community Wildfire Protection Plans. In FY2006 the Field Office completed an HFRA Environmental Analysis on 10,000 acres of BLM land surrounding the community of Candy Kitchen. In FY2007 the Field Office completed a Healthy Forest Restoration Act (HFRA) Environmental Analysis on 25,000 acres on BLM lands surrounding the Wild Horse Community. HFRA fuel reduction projects have been implemented in the Candy Kitchen area and are planned in FY2008 and out years for both Candy Kitchen and Wild Horse Communities.

Cibola County has completed a CWPP and includes Zuni Mountains and Oso Ridge. In 2005 the BLM completed a Healthy Forest Initiative (HFI) Categorical Exclusion on 936 acres of BLM land south of the Zuni Mt area. HFI fuel reduction projects have been implemented in FY2006 and 2007 in the Zuni Mt area and are planned for out years. HFI fuel reduction projects are planned south of Oso Ridge but fully collaborative planning efforts have not begun.-

Sandoval County is interested in a County Wide CWPP which will include Pueblo de Cochiti, Regina, and Placitas. Fuel reduction projects are planned for around Pueblo de Cochiti but fully collaborative planning efforts have not begun.-

The Village of Cuba has completed a CWPP and ~~will~~ includes Regina, NM. The Rio Puerco Field Office has completed an HFRA Environmental Assessment on BLM lands south of the village of Cuba and has implemented and planned HFRA fuel reduction projects.

Following is a list of all of the communities prioritized for accomplishment of Community Risk Action Plans:

	Planned Completion
1) Pueblo de Cochiti	<b>Unknown</b>
2) Placitas	FY09
3) Wild Horse	Completed FY06
4) Candy Kitchen	Completed FY06
5) Zuni Mountains	Completed Cibola County CWPP (FY06)
6) Oso Ridge	Completed Cibola County CWPP (FY06)
7) Regina	Completed Village of Cuba CWPP (FY07)

### **Rural Fire Assistance Program**

The Field Office has an active Rural Fire Assistance program. The Fire Management Officer engages local rural fire chiefs on the benefits of the program and provides assistance on grant preparation. To coordinate the distribution of Rural Fire

Assistance Grants an annual meeting is held with representatives from the New Mexico State Division of Forestry and the National Park Service. Since 2001 rural fire assistance grants have been awarded to the following communities:

<u>Community</u>	<u>Year</u>	<u>Amount</u>	<u>For</u>
Pueblo of Acoma	2001	\$20,000	PPE, Hoses, foam, shovels etc.
Tome-Adelino	2001	\$3,776	PPE, equipment
Town of Cochiti Lake	2001	\$2,000	PPE
City of Grants	2001	\$13,500	Slip-on unit
Cubero	2001	\$7,600	equipment
Regina	2002	\$18,000	PPE, equipment
Wildhorse	2002	\$20,000	Fire truck, equipment
Cubero	2003	\$3,000	Slip-on
Wildhorse	2003	\$13,690	Equipment
<del>Town of Cochiti Lake</del>	2003	\$5,000	CAFS Unit
Tome-Adelino	2003	\$3,000	PPE and equipment
City of Grants	2003	\$11,000	Equipment
Wildhorse	2004	\$15,300	Fire truck, equipment
Candy Kitchen	2004	\$7,000	PPE and equipment
City of Grants	2004	\$15,300	PPE and equipment
La Madera	2004	\$17,250	Portable tanks, pumps
La Cueva	2004	\$3,400	Training materials
Peublo of Laguna	2004	\$10,000	Equipment
Regina	2004	\$6,000	Equipment
Wild Horse	2005	\$18,000	Training Equipment
Laguna Pueblo	2005	\$7,000	Training Equipment
Tome-Adelino	2005	\$5,500	Training Equipment
Ft Wingate	2005	\$20,000	Equipment
Cochiti Lake	2006	\$10,000	Training, PPE
Wild Horse	2006	\$6,000	PPE
Algodones	2006	\$10,000	PPE
La Madera	2006	\$4,000	PPE
Placitas	2006	\$5,000	PPE
Ponderosa	2006	\$5,000	PPE
Regina	2006	\$4,000	PPE
Sandoval County	2006	\$5,000	PPE
Torreón	2006	\$5,000	PPE
Total		\$299,316	

## V. – Budget and Organization

### A. Budget and Organization

The table below is the organization and equipment required to meet 100 percent of program objectives.

Resource	Current Staffing	Desired Staffing	Normal Activation	Sub Activity	Cost
Fire Management Officer	1	1	Yearly	LF10000PP	\$108,000
Assistant Fire Management Officer	1	0	Yearly	LF10000PP	\$91,500
Fire Operations Spec.	1	1	Yearly	LF10000PP LF1010/1020	\$77,000
Dist. Fuels Specialist	1	1	Yearly	LF1010/1020	\$91,500
Rio Puerco Fuels Spec	1	1	Yearly	LF1010/1020	\$77,000
Fire Dispatcher	1	1	Yearly	LF10000PP	\$59,000
Fuels Crew	5	10	Mar-Oct	2823/2824	\$120,000
Fuels Module Leader	1	1	Yearly	2823/2824	\$42,500
Dist. Fire Program Asst.	0	1	Mar-Oct	2810/2823/2824	\$42,500
Type 4 Engine with 5 includes all cost	5	5	Apr – Sept	2810/2823/2824	\$85,000
Type 6 Engine with 5 includes all cost	5	5	Apr - Sept	2810/2823/2824	\$80,000
Prevention Supplies				2810	\$5,000
Detection				2810	\$5,000
NM-ABC Support				2810	\$10,000
Fire cache replacement				2810	\$7,500
Medical Testing				2810	\$5,000
Training				2810	\$10,000
Vehicle FMO				2810	\$23,500
Vehicle AFMO				2810	\$23,500
<b>Total</b>					<b>\$963,500</b>
Pro-rate for administrative support					\$144,525

## **B. Assistance Agreements and Intra/Interagency Agreements**

The following is a list of agreements that pertain to fire management activities for the field office:

Albuquerque Zone Operations Plan – this agreement covers the operations of the NM-ABC and initial attack responsibilities for the field office.

Albuquerque Zone Mobilization Guide – this guide covers the operational procedures for initial attack and other incident support activities for the field office.

## **C. Equipment Rental Agreements**

The Field Office uses emergency equipment rental agreements (EERA's) prepared by the Cibola National Forest. Copies are stored in NM-ABC, and the Administrative Services Office located in the Rio Puerco Field Office.

## **VI. Monitoring and Evaluation**

A systematic approach for monitoring prescribed fire and non-fire treatments has been developed in the Field Office Fuels treatment Monitoring Guide found in Appendix F. protocols have been established in this guide for a systematic monitoring methodology for all fuels treatment projects in the field office.

Monitoring and evaluating of the fire program will occur to determine if the program and associated projects are meeting the various resource plans directions and to determine if the costs of implementing the fire program and management effects are occurring as predicted.

Monitoring related to wildland fire or fire related projects falls under the general monitoring and evaluation guidelines outlined in the Resource Management Plan. Site specific monitoring needs are identified in analysis for individual fire related projects.

## **Glossary**

**AIR QUALITY:** The composition of air with respect to quantities of pollution therein; used most frequently in connection with "standards" of maximum acceptable pollutant concentrations. Used instead of "air pollution" when referring to programs.

**CONDITION CLASS:** Based on coarse scale national data, Fire Regime Condition Classes measure general wildfire risk as follows:

**Condition Class 1:** Fire regimes in this Fire Condition Class are generally within historical ranges. Vegetation composition and structures are intact. Thus, the risk of losing key ecosystem components from the occurrence of fire remains relatively low.

**Condition Class 2:** Fire regimes on these lands have been moderately altered from their historical range by either increased or decreased fire frequency.

**Condition Class 3:** Fire regimes on these lands have been significantly altered from their historical return interval. The risk of losing key ecosystem components from fire is high. Fire frequencies have departed from historical ranges by multiple return intervals. Vegetation composition, structure and diversity have been significantly altered. Consequently, these lands have the greatest risk of ecological collapse.

**CULTURAL RESOURCES:** Remains of human activity, occupation, or endeavor, reflected in districts, sites, structures, buildings, objects, artifacts, ruins, works of art, architecture, and natural features that were important in past human events. Cultural resources consist of 1) physical remains, 2) areas where significant human events occurred, even though evidence of the events no longer remains, and 3) the environment immediately surrounding the actual resource.

**DESIRED PLANT COMMUNITY:** The kind, amount, and proportion of vegetation which best meets land use objectives for a particular site, and which must be within the site's capability to produce through management or a combination of management and land treatment.

**ECOSYSTEM:** An interacting system of organisms considered together with their environment.

**ENVIRONMENTAL ASSESSMENT (EA):** A systematic environmental analysis of a BLM activity used to determine whether the activity would have a significant impact on the quality of the environment; if so, an environmental impact statement would be required.

**ENVIRONMENT:** The complex surroundings of an item or area of interest, such as air, water, natural resources, and their physical conditions (temperature, humidity).

**EMERGENCY STABILIZATION AND REHABILITATION:** A policy and program designed to mitigate the adverse effects of fire on the soil-vegetation resource in a cost-effective and expeditious manner and to minimize the possibility of wildland fire recurrence or invasion of

weeds.

**FIRE MANAGEMENT:** Activities required for the protection of burnable wildland values from fire and the use of prescribed or wildland fire to meet land management objectives.

**FIRE INTENSITY LEVEL (FIL):** A measure of intensity measured by the average flame length

FIL	Flame Length
1	0-2 feet
2	2-4 feet
3	4-6 feet
4	6-8 feet
5	8-12 feet

**FUEL:** All the dead and living material that will burn. This includes grasses, dead branches and pine needles on the ground, as well as standing live and dead trees. Also included are minerals near the surface, such as coal, that will burn during a fire and human-built structures.

**FUELBREAK:** A wide strip with a low amount of fuel, usually grass, in a brush or wooded area to provide soil cover and serve as a line of fire defense.

**FUEL TYPE:** An identifiable association of fuel elements of distinctive species, form, size, arrangement, or other characteristics that will cause a predictable rate of spread or resistance to control under specified weather conditions.

**HAZARDOUS FUELS REDUCTION:** The removal of dangerously high amounts of fuels in areas where the negative impacts of wildland fire are greatest.

**LONG-TERM:** Ten to twenty years

**MITIGATION MEASURES:** Means taken to avoid, compensate for, rectify, or reduce the potential adverse impacts of an action.

**MONITORING:** The orderly collection, analysis, and interpretation of resource data to evaluate progress toward meeting management objectives.

**MOSAIC:** The intermingling of plant communities and their successional stages in such a manner as to give the impression of an interwoven design.

**PRESCRIBED BURNING:** The planned application of fire to wildland fuels in their natural or modified state under specific conditions of fuels, weather, and other variables, to allow the fire to remain in a predetermined area and to achieve site-specific fire and resource management objectives.

**REHABILITATION:** Short term actions taken following fire to stabilize soils and encourage rapid establishment of vegetative cover.

**RESOURCE MANAGEMENT PLAN:** A multiple-use plan that provides management direction for all Bureau of Land Management resources within a Field Office. It is often supplemented by more detailed, site-specific management plans for a particular land use activity, such as livestock grazing.

**RESTORATION:** A long-term landscape-based approach to changing the ecological health of the rangelands which requires implementation of a set of actions that promotes plant community diversity and structure to encourage communities to be more resilient to future disturbance and invasive species.

**RIPARIAN:** The banks and adjacent areas of water bodies, watercourses, seeps, and springs. These waters provide soil moisture sufficiently in excess of that otherwise available locally to provide a moister habitat than that of contiguous uplands.

**SENSITIVE SPECIES:** A list of animal and plant species that were designated by the BLM State Director in cooperation with the New Mexico Game and Fish Department. It is BLM policy to give these species the same protection as federal candidate species in BLM Manual 6840.06.

**SUPPRESSION:** All the work of extinguishing or confining a fire beginning with its discovery.

**THREATENED SPECIES:** Plant or animal species that are not in danger of extinction but are likely to become so within the foreseeable future throughout all or a significant portion of their range.

**UNDERBURN:** A fire that consumes surface fuels but not trees and shrubs.

**WILDERNESS:** An area established by the Federal Government and administered either by the Forest Service, USDA or National Park Service, Sigh & Wildlife Service, or Bureau of Land Management, DOI, in order to conserve its primeval character and influence for public enjoyment, under primitive conditions, in perpetuity.

**WILDERNESS STUDY AREAS:** Those lands that have been inventoried and found to have wilderness characteristics as described in section 603(a) of FLPMA and section 2(c) of the Wilderness Act of 1964.

**WILDFIRE:** A fire occurring on wildland that is not meeting management objectives and thus requires a suppression response.

**WILDLAND:** An area in which development is essentially non-existent, except for roads, railroads, power lines, and similar transportation facilities. Structures, if any, are widely scattered.

**WILDLAND FIRE:** Any fire occurring on the wildlands, regardless of ignition source, damages,

or benefits.