

Socorro County

COMMUNITY WILDFIRE PROTECTION PLAN

Sponsored by:

Socorro County Commission
Socorro County Fire Marshal's Office
New Mexico State Forestry — Socorro Office
Socorro County Fire Chiefs' Association

Participating Municipal and Volunteer Fire Departments

Socorro City Fire Department
Abeytas Volunteer Fire Department
Hop Canyon Volunteer Fire Rescue
La Joya Volunteer Fire Department
Magdalena Village Fire Department
Midway Hose Company & Rescue
San Antonio Volunteer Fire Department
Veguita Volunteer Fire Department

Additional Support from:

BLM — Socorro Office
USFWS — Bosque del Apache Refuge
USFWS — Sevilleta Refuge
USFS — Cibola National Forest
Socorro Soil and Water Conservation District
Socorro County Local Emergency Planning Committee
Socorro County Emergency Management Officer

Funded by:

New Mexico Association of Counties
in partnership with
Bureau of Land Management Socorro Office

Contact:

Fred Hollis / Doug Boykin
Socorro, NM

June 13, 2006



TABLE OF CONTENTS

I.	Introduction	4
II.	The Problems	
	Community Description	5
	Fire History	6
	Current Fire Hazards and Problems	8
	Current Fire Protection Measures	10
III.	Prevention Planning	
	Strategies	11
	Current Activities and Programs	
	1. Hazard Reduction Programs	11
	2. Economic Development	12
	3. Forest Restoration	13
	4. Landowner Assistance Program	13
	5. Defensible Space Workshops	14
	6. FIREWISE Communities	15
	Recommended Projects and Programs	
	1. Alert/Warning System	16
	2. Community Outreach Program	16
	3. 20 Year Fuels Reduction Strategy	16
	4. Codes Revisions	16
	5. Annual Plan Review and Revisions	16
	6. LEPC Incorporation	17
	7. Development of an Exercise Program	17
	8. Creation of a County Fire Marshal's Office	17
	9. Recruitment and Development Fire Departments	17
	10. Communication Systems	17
	11. Open an evacuation route, Hop Canyon to Patterson Canyon:	17
IV	Response Planning	
	Preface	18
	Purpose	18
	Situation and Assumptions	18
	Concept of Operations	19
	Organization and Assignment of Responsibilities	20
	Authorities and References	21
V	Appendices	
	1. WUI Communities Descriptions	1-3
	2. EOP Evacuation Plan	2-1
	3. EOP Unified Fire Command Protocols	3-1
	4. Critical Communications and Watersheds	4-1
	5. Fire Departments Training and Equipment	5-1
	6. Water Sources	6-1
	7. Infrastructure Protection	7-1

**SOCORRO COUNTY
COMMUNITY WILDFIRE PROTECTION PLAN****I. INTRODUCTION**

This document — hereafter known as “The Plan” — is intended to summarize plans and activities targeted at reducing the risk of a catastrophic Wildland Urban Interface (WUI) fire event in Socorro County, and provide coordination and guidance to first responders and their respective jurisdictions in the event of wildfire. The successful usage of this planning document will ensure that the health, safety, and welfare of our citizens remain secure from the threat of wildfire in the urban interface. The Plan will improve planning tools for city and county alike, which will result in better building and development codes, as they relate to the urban interface growth. The Plan will also aid economic development of forest products by ensuring a sustainable forest by-product from fuels reduction efforts.

The goals of The Plan are to:

- Prevent loss of life and health;
- Prevent destruction of property;
- Preserve and restore natural and beneficial function of our forests and watersheds;
- Control future increases in fire damage;
- Educate citizens and local businesses on the Plan’s content;
- Ensure the Plan and its goals are consistent with all stakeholders plans and expectations.

Objectives to be accomplished by The Plan include:

- Identify, inventory and prioritize the risks associated with a WUI wildfire event;
- Implement projects and programs intended to reduce the above risks;
- Exercise (testing) and utilize the Plan with all local jurisdictions and first responder agencies.

Planning priorities of The Plan, in order of importance, are:

- Protect human life and health;
- Protect critical community infrastructure;
- Protect private property;
- Protect natural resources.

The Socorro County Local Emergency Planning Committee, the USFS Magdalena District, the Bureau of Land Management Socorro Office, FWS Bosque del Apache Refuge, FWS Sevilleta Refuge, local Fire Districts, Socorro Soil and Water Conservation District, and the New Mexico State Forestry Socorro office have been working together over the years in an effort to better prepare for and respond to catastrophic wildfire in Socorro County. The information contained in this planning document reflects these organizations’ focus and dedication to five strategies of the National Fire Plan:

- 1) Community Fire Planning;
- 2) Wildland Urban Interface Fuel Treatment;
- 3) Economic Development;
- 4) Forest Restoration
- 5) Community Education and Outreach.

Community Description

II. THE PROBLEMS

“Good grass, soil, and water” were the natural resources that first drew the attention of Spaniards to Socorro in the late 18th century.

With increased residential growth in or near the forest boundary and the bosque areas (Wildland Urban Interface), risk from catastrophic wildfire has increased dramatically. Private inholdings are being developed with multiple structures and limited access. This growth has also increased the traffic on our roadways, resulting in safety concerns both for emergency response and urban interface fire evacuations.

The area receives an abnormally high number of lightning storms and ground strikes, due mainly to the topographical change from desert to rolling mountains; and receives only 6 inches of rainfall, annually in lower elevations, to 30 inches in the higher elevations above 10,000 feet., annually. The vegetation in the county ranges from desert grasslands in the lower elevation plains and foothills, riparian/bosque vegetation along the Rio Grande and other major drainages, oak/piñon-juniper savannah in the lower mid elevations, ponderosa pine stringers intermixed with piñon/juniper woodlands in the upper foothills, pure ponderosa pine stands on upper elevation slopes and mesa tops, and mixed conifer/alpine vegetation near the tops of the major mountain ranges. The vegetation surrounding the City and the vast 6634 square miles making up Socorro County consists of transitions from desert grasslands in the south to bosque river areas, to oak/piñon-juniper savannah, to ponderosa pine stringers intermixed with piñon/juniper woodlands, to pure ponderosa pine stands in the west. This ponderosa pine ecosystem is a part of the largest continuous area of ponderosa pine in the world, and is referred to as a short-interval, fire-adapted ecosystem. The frequent fires that helped sustain this ecosystem were low intensity, benign surface fires which kept stands open and park-like. However, with our nation’s intensive fire suppression efforts these past hundred years, these ponderosa and piñon/juniper ecosystems have grown into overly dense stands and have produced many unhealthy characteristics including:

- Accumulation of fuels with subsequent increases in fire severity and size;
- Decreases in soil moisture and nutrient availability;
- Decreases in growth and diversity of both herbaceous and woody plants;
- Decreases in spring and stream flow.

These areas are also taking the heaviest brunt of semi-urban construction, due to the aesthetically pleasing surroundings and advantageous climate.

Socorro County’s natural resources have played a significant role in the makeup of its communities’ cultures and the development of mining and ranching that have sustained its local economy. The economic and environmental issues facing Socorro County go beyond current concerns with county budget shortfalls. They point to the need for a new commitment to planning on the part of local governments. How to deepen the process of economic diversification in the area has been an issue since the mid 19th century and will continue to need to be addressed and studied.

One of the purposes of this Community Wildfire Protection Plan is to ensure the above economic conditions and issues are addressed.

Part One of The Plan describe *prevention measures* and recommends strategies and projects that will reduce the risk of uncontrollable wildfire; restore our watershed functions and conditions; and improve “socioeconomic” well being by supporting local economic development that utilizes the by-products of fuels treatments and watershed restoration. Part Two addresses the *coordination of resources in response* to a catastrophic wildfire within Socorro County.

Fire History in the Cibola National Forest

Prior to the late 1800's, frequent low-intensity surface fires helped to maintain this ponderosa pine and Gambel oak forest. Early records from the 1800's describe this forest as more open, with little downed woody material. Ground cover was a continuous grass savanna, with the grasses becoming dormant during the dry periods of May and June. The accumulated leaf biomass of several fire-free years provided fine fuels to carry low-intensity ground fires with little damage to the parent plant. These grasses recovered quickly with the arrival of moisture from the tropics during the summer monsoon period.

Tree ring analysis of burn scars has been used to estimate fire frequencies within the stands of ponderosa pine in the Southwest. It is generally accepted that fire occurred at 2 to 12 year intervals. Stand-replacement crown fires were considered rare and were typically confined to small thickets when they occurred. Because of these frequent fire events, it is believed that the species of plants and animals within this vegetation type have evolved with fire.

Fire History of BLM land

Most fires on BLM lands in Socorro County occur during the late spring and early summer, and are usually less than 10 acres in size. Grazing by wildlife and livestock reduces the fine fuel loading, which causes most fires to not burn well. In those years following a good monsoon season, grass production is higher which usually results in more and larger fires on BLM lands, with lightning as the major cause.

Prescribed fire makes up the majority of the acres that are burned on BLM lands in Socorro County. Most of the burning is done to maintain and/or restore grasslands, piñon / juniper stands and ponderosa pine stands. Historically, the Socorro Field Office has burned between 1,000 and 5,000 acres each year (this includes acres burned in Catron County).



Fire History of Bosque del Apache NWR

In 1936, the Federal Government purchased the land which had once been Antonio Sandoval's ranch, in order to establish a refuge for protecting wildlife which follow the Rio Grande in their wintering migrations, from Canada and the northern United States south to Mexico or beyond. In 1939 President Roosevelt created the 57,191-acre Bosque del Apache NWR in the area situated between the crest of the Chupadera range to the west and San Pasqual Mountain to the east. While the Congressional mandate for the Refuge focuses more on the wetlands, most of the Refuge consists of upland desert. It currently includes three Wilderness Areas, the Chupadera, the Indian Wells, and the Little San Pasqual, for a total of 30,850 acres, which are minimally managed. There are also five Research Natural Areas totaling 18,500 acres.

In 1939, a large CCC crew and heavy equipment were brought in and set to work constructing ditches, dikes, and ponds in the riparian flood plain along the Rio Grande for wetland impoundments. They also built the administrative compound, and the Refuge prospered.

Unfortunately, only a small crew was left behind to manage all that was created. Budgets and management levels and styles fluctuated, and over time the Refuge fell into disrepair. Wetlands were actively managed off and on for the next 40 years.

In 1987 wetland renovation began, driven by Moist Soil Management techniques. The locations of inflows and outflows which bring water in and out of the fields (which are seasonally inundated with water to create wetlands primarily for dabbling ducks) were re-engineered to facilitate flow over the land from the intakes on the north and east sides of the fields to the outlets on the south and west sides. The lay of the land is higher to the east and north; therefore water enters the Refuge at the north through several water delivery canals running along higher ground to the east. After passing through a series of ditches and wetlands, it ends up in the Interior Drain, which is about four feet lower than the wetlands.

The Interior Drain runs along the west side of the wetlands flowing south and eventually back to the Rio Grande. More dikes were constructed so that water depths could be controlled on sloping terrain, and canals were reconstructed so water flow could be controlled, and a simple outflow gate was designed which made it easier to control water depth in the wetlands.

Much of the land managed for wetlands, as well as areas of the natural bosque, is being reclaimed from salt cedar brush lands. Salt cedar (tamarisk) is not native to the southwest. It robs essential moisture from the indigenous vegetation and responds favorably to fires that normally kill the native plants, making assertive reclamation efforts to re-introduce the native species necessary. The Refuge has been a partner in a number of habitat restoration efforts in the area, and is considered an important local resource for information on the natural environment and restoration techniques.

The Refuge hosts approximately 150,000 visitors per year with wildlife, viewing being the primary visitor use. The Festival of the Cranes each fall brings thousands of visitors to the local area.

Socorro County
Community Wildfire Protection Plan

Current Fire Hazards

The Socorro County Rural Fire District will compile information on rural communities located within the Wildland Urban acres, construction materials, roads, bridges, driveways, roads, turnarounds, water availability, and closest Interface, gathering data on vegetation fuels, terrain, slope, aspect, number of lots, estimated human density, total fire department. The data was analyzed and an Average Hazard Rating determined for each community. The table below identifies the number of communities in each hazard rating, with acreage.

Table 1. Count of WUI Communities and Average Hazard Rating

NUMBER OF WUI AREAS	AVERAGE HAZARD	ACREAGE
9	Low	95650
11	Medium	151140
14	High	126960
TOTAL ACRES		373750

NOTE: A complete compilation of WUI Community Descriptions provided by the Fire Districts in Socorro County is found in Appendix 1.

In addition, though they were not assessed as WUI Communities, the County's watersheds should be considered critical Interface areas, with a hazard rating of Extreme. A more detailed look at the watersheds can be found in Appendix 4.

Socorro County
Community Wildfire Protection Plan

Socorro WUI/ Watershed Priority matrix			Low 1-6	Medium 7-10	High 11-15			
WUI Area	Private lands and structures Yes = 1, No = 0	Population density <250 =1, 250 = 2	Fuel Types Grass = 1, PJ- Shrub = 2, PiPo = 3, Mixed Conifer = 4, Bosque = 5	Ingress, Egress Issues 1- Low, 2- Medium, 3- High	FD- Yes = 0, No = 1	Federal Interagency Cooperation Possible, yes = 1, 0 = no	NEPA complete (2) or in planning (1) on adjoining federal ground	Total Score Possible total score of 15
San Antonio	1	2	2	1	0	1	0	7
Bosquecito	1	1	5	3	0	1	0	11
San Pedro	1	1	5	3	0	1	0	11
Luis Lopez	1	1	2	1	0	1	0	6
Laborcita	1	1	2	1	0	1	0	6
San Marcial	1	1	5	3	1	1	0	12
Lemitar	1	2	2	1	0	1	0	7
San Acacia	1	1	2	2	1	1	0	8
Polvadera	1	1	2	1	0	1	0	6
Pueblito	1	1	5	2	1	1	0	11
Alamillo	1	1	2	1	1	1	0	7
Escondida	1	1	2	1	0	1	0	6
Abeytas	1	2	5	2	0	1	0	11
Sabinal	1	2	5	2	0	1	0	11
San Francisco	1	1	5	3	1	1	0	12
La Joya	1	2	5	3	0	1	0	12
Contreras	1	1	2	2	0	1	0	7
Veguita	1	2	5	2	0	1	0	11
Las Nutrias	1	2	5	2	0	1	0	11
Boys Ranch	1	1	1	1	0	1	0	5
Hop Canyon	1	2	4	3	0	1	2	13
Paterson Canyon	1	1	4	3	0	1	2	12
Water Canyon	1	1	3	3	1	1	2	12
Bingham	1	1	1	1	1	1	0	6
Socorro city	1	2	1	1	0	1	0	6
Florida	1	2	2	1	1	1	0	8
Magdalena	1	2	1	1	0	1	0	6
Riley	1	1	2	2	1	1	0	8
Mill Canyon	1	1	2	2	1	1	0	7
Sargent Canyon	1	1	4	3	1	1	1	12
Durfee Canyon	1	1	4	3	1	1	1	12
Alamo	1	2	2	1	1	1	0	8
Abbe Springs	1	1	2	2	1	1	0	8
Dusty	1	1	1	1	1	1	0	6
Claunch	1	1	2	1	1	1	0	7

Current Fire Protection Measures

In 2003 the County's *Local Emergency Planning Committee* (LEPC) was established, and City and County emergency management efforts were focused on multi-agency coordination and cooperation in their response to all emergency events. The LEPC has members from organizations and agencies that are committed to mitigating the wildfire hazard that confronts its communities, citizens and the natural resources that sustain us all.

The LEPC is working on an *All-Hazards Emergency Operation Plan*

In addition to the above described *All-Hazards Emergency Operations Plan*, The County of Socorro will developed and implemented a number of regulations and related documents concerning first response and emergency resource coordination. They include:

- Creation of a County Rural Fire Chiefs' Association
- Socorro County Rural Fire Department By-Laws
- County Fire Code ordinance
- Socorro County Multi-Agency Response Plan
- Socorro County Fire and Emergency Services JPA

NOTE: The above documents and the other comprehensive planning documents governing County building and development codes must be reviewed and revised to reflect specific wildfire prevention and response needs, concepts and strategies.



III. PREVENTION PLANNING

Strategies

The National Fire Plan's *key point components* focus on building community capacity to develop and implement citizen driven solutions in wildfire prevention planning. These solutions, in the form of prevention strategies are listed below:

- **Hazardous Fuels Reduction** in the Wildland Urban Interface (WUI): this strategy will reduce the impacts of wildland fires on communities, natural resources, and cultural resources. Past disruptions of natural fire cycles, and use of certain management practices, have resulted in wildfires of increasing intensity and severity. Treatment of hazardous fuels will help reduce the impacts of wildfires on communities and restore health to fire-adapted ecosystems.
- **Economic Development**: This strategy involves identifying; developing and expanding economic opportunities related to traditionally underutilized wood products and to expand the utilization of biomass removed through hazardous fuel reduction treatments.
- **Community Fire Planning**: A strategy that develops prevention based capacity and organizational infrastructure, identifies and inventories hazards, and establishes treatment plans; while it also develops response based capacity and organizational infrastructure, and crafts response plans and exercise programs.
- **Community Education and Outreach**: A strategy that develops and disseminates information to help wildland urban interface dwellers and the general citizenry make sensible choices about living in and around such environs. The FIREWISE programs and Defensible Space Workshops are aimed at informing the community spectrum of: homeowners, firefighters and builders to landscapers, insurance agents and public officials about the concept of FIREWISE living.
- **Fire Fighting**: Strategy includes building and maintaining a cost effective level of preparedness, and the continued research and development of initial attack and suppression allocation modeling, risk assessment processes for fire management, remote sensing monitoring of fire behavior and smoke dispersion, meteorological prediction systems, fire severity forecasting and smoke and fire behavior modeling.
- **Forest rehabilitation and restoration**: A strategy whose work is broadly defined, and the efforts intended for lands that are unlikely to recover naturally from fire damage. The work is often implemented over the course of several years.

Current Activities and Programs:

Six programs addressing Socorro County's fire prevention efforts will be in place, and their mention below is meant to emphasize their importance to the Plan's success. Five additional projects are recommended and will be discussed further on in this section.

1. Hazard Reduction Programs — National Fire Plan Implementation Team

There is little doubt that any hazard reduction programs, especially in construction of fuel breaks, will include mechanized treatment. "Fire Use" prescriptions are also an integral strategy of the Plan's, but discussion of this highly complex treatment is left to the federal and state land use agency partners to address in their own policies and procedures. The discussion that follows utilizes a National Fire Plan Study as a "base line" and makes recommendations describing both the hazard reduction and economic effectiveness of various mechanical prescriptions in the Wildland Urban Interface.

The "Strategic Assessment of Fire Hazard In New Mexico" referenced above stated that its overall goals were to profile forest conditions and fire hazard and evaluate the potential effectiveness and costs of hazard reduction treatments. Specific objectives were to:

- a. Describe and quantify forest conditions and rate these conditions for fire hazard;
- b. Develop alternative treatment prescriptions and evaluate their effectiveness in reducing hazard, both now and 30 years in the future;

- c. Determine harvest and slash reduction costs associated with treatments;
- d. Determine the potential revenue from timber products generated by the hazard reduction treatments.

The Analysis identified three basic mechanical treatment prescriptions for reducing fire hazard in the WUI, which are described below:

- a. Thin-from-below: an approach of low thinning to a given diameter limit, a treatment that has been widely recommended. The Analysis used a diameter limit of 9 inches.
- b. Diameter-limit: Retains all trees larger than 16 inches. However, if reserve basal area is less than 50 ft/ac, reserve additional trees less than 16" until basal area is equal to 50 ft/ac. This prescription is influenced by concerns that there may be a deficit of trees in the Southwest greater than 16" compared to historic levels, and that cutting trees larger than 16" is economically rather than ecologically motivated.
- c. Comprehensive: ecologically-based; reserves a target basal area of 40-50 ft/ac, primarily comprised of larger trees. This approach aims at initiating restoration of sustainable structure and composition (and longer term, ecological function), and therefore focuses on the trees to leave in terms of a target density, diameter distribution, and species composition.

Aside from 92% of the short-interval, fire-adapted ecosystems being in high/moderate fire hazard condition, the assessment also determined the following:

- Mechanical hazard reduction treatments differ substantially in their potential to reduce crown fire hazard. The Thin-from-Below treatment increases crowning index from 21 to 43 mph, but moves only 29 % of treated acres into the low hazard category. The Comprehensive treatment, in contrast, increases crowning index to 61 mph and moves 69% of treated acres into a low hazard condition.
- Woodland species contribute substantially to fire hazard; removing these species from the ponderosa pine and dry mixed conifer stands improves average crowning index by 15 to 24 mph.
- The value of timber produced as by-product of implementing the Comprehensive mechanical prescription would, on average, pay for all treatment and haul costs, i.e. breaking even, while both the "Thinning from-Below" and "Diameter-Limit" prescriptions resulted in negative costs of -\$368 and -\$439 respectively.
- Results of this study show that the fire hazard problem in New Mexico is best addressed by management approaches that recognize the broader ecological context within which it occurs.
- Whether the problem is viewed from the standpoint of hazard reduction, ecological condition, or treatment cost, a "comprehensive" prescription evaluated in this Analysis achieves greater hazard reduction, improves ecological condition, and is less expensive to employ than alternative treatments.

Currently the State Forestry Socorro Office is coordinating all WUI hazardous fuel mechanical treatments and assisting in the development and coordination of a large forest rehabilitation/restoration project (discussed below).

2. Economic Development Utilizing Harvested Fuels

In The Plan's development all saw the need, early on, to begin attracting entrepreneurs to develop products utilizing the wood "bio mass" of the hazardous fuels reduction efforts, and forest restoration projects. Fortunately, Collaborative Forest Restoration Program, and include:

- Conducting research and development activities dedicated to the development of appropriate new logging and processing equipment specifically designed for efforts relating to forest ecosystem restoration;

- Conducting research and development activities dedicated to the creation of value-added wood products derived from small diameter logs obtained as a by-products from forest restoration projects;
- Creating and expanding market activities relating to those products;
- Educating and assisting the general public in the use of those techniques, equipment, and products in development of viable small businesses that will benefit local economies and provide jobs;
- Supplying local wood products businesses with a supply of raw material.

3. Forest Restoration

Restoration projects are extremely complex, requiring extensive planning, consultation, design, and sometimes- contracting, and may take several years to fully implement. Monitoring and evaluating effectiveness of treatments may occur following control of a fire. Activities may include: reforestation, watershed restoration, road and trail rehabilitation, fence replacement, fish and wildlife habitat restoration, invasive-plant treatments, and replanting and reseeded.

Current problems with forest ecosystems, including large increases in forest density and fuel loading, have led to an increase in fire severity and size, and mortality in old growth trees and decreases in resiliency to natural disturbances, soil moisture and nutrient availability, and growth and diversity of both herbaceous and woody plants. There are various models of restoration advocated to deal with some of these problems.

The primary objective of these model are to restore natural processes into forest ecosystems. Ecological goals rather than an economic imperative guide this approach, addressing many of the concerns of the conservation community. This is accomplished by working with positive aspects of existing forest structures to move toward natural structure and function using the largest trees to create groups that will develop move quickly toward old growth condition.

4. Landowner Assistance Program — State Forestry and County of Socorro

New Mexico State Forestry along with Socorro County has developed and implemented a Landowner Assistance Program that involves cost sharing between the State (70%) and the Landowner (30%) for fuel treatments that reduce the fire hazard on state and private lands in the WUI. The goals of the program are to 1) assist private landowners in developing defensible space around their homes 2) construct fuel breaks and 3) thin adjoining stands on private lands where the federal agencies have either constructed or will construct fuel breaks. These actions will ensure private lands are better protected from fires originating on federal lands and ensure federal lands will be better protected from fires originating on private lands.

The landowner begins the process by requesting a fire hazard assessment be conducted on his/her land. A qualified fire professional from one of the local fire departments or State Forestry will visit the property and assess it using the NFPA 299 Assessment form. The findings are reviewed with the property owner and actions recommended to protect structures, improvements and the property itself from wildland fire. If minimal work is needed to mitigate the threat, the landowner will be encouraged to complete it himself, without considering financial assistance.

If the assessment recommends major actions, the landowner can apply for cost-share assistance from the County of Socorro who manages the program for the New Mexico State Forestry Division. Assistance is given in the form of 70% reimbursement and 30% landowner responsibility. The landowner must prepare a “Wildfire Mitigation Cost-Share Assistance Application.” The completed application and the initial assessment are then used by the fire professional to prepare a “Treatment Plan” identifying activities that need to take place to mitigate hazards to the structure(s).

Approved activities consist of:

- Structure Protection/Survivable Space/Zone
- Thinning
- Fuel Break Development

Upon preparation of the Treatment Plan and approval signatures obtained from the Landowner, the County of Socorro and the State District Forester, the landowner will receive a “Notice to Proceed”. The landowner either completes the work or hires a contractor to do it. (Cost share rates are calculated in the “Treatment Plan”.) In-kind costs that can be calculated in to the 30% Landowner match include: hours worked; chainsaw time; transportation time moving the cut fuels to a disposal site; purchase and installation of spark arresters on chimney; and road rehabilitation/erosion control.

Once all work identified on the Treatment Plan has been completed, the landowner requests an inspection of the property and the work performed. Once approval on the work is obtained, the landowner submits the documented costs (contractor or self) associated with the project on an itemized expense schedule.

An audit of the submitted expenses will be accomplished, and the County of Socorro will then request appropriate reimbursement from the State, which in turn will be given the landowner. The timeframe between landowner submittal of receipts and landowner reimbursement should be no longer than 30 days.

5. Defensible Space Workshops

There is increasing recognition that our ability to live more safely in our wildland urban interface fire prone environment depends on “pre-fire activities.” Pre-fire activities are actions taken before wildfire occurs which improve the survivability of people and homes, by providing for proper vegetation management around the home, (known as defensible space), use of fire resistant building materials, and appropriate subdivision design. Untreated shake and shingle roofs, narrow roads, limited access, lack of fire-wise landscaping, and inadequate water supplies are some of the issues that need to be addressed.

Prevention specialists with the Cibola National Forest have developed and implemented a comprehensive community assistance program to help landowners in our wildland urban interface prepare for wildfire. The program focuses on creating an effective “defensible space” and guides the participants through a ten-step effort including:

- Step One: Defining the defensible space, a buffer zone, a minimum of 30 foot non-combustible area around the home;
- Step Two: Reducing flammable vegetation, trees and brush around the home, choosing plants with loose branching, non-resinous woody material, and high moisture content;
- Step Three: Removing or pruning trees, thinning overcrowded or weakened trees, pruning low hanging branches, and limbing up “ladder fuels;”
- Step Four: Cutting grass and weeds regularly, keeping vegetation well watered;
- Step Five: Relocating wood piles and leftover building materials; stacking all wood, building debris and other burnable materials at least 30 feet away from the home, and clearing flammable vegetation within ten feet of wood/debris piles;
- Step Six: Keeping both roof and yard clean; especially the roof, clearing pine needles, leaves and debris from roof, gutters and yard to eliminate ignition sources;

- Step Seven: Signs, addresses, and access: easy-to-read road signs and address numbers that are visible from the road allow fire fighters to find homes quickly. Safe and easy access includes two-way roads that can accommodate emergency vehicles and give them space to turn around;
- Step Eight: Rating roofs: The roof is the most vulnerable part of the house in a wildfire. If not already fire resistant, roofs should be replaced with approved fire resistant materials;
- Step Nine: Recycling yard debris and branches; check into alternative disposal methods like composting, recycling, or selling the material to small wood/bio mass businesses;
- Step Ten: What to do when fire strikes; monitor your local radio and television stations for fire reports and evacuation procedures and centers. Keep an emergency checklist handy. Proper actions also include closing all windows and doors, arranging garden hoses so they can reach any area of the house, and packing the car for quick departure.

To schedule a workshop or to obtain more defensible space information contacts the State Forestry or your local fire department.

6. FIREWISE Communities Workshops:

The County Fire Marshal's Office with the local Fire Districts will co-sponsor a FIREWISE Communities workshop in 2006.

Program components include the following:

- FIREWISE Website (www.firewise.org): Representing a successful partnership of private and government agencies, this site averages 50,000 hits a month.
- Communication tools such as publications and videos: Firewise concepts on landscaping, building, firefighter safety and other topics are available online as well as through other outlets. The latest project is a television documentary called "Keepers of the Flame," which puts America's fire history and interface fire problem in context.
- Workshops, Training Sessions and Demonstration Events: These activities are focused on reducing fire risk to property and lives through better community design and retrofit and preparedness planning.
- Technical Assistance to Communities: As FIREWISE spreads across the country, more communities are looking to program organizers for help. This component includes GIS mapping technology.
- FIREWISE Communities USA Recognition Program: Communities can earn national status for their work to improve planning for and mitigation of fire hazards. Currently, there are eleven geographically diverse pilot communities in the recognition program, which will be officially unveiled in later 2003. Nationwide, there are thousands of communities with wildland/urban interface areas.

Recommended Projects and Programs

1. *Alert/Warning System: Office of Emergency Management*

Development of a community alert/warning system is critical to continued health, safety and welfare of our citizens. Currently there is no warning system in place to alert our citizens of impending danger from wildfire. There are three systems available that would dramatically improve warning. They include Weather Radio System, a Radio/TV Emergency Alert System. and automated dialup telephone alert system. A project is needed to get all these systems developed and implemented.

2. *Community Outreach Program-*

Residents of our area want to live in a natural setting with native vegetation, and are reluctant to modify their surroundings to reduce fire hazard. At the same time most of our community is unaware of the beneficial uses of fire. The Socorro County Fire Marshal will set up a community outreach program with funds from the NMAC and BLM .

The National Fire Plan Implementation Team is seeking funding that would allow comprehensive mitigation of both these citizen misconceptions. The proposal would provide area residents, homeowners, business owners, and other opinion-makers with information, education and training on *why* fuel treatments are necessary and *what* constitutes proper fuel treatment and *how* these treatments can be accomplished. The Proposal focuses on hiring a qualified public relations person to develop and implement a public information and education plan that includes goals, objectives, background, key messages/talking points, communication strategy, tactics, action plan and evaluation criteria.

Activities would include development of education modules for homeowners, rural volunteer fire departments, elected officials, students in grades K-12, homebuilders, insurance companies, developers, and planners; public service announcements, brochures, showcase demonstration projects, website development and continued firewise and defensible space workshops.

3. *Development of a 20 year fuels reduction strategy-*

One major problem that continues to hamper economic development of the utilization of forest by-products is any guarantee of a steady supply of material. To date there is no formal long range strategy by either the USFS or the BLM, nor any guarantees that they will continue with their current level of interest, commitment and funding assistance with regards to their fuels reduction and forest restoration strategies.

4. *Building and Development Codes Revisions: Socorro County, the Village of Magdalena and the City of Socorro*

The City of Socorro, the County of Socorro, and the Village of Magdalena have building codes and development ordinances that have no provisional guidelines to mitigate fire hazard and response. Revision of City, Village, and County ordinances, codes, and other regulatory processes is critical to ensuring that development in the Wildland Urban Interface adheres to proven building materials, landscaping, roads, water and other critical influences.

5. *Annual Emergency Operations Plan Review and Revision:*

Our Local Emergency Planning Committee was instrumental in the drafting and implementation of the Socorro County All Hazards Emergency Operations Plan. It is a matter of life and death that the Plan be

reviewed, revised and tested annually to ensure that all components are accurate in content, current with regards to responsibilities, techniques, agency policy and proven workable through an exercise program. The current Plan, to be adopted in 2006, has not been reviewed and revised to incorporate the concepts and strategies involving the Unified Fire Command Protocols and Evacuation Plans. The responsibility for ensuring the Plan is up to date with regards to content and workability rests with the Office of Emergency Management.

6. Incorporation of the Socorro County Local Emergency Planning Committee: LEPC

Incorporating the LEPC as a “non-profit” will allow more autonomy and potential funding from both government agencies and private foundations. This funding could be used to purchase and install all the components of an early warning/alert system described above.

7. Development of an Exercise Program: Testing the Plan

An exercise program should be developed and implemented by the Office of Emergency Management to ensure that the Emergency Operations Plan is a workable document, and addresses the latest in technique and policy.

8. Creation of a County Fire Marshal’s Office: to assist in Coordination

Our volunteer fire departments are just that — citizens volunteering to assist rural communities protect life and property. It is not their job to coordinate equipment, training and coverage needs of their departments. The State Forestry has developed and obtained funding for a county “wildland fire coordinator” and it has developed into a formal County Fire Marshal position.

9. Recruitment and Development of our Rural Fire Departments

Our rural fire departments are the County’s first line of defense. Yet, membership in these departments has been declining. Much of the reason for the declines is the County’s depressed economy, and resultant lack of employment for our young people. Another reason is the increasing state mandates for more training of our volunteer fire personnel. It is critical that the Office of Emergency Management, the County, and the LEPC develop strategies to attract and keep more volunteers. One such strategy would be the creation of an elite “Strike Team,” comprised of experienced, highly trained members of the various volunteer departments.

10. Communication Systems (911 and Local Dispatch Center)

Upgrade our local dispatch center and install repeaters in the outline areas that would allow full communication coverage in all parts of county. The center is also needed to be able to dispatch all fire departments in the county, to include Hop Canyon Fire Department.

11. Open an evacuation route, Hop Canyon to Patterson Canyon:

Get with NFS Magdalena District to open an evacuation route from Hop Canyon to Patterson Canyon. This will be open only during emergencies.

IV. RESPONSE PLANNING

Preface

In 2006 the County will adopt and implement the comprehensive “**Socorro County All Hazards Emergency Operations Plan**” (EOP). The document is being written by the Socorro County Local Emergency Planning Committee (LEPC), and will be endorsed by every first response agency or organization, in every jurisdiction in Socorro County. The EOP is the starting point for all other emergency plans in Socorro County. It provides broad guidelines for emergency management, thus enabling the individual agencies to write detailed operational plans of their own. What follows is abridged version of the EOP that describes the mission, goals, situation and assumptions, concept of operations, organization and assignment of responsibilities.

Purpose

The purpose of the EOP is to describe how Socorro County will handle emergency situations and disasters within its jurisdiction. The Plan assigns responsibilities for emergency preparedness and planning and for coordinating emergency response activities and resources before, during and after any type of emergency or disaster.

The overall emergency management goal is to coordinate emergency response efforts to save lives, reduce injuries, and preserve property. Since the Plan is essentially a contingency plan, its primary goal is to assemble, mobilize and coordinate a team of responders and coordinators that can deal with any emergency.

The EOP response strategies include:

- Utilizing a graduated response which is in proportion to the scope and severity of an emergency or disaster;
- Utilizing Four Emergency Action Levels that describe the extent of response. Each Emergency Action Level is a shorthand guide for describing the scope and severity of an emergency and for activating resources to respond to the emergency.

Situation and Assumptions

Situation: The County’s two biggest hazards are wildfire and severe weather. In fact, severe weather plays a pivotal role in the area’s infamous dry lightning storms, with scores of ignitions that severely stress the County’s ability to provide effective response. Adding to the complications of inherent wildland fire risk, is the continuing development of wildland urban interface communities, scattered remotely throughout the County. Of equal importance is the vulnerability of the County’s communication sites and other critical facilities. Most of the sites are located on top of forested mountains, prime targets of lightning and catastrophic fire, which in turn would cripple our response efforts.

Assumptions: The Response Plan makes certain assumptions about preparedness, emergencies and response. It is assumed that:

- Emergencies occur that will require multiple agency response and that exhaust local jurisdiction resources;
- Assistance from other jurisdictions will be needed for large-scale emergencies or disasters;
- The experience and expertise of annex coordinators called to the *Emergency Operations Center* during an emergency will compensate for gaps in emergency planning;

- Individuals who are responsible for emergency response and coordination will have a working knowledge of the **Emergency Operations Plan**;
- County, City and Village officials and response agencies will have been trained in the **Incident Command system (ICS)** and in Emergency Operations Center management;
- **The Emergency Operations Center** needs to be sufficiently organized and equipped to coordinate emergency resources.

Concept of Operations

The following priorities are listed in order of importance. Whenever demands for emergency resources (personnel or equipment) conflict, the operational demand that is highest on this list will prevail:

1. Save Lives
 - a. Save human lives
 - b. Treat the injured
 - c. Warn the public to avoid further casualties
 - d. Shelter and care for those evacuated.
 - e. Save animals
2. Protect property
 - a. Save property from destruction
 - b. Take action to prevent further loss
 - c. Provide security for property, especially in evacuated areas
3. Restore the Community to normal
 - a. Restore essential utilities
 - b. Restore community infrastructure such as roads
 - c. Help restore economic basis of the community.

Training is the key to effective response and is one of the most significant of any operational concepts. Two areas of training unique but critical to successful response are the: incident command system, and support coordination at the Emergency Operations Center.

Emergency Action Levels define the Plan's increasing severity and response levels. They consist of:

Level One: Incident Command system is necessary but able to control emergency without additional assistance of the EOC.

Level Two: Resources that are immediately available to IC are exhausted. Local Emergency Operations Center is activated to manage and coordinate related, multiple, or low level emergencies at different locations. Some precautionary evacuation may be necessary.

Level Three: State response and management resources may be needed to assist local and regional response. Local area evacuation and mass care activities characterize this level. EOC at State and Local level are coordinating resources.

Level Four: This is the **worst case scenario** for a disaster. All local, regional, state and federal response and management are needed to handle a disaster. Wide area evacuation and mass care activities characterize this level. EOCs at all government levels are coordinating resources.

Organization and Assignment of Responsibilities

The County All Hazards Emergency Operations Plan describes general operational functions and organizes these specific emergency resources into *Annexes*. The Annexes describe basic emergency functions and actions that can apply to any type of emergency. These annexes include:

- (A) Direction and Control
- (B) Communications
- (C) Warning
- (D) Emergency Public Information
- (E) Evacuation
- (F) Mass Care
- (G) Health and Medical
- (H) Fire and Rescue
- (I) Resource Management
- (J) Animal Control and Care

Each *Annex* contains a job description outlining general and specific duties, and a checklist that incorporates essential and time-critical tasks, special considerations and priorities. The intent of these job descriptions and checklists are to:

- 1) get coordinators into action-starting them immediately on critical coordination tasks;
- 2) direct coordinators in what to do with aid of wall posters, job descriptions, priorities, etc;
- 3) program initial work of coordinators with a checklist to show how he/she fits into the team;
- 4) help coordinators identify and outline reminders and priorities for specific emphasis; and
- 5) familiarize coordinators with essential reference information as they work through time-critical tasks in the checklist.

General policies for both responders and Annex coordinators include:

- When in doubt about the appropriate level of emergency response, do more than is expected;
- Emergency response agencies should expect to sustain themselves during the first 24 hours of an emergency;
- Emergency service personnel and EOC coordinators should exhaust their own channels of support before turning to others for assistance;
- County/City maintenance crews and equipment will provide primary assistance at the disaster site (debris clearance, road upgrading, damage assessment etc.) and assist with the repair and restoration of essential services and vital facilities;
- All responding agencies and EOC coordinators will manage and coordinate their own people, equipment, facilities and supplies to accomplish their tasks;
- Lead jurisdiction in the emergency will be based on the location of the emergency, the jurisdiction committing the majority of initial response resources and the arrival of higher authorities (such as State or Federal agencies).

Authorities and References

The table below summarizes the authority of local officials during any emergency. The documents which authorize EOC, ICS, and emergency management operations are the State Civil Emergency Preparedness Act, State Executive Order, and the Emergency Management Act.

	Order Evacuation	Activate EOC	Declare Disaster	Use Private Resources	Request State Assistance
County of Socorro	-Chair, County Commission -Sheriff's Dept	-Chair, County Commission -County Manager -OEM	-Chair, County Commission	-Chair, County Commission	-Chair, County Commission -County Manager -OEM
City of Socorro	-Mayor -City Police Dept	-Mayor -City Clerk -City Police Dept	Mayor	Mayor	-Mayor -City Clerk -OEM
Village of Magdalena	-Mayor -Marshals Office	-Mayor -Town Clerk	Mayor	Mayor	-Mayor -Town Clerk

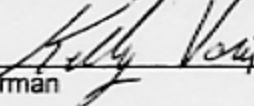
In addition to the Authorities and References already cited, the following publications were used to develop the Plan.

- a. Guide for All-Hazard Emergency Operations Planning, State and Local Guide, (SLG-101), FEMA, September 1996
- b. Disaster Assistance Program (DAP), Local Government Handbook, New Mexico Department of Public Safety, Office of Emergency Management (DPS OEM).

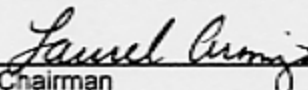
Socorro County Community Wildfire Protection Plan

We the undersigned do hereby endorse and approve the Socorro County Wildfire Protection Plan.

Socorro County Fire Chief's Association


Chairman

Socorro County Board of Commissioners


Chairman

New Mexico State Forestry


Socorro District State Forester

Collaborating Agencies:

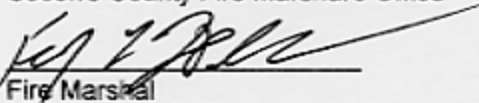
U.S. F&WS Sevilleta NWR

Refuge Manager

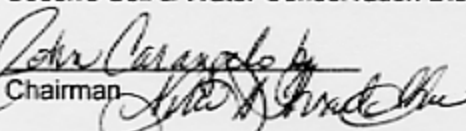
BLM , Socorro Resource Area

Area Manager

Socorro County Fire Marshal's Office


Fire Marshal

Socorro Soil & Water Conservation District


Chairman

Socorro County Local Emergency Planning Committee

Chair

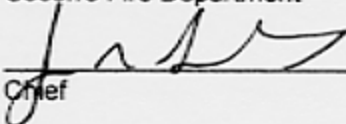
U.S. F&WS, Bosque del Apache NWR

Refuge Manager

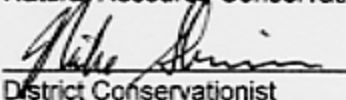
USFS Cibola National Forest. Magdalena RD

District Ranger

Socorro Fire Department


Chief

Natural Resource Conservation Service


District Conservationist

Cibola D3 (Magdalena) list of Regional Forester Sensitive Species as of 01/2006

		Status on District
MAMMALS		
Black-tailed prairie dog	<i>Cynomys ludovicianus</i>	S*
Mexican gray wolf	<i>Canis lupus baileyi</i>	S*
Rocky Mountain bighorn sheep	<i>Ovis canadensis canadensis</i>	S*
BIRDS		
Northern goshawk	<i>Accipiter gentilis</i>	SB
American peregrine falcon	<i>Falco peregrinus anatum</i>	SB
Bald eagle	<i>Haliaeetus leucocephalus</i>	S
Mexican spotted owl	<i>Strix occidentalis lucida</i>	SB
Loggerhead shrike	<i>Lanius ludovicianus</i>	S
Gray vireo	<i>Vireo vicinior</i>	S?
Montezuma quail	<i>Cyrtonyx montezumae</i>	SB
AMPHIBIANS		
Chiricahua leopard frog	<i>Rana chiricahuensis</i>	S?
Northern leopard frog	<i>Rana pipiens</i>	S?
FISHES		
Rio Grande silvery minnow	<i>hybognathus amarus</i>	HD
SNAILS		
Alamosa springsnail	<i>Tryonia alamosae</i>	HD
Socorro springsnail	<i>Pyrgulopsis neomexicana</i>	HD
INSECTS		
Blue-back silverspot butterfly	<i>Speyeria nokomis nokomis</i>	S
NM silverspot butterfly	<i>Speyeria nokomis nictocris</i>	S
PLANTS		
Zuni fleabane	<i>Erigeron rhizomatus</i>	S
Horrid herrickia	<i>Eurybia horrida</i>	S?
San Mateo penstemon (also called Crosswhite Mt. Washington beardtongue)	<i>Penstemon pseudoparvus</i>	S?
Parish's alkali grass	<i>Puccinellia parishii</i>	S?
Spellenberg's groundsel	<i>Senecio spellenbergii</i>	S?

STATUS DEFINITIONS:

- S Presence of species documented and likely still occurs;
- S* Presence of species documented or almost certainly occurred, but almost certainly no longer occurs on District;
- S? Presence of species not documented, or unknown, but may occur because suitable habitat occurs;
- SB Breeding of species documented;
- HD Habitat not on District, but actions on District may impact habitat downstream of District.

(blank)

APPENDIX 1 — WILDLAND URBAN INTERFACE COMMUNITIES

San Antonio Fire District

- San Antonio 1-2
- Bosquecito..... 1-3
- San Pedro 1-4
- Luis Lopez 1-5
- Laborcita 1-6
- San Marcial 1-7

Midway Fire District

- Lemitar 1-8
- San Acacia 1-9
- Polvadera..... 1-10
- Pueblito 1-11
- Alamillo 1-12

Abeytas Fire District

- Abeytas 1-13
- Sabinal..... 1-14
- San Francisco..... 1-15

Veguita Fire District

- Veguita
- Las Nutrias 1-16
- Boys Ranch 1-17

La Joya Fire District

- La Joya..... 1-18
- Contreras..... 1-19

Hop Canyon Fire District

- Hop Canyon 1-20
- Paterson Canyon 1-21
- Water Canyon 1-22

Bingham — (no fire district) 1-23

Claunch — (no fire district) 1-24

City of Socorro

- City of Socorro..... 1-25
- Florida 1-26

Village of Magdalena

- Magdalena 1-27
- Riley 1-28

Alamo Reservation (no fire district)

- Alamo 1-29
- Abbe Spring Subdivision 1-30

Dusty (no fire district)

- Dusty 1-31
- Durfee Canyon 1-32
- Sargent Canyon 1-33
- Mill Canyon 1-34

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
SAN ANTONIO FIRE DISTRICT**

NAME: San Antonio

LEGAL: T14S R18W Sec 33; T15S R18W Sec 3, 4, 11

DESCRIPTIVE LOCATION: 10 miles south of Socorro on Hwy 380

VEGETATION FUELS: Grass brush (mesquite) cottonwood, salt cedar & willow along the Rio Grand

ESTIMATED DENSITY (population per square mile):

NUMBER OF LOTS: 120

TOTAL ACRES: 640

CONSTRUCTION MATERIALS: Various

ROOF: Various

TERRAIN: Flat

SLOPE: 0-5%

ASPECT: E to NE

ACCESS: Hwy 380

ROADS: Hwy 380 Hwy 1. Farm market road

BRIDGES: Over Rio Grande: US 380

DRIVEWAYS: Driveways are dirt and some narrow

WATER AVAILABILITY: Fire hydrants available around district

CLOSEST FIRE DEPARTMENT (in miles): San Antonio VFD (ISO rating 6) 1/10 mile

AVERAGE HAZARD RATING: Low

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
SAN ANTONIO FIRE DISTRICT**

NAME: Bosquecito

LEGAL: T17S R13W Sec. 26

DESCRIPTIVE LOCATION: Hwy 380

VEGETATION FUELS: Grass, brush, cottonwoods. Salt cedar & willow along the Rio Grande

ESTIMATED DENSITY (population per square mile): 50

NUMBER OF LOTS: 30

TOTAL ACRES: 32000

CONSTRUCTION MATERIALS: Various

ROOF: Various primarily metal roofs.

TERRAIN: Open with some man made obstructions.

SLOPE: Flat to slightly rolling.

ASPECT: All

ACCESS: One way in and out on a good paved road.

ROADS: Paved roads wide easy access.

BRIDGES: None

DRIVEWAYS: Short and accessible.

WATER AVAILABILITY: 20,000 gal. Tank

CLOSEST FIRE DEPARTMENT: San Antonio VFD (ISO rating 6) sub station in Bosquecito

AVERAGE HAZARD RATING: High

COMMENTS: Easy access.

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
SAN ANTONIO FIRE DISTRICT**

NAME: San Pedro

LEGAL: T20S R11W Sec. 21

DESCRIPTIVE LOCATION: 2 miles East on Hwy 380

VEGETATION FUELS: Grass and Bosque. Brush (mesquite), cottonwood, salt cedar & willow along the Rio Grande

ESTIMATED DENSITY (population per square mile): 40

NUMBER OF LOTS: 16

TOTAL ACRES: 640

CONSTRUCTION MATERIALS: From mobile homes to adobe

ROOF: Mostly metal or composition

TERRAIN: Rolls and dips

SLOPE: Flat to 5%

ASPECT: All

ACCESS: Paved road from US 380

ROADS: Fair

BRIDGES: None

DRIVEWAYS: Mostly short and narrow

WATER AVAILABILITY: Hydrants available from San Antonio MDWCA

CLOSEST FIRE DEPARTMENT: San Antonio (ISO rating 6)

AVERAGE HAZARD RATING: HIGH

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
SAN ANTONIO FIRE DISTRICT**

NAME: Luis Lopez

LEGAL: T18S R10W Sec. 14

DESCRIPTIVE LOCATION: 5 miles north of Hwy 380 on state road 1

VEGETATION FUELS: Grass, brush (mesquite), cottonwood, salt cedar & willow

ESTIMATED DENSITY (population per square mile): 100

NUMBER OF LOTS: 75

TOTAL ACRES: 1220

CONSTRUCTION MATERIALS: Various wood frame and conventional

ROOF: Mostly composition and metal

TERRAIN:

SLOPE:

ASPECT: All

ACCESS: State road one

ROADS: Good

BRIDGES: At least 3 some limited to 5 tons or less over ditches

DRIVEWAYS: Narrow rough, locked gates

WATER AVAILABILITY: hydrants available

CLOSEST FIRE DEPARTMENT: Luis Lopez Station, San Antonio Fire District (ISO rating 6)

AVERAGE HAZARD RATING: Low

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
SAN ANTONIO FIRE DISTRICT**

NAME: Laborcita

LEGAL: T18S R10W Sec. 8

DESCRIPTIVE LOCATION: 2.5 miles North on Hwy 1 from San Antonio Hwy 380

VEGETATION FUELS: Grasses and Bosque grass, brush (mesquite) cottonwood, salt cedar & willow .

ESTIMATED DENSITY (population per square mile): 50

NUMBER OF LOTS: 25

TOTAL ACRES: 640

CONSTRUCTION MATERIALS: From mobile homes to adobe

ROOF: Mostly composition and metal

TERRAIN: River bottom

SLOPE: Flat to 10%

ASPECT: All

ACCESS: State highway 1

ROADS: Fair narrow

BRIDGES: None

DRIVEWAYS: Narrow

WATER AVAILABILITY: Water available from San Antonio MDWCA hydrants.

CLOSEST FIRE DEPARTMENT: San Antonio (ISO rating 6)

AVERAGE HAZARD RATING: Low

Socorro County
WILDLAND URBAN INTERFACE COMMUNITIES
SAN ANTONIO FIRE DISTRICT

NAME: San Marcial

LEGAL: T18S R10W Sec. 8

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grasses and Bosque, brush (mesquite), cottonwood, salt cedar & willow along the Rio Grande

ESTIMATED DENSITY (population per square mile):

NUMBER OF LOTS:

TOTAL ACRES:

CONSTRUCTION MATERIALS: From mobile homes to adobe

ROOF: Mostly composition and metal

TERRAIN: River bottom

SLOPE: Flat to 10%

ASPECT: All

ACCESS: State highway 1

ROADS: Fair narrow

BRIDGES: 4 over channel

DRIVEWAYS: Narrow 2 track no markings

WATER AVAILABILITY: No water available trucked from San Antonio MDWCA hydrants.

CLOSEST FIRE DEPARTMENT: San Antonio (ISO rating 6)

AVERAGE HAZARD RATING: High

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
MIDWAY FIRE DISTRICT**

NAME: Lemitar

LEGAL: T15S R17W Sec 28, 29, 33

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, mesquite, cottonwood, salt cedar and willow.

ESTIMATED DENSITY (population per square mile): 120

NUMBER OF LOTS: 175

TOTAL ACRES: 1280

CONSTRUCTION MATERIALS: Various

ROOF: Various

TERRAIN: Flat w/ some hills

SLOPE: 0-20%

ASPECT: South mostly

ACCESS: Good

ROADS: Good

BRIDGES: Escondido over River

DRIVEWAYS: Most driveways are adequate for emergency vehicles

WATER AVAILABILITY: Water hydrants around district

CLOSEST FIRE DEPARTMENT (in miles): Midway VFD,(ISO rating 9) in center of village

AVERAGE HAZARD RATING: High

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
MIDWAY FIRE DISTRICT**

NAME: Polvadera

LEGAL: T16S R14W Sec. 35, T17S R14W Sec. 2

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, mesquite, cottonwood, salt cedar and willow.

ESTIMATED DENSITY (population per square mile): 50

NUMBER OF LOTS: 25

TOTAL ACRES: 640

CONSTRUCTION MATERIALS: Frame construction with wooden or stucco siding and adobe construction.

ROOF: Predominantly metal with some composition shingle.

TERRAIN: Flat

SLOPE:

ASPECT: All aspects.

ACCESS:

ROADS: Fair the county maintains the roads through the area.

BRIDGES:

DRIVEWAYS: Various mostly narrow

WATER AVAILABILITY: Water hydrants available from Polvadera MDWCA

CLOSEST FIRE DEPARTMENT: Midway (ISO rating 9) about 3 miles away.

AVERAGE HAZARD RATING: High

COMMENTS:

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
MIDWAY FIRE DISTRICT**

NAME: San Acacia

LEGAL: T16S R14W Sec. 31& 32

DESCRIPTIVE LOCATION: Approximately 5 miles north of Lemitar on frontage road.

VEGETATION FUELS: Grasses mesquite, cottonwood, salt cedar and willow.

ESTIMATED DENSITY (population per square mile): 60

NUMBER OF LOTS: 20

TOTAL ACRES: 640

CONSTRUCTION MATERIALS: From mobile homes to adobe.

ROOF: Predominantly metal with some composition shingle.

TERRAIN: Flat

SLOPE:

ASPECT:

ACCESS:

ROADS: Good

BRIDGES:

DRIVEWAYS: Various mostly narrow.

WATER AVAILABILITY: Water available

CLOSEST FIRE DEPARTMENT: Midway VFD. (ISO rating 9)

AVERAGE HAZARD RATING: High

COMMENTS:

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
MIDWAY FIRE DISTRICT**

NAME: Pueblito

LEGAL: T16S R14W Sec. 31, 32

DESCRIPTIVE LOCATION: Approximately 5 miles south of Lemitar across river.

VEGETATION FUELS: Grass, mesquite, cottonwood, salt cedar and willow.

ESTIMATED DENSITY (population per square mile): 50

NUMBER OF LOTS: 20

TOTAL ACRES: 640

CONSTRUCTION MATERIALS: From mobile homes to adobe.

ROOF: Predominantly metal with some composition shingle.

TERRAIN:

SLOPE:

ASPECT:

ACCESS:

ROADS:

BRIDGES: Bridge across Rio Grand.

DRIVEWAYS: Various mostly narrow.

WATER AVAILABILITY: Water available from Polvadera water system across river

CLOSEST FIRE DEPARTMENT: Midway VFD. (ISO rating 9)

AVERAGE HAZARD RATING: High

COMMENTS:

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
MIDWAY FIRE DISTRICT**

NAME: Alamillo

LEGAL: T16S R14W Sec. 31, 32

DESCRIPTIVE LOCATION: Approximately 5 miles north of Lemitar on frontage road.

VEGETATION FUELS: Grass, mesquite, cottonwood, salt cedar and willow.

ESTIMATED DENSITY (population per square mile): 30

NUMBER OF LOTS: 10

TOTAL ACRES: 640

CONSTRUCTION MATERIALS: From mobile homes to adobe.

ROOF: Predominantly metal with some composition shingle.

TERRAIN:

SLOPE:

ASPECT:

ACCESS:

ROADS:

BRIDGES: Bridges across ditches.

DRIVEWAYS: Various mostly narrow.

WATER AVAILABILITY: Water available

CLOSEST FIRE DEPARTMENT: Midway VFD. (ISO rating 9)

AVERAGE HAZARD RATING: High

COMMENTS:

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
ABEYTAG FIRE DISTRICT**

NAME: Abeytag

LEGAL: T15S R17W Sec 23, 26, 27, 34, 35

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, brush (mesquite), cottonwood, salt cedar and willow.

ESTIMATED DENSITY (population per square mile):

NUMBER OF LOTS:

TOTAL ACRES:

CONSTRUCTION MATERIALS: Not provided

ROOF:

SIDING:

DECKS:

TERRAIN: Mostly flat

SLOPE: 0-1%

ASPECT: West

ACCESS:

ROADS:

BRIDGES:

DRIVEWAYS: Most Driveways are adequate to narrow

WATER AVAILABILITY: Abeytag has a tank at fire station.

CLOSEST FIRE DEPARTMENT (in miles): Abeytag VFD(ISO rating 9) is in community

AVERAGE HAZARD RATING: High

COMMENTS:

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
ABEYTAS FIRE DISTRICT**

NAME: Sabinal

LEGAL: T16S R13W Sec.31, 32; T17S R13W Sec. 5, 6

DESCRIPTIVE LOCATION: Approximately 4 miles North of Abeytas

VEGETATION FUELS: Grass, mesquite, cottonwood, salt cedar and willow.

ESTIMATED DENSITY (population per square mile):

NUMBER OF LOTS: 40

TOTAL ACRES: 1280

CONSTRUCTION MATERIALS: Various

ROOF: Various

TERRAIN:

SLOPE:

ASPECT: All aspects present.

ACCESS: Good a state highway runs through town.

ROADS: Good to poor. Close to the center of town the roads are good but the outlying areas have some very narrow and rough sections.

BRIDGES: over ditches

DRIVEWAYS: Good to poor. Some are very narrow and rough.

WATER AVAILABILITY: The only water is from the tank at Abeytas fire department.

CLOSEST FIRE DEPARTMENT: Abeytas VFD. (ISO rating 9)

AVERAGE HAZARD RATING: High

COMMENTS: the area has a lot of old construction and is surrounded by heavy Bosque fuel loads.

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
ABEYAS FIRE DISTRICT**

NAME: San Francisco

LEGAL: T16S R14W Sec. 33, 34; T17S R14W Sec. 3

DESCRIPTIVE LOCATION: Approximately 4.5 miles south of Abeytas.

VEGETATION FUELS: Grasses, forbs and salt cedar.

ESTIMATED DENSITY (population per square mile): 15

NUMBER OF LOTS: 5

TOTAL ACRES: 640

CONSTRUCTION MATERIALS: Frame construction with wooden or stucco siding.

ROOF: Predominantly metal with some composition shingle.

TERRAIN: Flat

SLOPE: 0% to 1%

ASPECT: All aspects.

ACCESS: Fair

ROADS: Good

BRIDGES: No bridges

DRIVEWAYS: Various mostly narrow; some are very long .

WATER AVAILABILITY: Some residents have above ground domestic water supplies of various sizes.

CLOSEST FIRE DEPARTMENT: Abeytas Fire District Station (ISO rating 9) 5 miles

AVERAGE HAZARD RATING: High

COMMENTS:

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
VEGUITA FIRE DISTRICT**

NAME: Veguita

LEGAL:

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, brush (mesquite), salt cedar, cottonwood willow along the Rio Grande.

ESTIMATED DENSITY (population per square mile):

NUMBER OF LOTS:

TOTAL ACRES:

CONSTRUCTION MATERIALS: Various

ROOF: various

TERRAIN: Flat to hilly

SLOPE: 0-5%

ASPECT: South

ACCESS:

ROADS:

BRIDGES:

DRIVEWAYS: Narrow but open

WATER AVAILABILITY: Water available from 42,000 gal. tank at fire station and water available at the school

CLOSEST FIRE DEPARTMENT (in miles): Veguita VFD (ISO rating 9)

AVERAGE HAZARD RATING: High

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
VEGUITA FIRE DISTRICT**

NAME: Las Nutrias

LEGAL:

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, brush (mesquite), Salt Cedar, Cottonwood Willow along the Rio Grande.

ESTIMATED DENSITY (population per square mile):

NUMBER OF LOTS:

TOTAL ACRES:

CONSTRUCTION MATERIALS: Various

ROOF: various

TERRAIN: Flat to hilly

SLOPE: 0-4%

ASPECT: South

ACCESS:

ROADS:

BRIDGES:

DRIVEWAYS: Narrow but open

WATER AVAILABILITY: Water available from 42,000 gal. tank at fire station and water available at school.

CLOSEST FIRE DEPARTMENT (in miles): Veguita VFD (ISO rating 9)

AVERAGE HAZARD RATING: High

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
LA JOYA FIRE DISTRICT**

NAME: La Joya

LEGAL:

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, brush, cottonwood, salt cedar and willow along Rio Grande

ESTIMATED DENSITY (population per square mile):

NUMBER OF LOTS:

TOTAL ACRES:

CONSTRUCTION MATERIALS: Various

ROOF: Various

TERRAIN: Rolling hills

SLOPE: 0-3%

ASPECT: North

ACCESS:

ROADS:

BRIDGES:

DRIVEWAYS: Narrow to 10-15 feet wide some rough

WATER AVAILABILITY: Water available from the LA Joya MDWCA.

CLOSEST FIRE DEPARTMENT (in miles): La Joya VFD (ISO rating 10)

AVERAGE HAZARD RATING: High

Socorro County
WILDLAND URBAN INTERFACE COMMUNITIES
LA JOYA FIRE DISTRICT

NAME: Contreras

LEGAL:

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, brush, PJ, cottonwood, salt cedar and willow along Rio Grande

ESTIMATED DENSITY (population per square mile):

NUMBER OF LOTS:

TOTAL ACRES:

CONSTRUCTION MATERIALS: Various

ROOF: Various

TERRAIN: Rolling hills

SLOPE: 0-3%

ASPECT: North

ACCESS:

ROADS:

BRIDGES:

DRIVEWAYS: narrow to 10-15 feet wide some rough

WATER AVAILABILITY: Water available from the LA Joya MDWCA.

CLOSEST FIRE DEPARTMENT (in miles): La Joya VFD (ISO rating 10)

AVERAGE HAZARD RATING: High

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
HOP CANYON FIRE DISTRICT**

NAME: Hop Canyon

LEGAL:

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, brush, P.J, ponderosa

ESTIMATED DENSITY (population per square mile): 200

NUMBER OF LOTS: 78

TOTAL ACRES: 1200

CONSTRUCTION MATERIALS: Various

ROOF: Various

TERRAIN: Brushy rough

SLOPE: 1-50%

ASPECT: West and East

ACCESS: Brushy Mt. Rd

ROADS: Brushy Mt. Rd

BRIDGES: None

DRIVEWAYS: narrow to very narrow (less than 8 feet) with trees bordering

WATER AVAILABILITY:

CLOSEST FIRE DEPARTMENT (in miles): Hop Canyon VFD . (ISO rating 10)

AVERAGE HAZARD RATING: Very High

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
HOP CANYON FIRE DISTRICT**

NAME: Paterson Canyon

LEGAL: T17S R11W Sec. 19

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Pinion, Juniper, Pine, Scrub, Oak , Brush and Grass

ESTIMATED DENSITY (population per square mile): 30 Approx

NUMBER OF LOTS: Approx. 10

TOTAL ACRES: 400

CONSTRUCTION MATERIALS: Various

ROOF: Composition and metal.

SIDING: Frame Metal

DECKS: Wooden

TERRAIN: Gentle slope

SLOPE: 5 to 20%

ASPECT: All slope positions

ACCESS: 2 unpaved seldom maintained roads

ROADS: Unpaved with good street signs although the numbers are hit and miss.

BRIDGES: None

DRIVEWAYS: Adequate with a few too narrow and very rocky.

WATER AVAILABILITY:

CLOSEST FIRE DEPARTMENT: Hop Canyon. (ISO rating 10)

AVERAGE HAZARD RATING: High

COMMENTS: Wildland fire danger backs up to Forest land. Only 25% of houses have adequate defensible space.

Socorro County
WILDLAND URBAN INTERFACE COMMUNITIES
HOP CANYON FIRE DISTRICT

NAME: Water Canyon

LEGAL: T17S R11W Sec. 19

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Pinion, Juniper, Pine, Scrub, Oak, Brush and Grass

ESTIMATED DENSITY (population per square mile): Approx. 12

NUMBER OF LOTS: Approx.5

TOTAL ACRES: 640

CONSTRUCTION MATERIALS: Various

ROOF: Composition and metal.

SIDING: Frame Metal

DECKS: Wooden

TERRAIN: Gentle slope

SLOPE: 5 to 20%

ASPECT: All slope positions

ACCESS: 2 unpaved seldom maintained roads.

ROADS: Paved with good street signs although the numbers are hit and miss.

BRIDGES: None

DRIVEWAYS: Adequate with a few too narrow and very rocky.

WATER AVAILABILITY:

CLOSEST FIRE DEPARTMENT: Hop Canyon. (ISO rating 10)

AVERAGE HAZARD RATING: High

COMMENTS: Wildland fire danger backs up to Forest land. Only 25% of houses have adequate defensible space.

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
NO FIRE DEPARTMENT**

NAME: Bingham

LEGAL:

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, brush (mesquite), pinion-juniper

ESTIMATED DENSITY (population per square mile): 6

NUMBER OF LOTS: 5

TOTAL ACRES: 1280

CONSTRUCTION MATERIALS: Various

ROOF: Various

TERRAIN: Rolling hills

SLOPE: 10-30%

ASPECT: Northeast

ACCESS:

ROADS:

BRIDGES: None

DRIVEWAYS: Good to narrow

WATER AVAILABILITY:

CLOSEST FIRE DEPARTMENT San Antonio 30 miles west (ISO rating 6/9)

AVERAGE HAZARD RATING: Moderate

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
NO FIRE DEPARTMENT**

NAME: Claunch

LEGAL:

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, brush (mesquite), pinion-juniper

ESTIMATED DENSITY (population per square mile): 20

NUMBER OF LOTS: 10

TOTAL ACRES: 640

CONSTRUCTION MATERIALS: various

ROOF: Various

TERRAIN: Rolling hills

SLOPE: 10-30%

ASPECT: Northeast

ACCESS:

ROADS:

BRIDGES: None

DRIVEWAYS: Good to narrow

WATER AVAILABILITY:

CLOSEST FIRE DEPARTMENT

AVERAGE HAZARD RATING: Moderate

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
SOCORRO CITY FIRE DEPARTMENT**

NAME: City of Socorro

LEGAL:

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, brush (mesquite), cottonwood, and willow - salt cedar

Riparian vegetation along Rio Grande

ESTIMATED DENSITY (population per square mile): 6000

NUMBER OF LOTS: 2000

TOTAL ACRES: 9216

CONSTRUCTION MATERIALS: Various

ROOF: Various :

TERRAIN: Flat some rolling hills

SLOPE: 0-15%

ASPECT: Southwest

ACCESS:

ROADS: Good

BRIDGES:

DRIVEWAYS:

WATER AVAILABILITY: City of Socorro

CLOSEST FIRE DEPARTMENT (in miles): Socorro FD (ISO rating 6)

AVERAGE HAZARD RATING: Moderate

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
SOCORRO CITY FIRE DEPARTMENT**

NAME: Florida

LEGAL:

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, brush (mesquite), cottonwood, and willow salt cedar riparian
Vegetation along Rio Grande

ESTIMATED DENSITY (population per square mile): 200

NUMBER OF LOTS: 50

TOTAL ACRES: 640

CONSTRUCTION MATERIALS: Various

ROOF: Various :

TERRAIN: Flat some rolling hills

SLOPE: 0-1%

ASPECT: Southwest

ACCESS:

ROADS:

BRIDGES:

DRIVEWAYS:

WATER AVAILABILITY: City of Socorro

CLOSEST FIRE DEPARTMENT (in miles): Socorro FD (ISO rating 6)

AVERAGE HAZARD RATING: Moderate

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
VILLAGE of MAGDALENA FIRE DEPARTMENT**

NAME: Magdalena

LEGAL:

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, brush (mesquite), pinion-juniper

ESTIMATED DENSITY (population per square mile): 913:

NUMBER OF LOTS: 372

TOTAL ACRES: 3968

CONSTRUCTION MATERIALS: Various

ROOF: Various

TERRAIN: Rolling hills

SLOPE: 10-30%

ASPECT: Northeast

ACCESS:

ROADS:

BRIDGES: None

DRIVEWAYS: Good to narrow

WATER AVAILABILITY: Village water supply

CLOSEST FIRE DEPARTMENT (in miles): Magdalena FD (ISO rating 7)

AVERAGE HAZARD RATING: Moderate

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
VILLAGE of MAGDALENA FIRE DEPARTMENT**

NAME: Riley

LEGAL:

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, brush (mesquite), pinion-juniper, salt cedar.

ESTIMATED DENSITY (population per square mile): 20

NUMBER OF LOTS: 10

TOTAL ACRES: 1280

CONSTRUCTION MATERIALS: Various

ROOF: Various

TERRAIN: Rolling hills

SLOPE: 10-30%

ASPECT: Northeast

ACCESS:

ROADS:

BRIDGES: None

DRIVEWAYS: Good to narrow

WATER AVAILABILITY: Village water supply

CLOSEST FIRE DEPARTMENT (25 miles): Magdalena FD (ISO rating 7)

AVERAGE HAZARD RATING: Moderate

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
NO FIRE DEPARTMENT**

NAME: Alamo

LEGAL:

DESCRIPTIVE LOCATION: 30 miles north west of Magdalena

VEGETATION FUELS: Grass, brush (mesquite), pinion-juniper

ESTIMATED DENSITY (population per square mile):

NUMBER OF LOTS:

TOTAL ACRES:

CONSTRUCTION MATERIALS: Various

ROOF: Various

TERRAIN: Rolling hills

SLOPE: 10-30%

ASPECT: Northeast

ACCESS:

ROADS:

BRIDGES: None

DRIVEWAYS: Good to narrow

WATER AVAILABILITY:

CLOSEST FIRE DEPARTMENT: Magdalena 30 miles south west

AVERAGE HAZARD RATING: Moderate

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
NO FIRE DEPARTMENT**

NAME: Abbe Spring Sub Division

LEGAL:

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, brush (mesquite), pinion-juniper

ESTIMATED DENSITY (population per square mile):

NUMBER OF LOTS:

TOTAL ACRES:

CONSTRUCTION MATERIALS: Various

ROOF: Various

TERRAIN: Rolling hills

SLOPE: 10-30%

ASPECT: Northeast

ACCESS:

ROADS:

BRIDGES: None

DRIVEWAYS: Good to narrow

WATER AVAILABILITY:

CLOSEST FIRE DEPARTMENT:

AVERAGE HAZARD RATING: Moderate

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
NO FIRE DEPARTMENT**

NAME: Dusty

LEGAL:

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, brush (mesquite), pinion-juniper

ESTIMATED DENSITY (population per square mile):

NUMBER OF LOTS:

TOTAL ACRES:

CONSTRUCTION MATERIALS: Various

ROOF: Various

TERRAIN: Rolling hills

SLOPE: 10-30%

ASPECT: Northeast

ACCESS:

ROADS:

BRIDGES: None

DRIVEWAYS: Good to narrow

WATER AVAILABILITY:

CLOSEST FIRE DEPARTMENT:

AVERAGE HAZARD RATING: Moderate

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
NO FIRE DEPARTMENT**

NAME: Durfee Canyon

LEGAL:

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, brush (mesquite), pinion-juniper

ESTIMATED DENSITY (population per square mile):

NUMBER OF LOTS:

TOTAL ACRES:

CONSTRUCTION MATERIALS: Various

ROOF: Various

TERRAIN: Rolling hills

SLOPE: 10-30%

ASPECT: Northeast

ACCESS:

ROADS:

BRIDGES: None

DRIVEWAYS: Good to narrow

WATER AVAILABILITY:

CLOSEST FIRE DEPARTMENT:

AVERAGE HAZARD RATING: Moderate

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
NO FIRE DEPARTMENT**

NAME: Sargent Canyon

LEGAL:

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, brush (mesquite) pinion-juniper

ESTIMATED DENSITY (population per square mile):

NUMBER OF LOTS:

TOTAL ACRES:

CONSTRUCTION MATERIALS: Various

ROOF: Various

TERRAIN: Rolling hills

SLOPE: 10-30%

ASPECT: Northeast

ACCESS:

ROADS:

BRIDGES: None

DRIVEWAYS: Good to narrow

WATER AVAILABILITY:

CLOSEST FIRE DEPARTMENT:

AVERAGE HAZARD RATING: Moderate

**SOCORRO COUNTY
WILDLAND URBAN INTERFACE COMMUNITIES
NO FIRE DEPARTMENT**

NAME: Mill Canyon

LEGAL:

DESCRIPTIVE LOCATION:

VEGETATION FUELS: Grass, brush (mesquite), pinion-juniper

ESTIMATED DENSITY (population per square mile):

NUMBER OF LOTS:

TOTAL ACRES:

CONSTRUCTION MATERIALS: Various

ROOF: Various

TERRAIN: Rolling hills

SLOPE: 10-30%

ASPECT: Northeast

ACCESS:

ROADS:

BRIDGES: None

DRIVEWAYS: Good to narrow

WATER AVAILABILITY:

CLOSEST FIRE DEPARTMENT:

AVERAGE HAZARD RATING: Moderate

APPENDIX 2
Socorro County
All Hazards Emergency Operations Plan

WILDFIRE EVACUATIONS

I. Objectives:

- To provide guidelines to assist in a safe and orderly evacuation
- To identify special concerns that will assist agencies and responding units; including persons requiring extraordinary care; livestock; and other property requiring specialized handling
- To identify the resources necessary to accomplish a timely, safe, and orderly evacuation

II. Authority:

- **Authority** for ordering an evacuation during a wildfire incident in the County rests with the Chairman of the Socorro County Commission or the Sheriff of Socorro County. This Authority is based on State Statutes: the State Civil Emergency Preparedness Act, the Emergency Management Act; State Executive Order, and existing multi-agency Joint Powers Agreements, local Memorandums of Understanding.
- **Responsibility** for planning, implementing, and managing an evacuation rests with NM DPS-State Police. In the event the State Police is unable to respond, the Emergency Operations Center Law Enforcement Staff (Socorro County Sheriff's Department) will manage evacuation operations.
- **The Incident Commander of a wildfire incident** is authorized to order an evacuation if conditions immediately threaten the health, safety, or welfare of citizens and the Emergency Operations Center is not operational nor are County Commission members available.

III. **Evacuation Stages** (Levels of Response):

Stage 1: **Notification and briefings** of persons within the affected areas. This stage will be implemented when *fire has a high potential of reaching structures in the area within 24 to 36 hours.*

Stage 2: **Warnings of potential evacuation** will be announced if there is a good probability of a need to evacuate. Warnings will include the recommended movement of persons requiring special needs or care, livestock, and large mobile property. This stage will be implemented when *fire has a high potential of reaching structures within the area in 16 hours.*

Stage 3: **Evacuation Requested** when the *fire has a high potential of reaching structures within the area in 6 hours.* Residents will be asked to leave within a specified time period by an announced route and assemble at pre-designated locations. These locations are listed below.

Stage 4: **Evacuation Ordered** when a *fire has a high potential of reaching structures within the area in 2 hours or less, and a disaster or emergency proclamation has been issued by the CEO of the jurisdiction affected by the incident. Access to the affected area is prohibited to anyone not authorized by the Incident Commander or his designee.*

Stage 5: **Perimeter Roadblocks and Patrols:** Once an evacuation has been ordered, perimeter roadblocks will be set up and maintained; and the evacuated area patrolled 24 hours a day. Regular status briefings will be provided to evacuees at the pre-designated assembly locations and shelters established by the American Red Cross.

Stage 6: **Return of Residents to Their Homes:** Once the incident is declared under control and safe for entry by the Incident Commander, evacuees will be allowed to return. Evacuation teams will re-contact residents to evaluate hardships and special needs.

IV. Implementation Procedures

1. In the event that an evacuation is requested or ordered by the jurisdiction affected and given to the Incident Commander for implementation, the **State Police will coordinate the evacuation** through officer(s) assigned to the Emergency Operations Center.
2. In the event of **non-compliance by residents** ordered to evacuate the State Police will coordinate all efforts to re-contact the person(s) and stress the immediacy of the threats and the need for evacuation.
3. **Evacuation routes and roadblock locations** will be determined by the Incident Commander specific to each incident. He will provide this information to the State Police and the Emergency Operations Center staff.
4. Assembly locations for residents being evacuated are listed below:

<u>Area:</u>	<u>Report To:</u>
Midway Area	Midway School Parking Lot
Veguita	La Promesa School Parking Lot
La Joya	La Promesa School Parking Lot
Abeytas	Abeytas Fire Department Parking Lot
Hop Canyon	Magdalena School Parking lot
San Antonio	San Antonio School Parking lot

Socorro

NOTE: additional assembly locations or re-routing may be identified during incident

V. Anticipated Resources

- Personnel with vehicles and radios to warn residents and patrol evacuation area
- Personnel at roadblocks and patrolling evacuation routes to ensure traffic flow and accountability of personnel and residents
- Personnel at Assembly locations to direct evacuee processing and assist with sheltering and information dissemination needs. These personnel will work under the authority of the American Red Cross.

APPENDIX 3
Socorro County
All Hazards Emergency Operations Plan
UNIFIED FIRE COMMAND PROTOCOLS

I. Introduction:

The USFS Magdalena Office, BLM Socorro Office, State Forestry Socorro Office, USFWS Bosque del Apache Refuge and Sevilleta Refuge, County and City Fire Departments and local Law Enforcement agencies will develop a specialized procedure to assist the Emergency Operations Center in staffing and guidance with the complex issues involved with multi jurisdictional authority communications and resource allocation focused on wildfire in the urban interface. These protocols are incorporated into the County All Hazards Emergency Operations Plan by reference as an appendix H.

II. Concept of Operations:

The protocols are intended as guides to help EOC staff better manage resource needs of a large incident, and consist of:

- Beefing up EOC communications between the incident and the two dispatch centers that would be involved with a fire in the WUI, and:
- The establishment of two deputy operations personnel under Operations Chief (in the incident command organization chart); one for structure fire fighting and protection and one for wildland suppression.

Additional guidance is given to EOC staff as follows:

- The incident commander will be determined by the host unilead jurisdiction)
- Incident Commander will order all resources through their respective Dispatch Center (either the Gila Zone Dispatch or Central Dispatch)
- Incident Commander will remain at the Incident Command Post in order to better coordinate responding resources
- All resources report to the Incident Commander or Staging Area Manager if one has been appointed.
- Incident Commander will designate the Operations Section Chief and assist the Chief in selecting the deputy Chiefs who will be in charge of Structure Operations and Wildfire Operations
- Law Enforcement: The EOC will identify the Lead Officer on the scene to coordinate law enforcement activities with the incident commander.
- VFDs may be used in either structural or wildland fire operations if properly trained in both scenarios.

III. Fire Staffing for the Emergency Operations Center

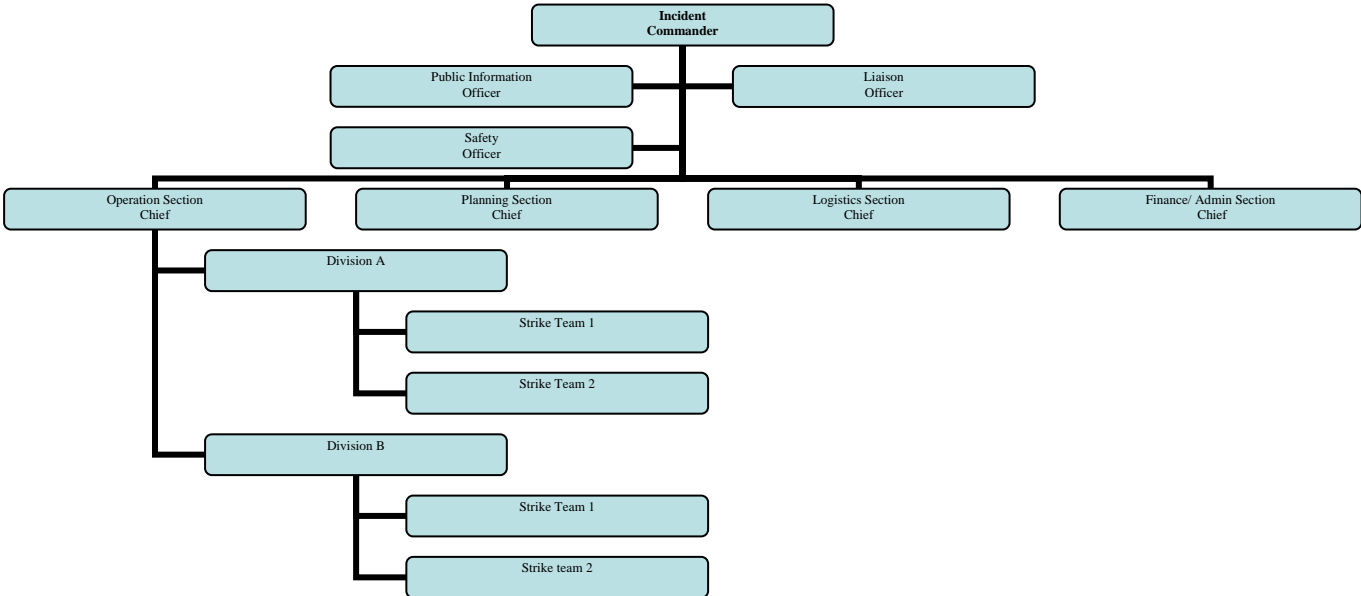
Staffing of the EOC for wildfire incidents in the urban interface may include decision making representatives formally appointed to staff by their respective agencies:

- New Mexico State Forestry
- USFS: Magdalena District
- Bureau of Land Management-Socorro
- FWS Bosque del Apache / Sevilleta
- Socorro County Fire Marshal
- Socorro City Fire Department
- NM DPS-State Police
- Socorro County Sheriff’s Department
- Socorro City Police Department
- Office of Emergency Management
- County Road Department
- NM State Highway Department
- American Red Cross
- County Manager

If a multi agency level incident occurs, the designated representatives will report to the County EOC and begin assessing and planning efforts. The EOC staff will operate according to the policies, strategies, and objectives outlined in the County All Hazards Emergency Operations Plan.

IV. Fire Staffing for the Incident Command Post

An Organization/Flow Chart is presented below to assist the reader in understanding the structure and staffing of the incident command team. The incident command team is made up of the following



APPENDIX 4
Socorro County
Critical Communication Facilities and Watersheds in the WUI

See map 2 for communications facilities and map 6 for watersheds.

(blank)

APPENDIX 5
Socorro County
Local Fire Departments

1. Fire Department Training

Objective

To build capacity and knowledge so that the recognized volunteer fire departments in Socorro County can not only assist the state and federal agencies in wildfire suppression and protection but also is a complementary force to all wildland fire management activities. Members of Volunteer Fire Departments would serve as the Initial Attack with an Incident Commander until state and federal agencies arrive.

Work Completed

Work Scheduled

Work Needed

The following courses need to be offered on an annual basis.

S-130 Basic Wildland Training Refresher course needed every 3 years

S-131 Advanced Wildland Training Refresher course needed every 3 years

S/190- Introduction to Wildland Fire Behavior Refresher course needed every 3 years

S-200 Fire Boss- Refresher course needed every 3 years

S-215 Fire Ops in the Urban Interface

S-230 Single Resource Boss – Engine

ICS 100, 200, 300

Training/Equipment Needed:

Various training videos and manuals, including:

“Essentials in Firefighting” and “Wildland Fire Training” (videos)

Budget and Finance

NM Forestry Division has responsibility, through the Joint Powers Agreement with Socorro County, to provide and coordinate wildland fire training courses to fire department personnel in Socorro County. Additionally, the USDA Forest Service, FWS Bosque del Apache Refuge, FWS Sevilleta Refuge and BLM will continue to assist with Forestry Division’s training activities.

There will be funds appropriated through the National Fire Plan to address training needs over the next few years. These needs will be prioritized in accordance with the list shown above.

2. Fire Department Equipment

Objective

To acquire equipment needed to adequately improve the ability to safely respond to wildland fires and to ensure acquisition of personal protective equipment (PPE) which is essential when responding to wildland fires. To coordinate New Mexico Volunteer Fire Assistance and the BLM Rural Fire Assistance funds to maximize interagency cooperation. To assist Volunteer Fire Departments (VFDs) with acquiring Federal Emergency Management Agency funds.



Work Completed

Wildland fire apparatus has been acquired or is in the process of be purchased by most fire departments in Socorro County. All departments are at various inventory levels of PPE for their firefighters but will require additional acquisitions to meet our objectives.

Work Scheduled

Equipment needs assessments will be accomplished in 2006 and given to the Socorro County Fire Marshals Office.

Work Needed

Fire departments will maintain and upgrade equipment inventories for wildland firefighting. Inventories should be submitted to the fiscal agent at Socorro County each year. Fire Departments will also submit lists of equipment needs annually.

Equipment Needed

FIRE DEPARTMENT	NEEDS	TARGET DATE
Abeytas	<ol style="list-style-type: none"> 1) 10 Bendix-King hand-held radios 2) Portable trailer mounted pump 3) PPE equipment 	VFA/RFA Grant?
Hop Canyon	<ol style="list-style-type: none"> 1) Radios, mobile and hand held 2) PPE equipment 	VFA/RFA Grant? FEMA (Truck)
La Joya	<ol style="list-style-type: none"> 1). 4x4 quick response truck, min. capacity of 200/gal. of water and have foam capability; have a 100 GPM pump; Truck is for initial attack 2). Pumps to fill from streams and ponds and dump into portable tanks 3). Equipment- PPE and wildland tools. 	FEMA (truck) VFA/RFA
Midway	<ol style="list-style-type: none"> 1). Tanker Truck 2). 10 Portable Radios 3). PPE for 20 firefighters 	FEMA (truck) VFA/RFA
San Antonio	<ol style="list-style-type: none"> 1). Firefighter protective clothing-one per volunteer 2). Wildland firefighting Equipment 3) PPE Equipment 	FEMA VFA/RFA
Veguita	<ol style="list-style-type: none"> 1). PPE 2). Portable Radios 	FEMA VFA/RFA
Socorro Fire Department	<ol style="list-style-type: none"> 1). Brush truck 2). PPE for all firefighters 3) Wildland firefighting equipment 	FEMA (TRUCKS) VFA/RFA
Magdalena Fire Department	<ol style="list-style-type: none"> 1). PPE for 20 2). 4X4 Brush Truck. 3). Tanker Truck. 4). 10 Portable Radios 	FEMA (Trucks) VFA/RFA
Alamo	<ol style="list-style-type: none"> 1). Tanker Truck (3000 gallon) 2). 4X4 Brush Truck 1-200 gallon porta-tank. 3). PPE for 10. 4). Wildland fire tools (10 each) 5). Portable radios 	FEMA (Trucks) VFA/RFA
County Fire Marshal	<ol style="list-style-type: none"> 1) Training aids 2) PPE Equipment 	

Budget and Finance

Currently funding appropriated by the State Fire Marshal’s Office is insufficient to meet the stated objectives. Additional funds that will be made available through the National Fire Plan should be earmarked for enhancing the capabilities of fire departments. Additional funding source include BLM (Rural Fire Assistance Program) NM Forestry Division (Volunteer Fire Assistance Program) and Federal Emergency Management Association (FEMA) grants. The fire departments will be responsible for coordinating directly with Socorro County to pursue FEMA grant opportunities. BLM and NM Forestry Division will work in conjunction with Socorro County to prioritize distribution of grant funds as they become available.

Equipment Available

A. Volunteer and Municipal Fire Departments

<i>FIRE DEPARTMENT</i>	<i>EQUIPMENT</i>
ABEYTAS FIRE DEPARTMENT (Volunteer)	Brush truck (1) Tankers (2) Engine, Structural (1)
HOP CANYON FIRE DEPARTMENT (Volunteer)	Brush Truck (1) Engines, Structural (2) Tanker (1)
LA JOYA FIRE DEPARTMENT (Volunteer)	Brush Truck (1) Tanker (1) Engine, Structural (1)
MIDWAY FIRE DEPARTMENT (Volunteer)	Brush Truck (2) Engines, Structural (2) Tanker (1)
SAN ANTONIO FIRE DEPARTMENT (Volunteer)	Brush Truck (1) Engines, Structural (3) Tanker (3)
VEGUITA FIRE DEPARTMENT (Volunteer)	Brush Truck (2) Engines, Structural (2) Tanker (2)
SOCORRO FIRE DEPARTMENT (Municipal, paid)	Engines, Structural (4)
MAGDALENA FIRE DEPARTMENT (Municipal, Volunteer)	Brush Truck (?) Engines, Structural (?) Tanker (?)

B. BLM

BLM	EQUIPMENT
SOCORRO	<i>1 Type 6 Light Engine 1 5,000 gallon water trailer 25 person fire cache 2 F350 4 x 4 pickups (6 seats) 1 D-6 Dozer (varies within district) 1 Truck with lowboy trailer transport</i>
ALBUQUERQUE	<i>1 Type 6 Light Engine (Grants) 1 Type 4 Heavy Engine 20 person fire cache</i>

C. US Forest Service

US FOREST SERVICE	EQUIPMENT
MAGDALENA	
Magdalena	<i>10 person reg Forest Service fir crew 2 type 6 wildland engine 20 person SWFF fire crew 10 person SWFF camp crew 20 person fire cache 1,000 gallon water trailer 2 porta/dip tanks Misc. support vehicles & equipment</i>

D. NM Forestry Division

NEW MEXICO FORESTRY DIVISION	EQUIPMENT
SOCORRO	<i>3 type 6 light engines 40 Person fire Cache</i>

E. Fish & Wildlife Service

FWS	EQUIPMENT
Bosque del Apache Wildlife Refuge	1- type 6 light engine
Sevilleta Wildlife Refuge	1- type 4 Heavy Engine

(blank)

APPENDIX 6
Socorro County
Local Community Water Supplies

Objective

To improve existing water systems and increase water supply to ensure adequate water supply for local firefighting efforts.

Work Completed

Abeytas has a 30,000 gallon storage tank.

Hop Canyon has a? Gallon storage tank.

La Joya has Fire Hydrants in area.

Midway has Polvadera water system to cover their area.

San Antonio has San Antonio water system to cover their area.

Veguita has 42,000 gal. Tanks to cover their area.

Magdalena has a water system for their village.

Socorro has a water system for the city.

.

Work Scheduled

Budget and Finance

Explore methods to use funds that are being allocated through the National Fire Plan and other community assistance programs to assist the county and local fire departments to install these improvements. FEMA and VFA/RVA grants are available for these types of projects.

(blank)

APPENDIX 7 Socorro County Infrastructure Protection

1. INFRASTRUCTURE PROTECTION

A. COMMUNICATIONS

1. Communication Sites

Objective

The objective is to mitigate the threat of an intense wildfire that could threaten the communications equipment at the site. Fuel types immediately adjacent to the communication sites consists of heavy brush pinon-juniper ponderosa pine and mixed conifers depending upon the elevation.

Electronic equipment on the sites includes:

- City of Socorro Fire Dept. and EMS radio repeater
- State of New Mexico Communications Bureau radio repeaters
- Cellular phone contractor
- U.S. Forest Service/Bureau of Land Management radio repeaters
- NM State Police
- Socorro County Volunteer Fire Departments
- US Border Patrol
- Sierra County Road Department

Repeater sites:

Work Completed and scheduled is itemized on Action Plan

2. Communication Needs

Objective

The objective is to improve communications between federal, state, county and local entities to maximize the use of current communications infrastructure and improve communications where they are currently inadequate and unsafe.

Work Completed and scheduled itemized in Action Plan

COMMUNICATION SITES OVERVIEW

3. Communications/Emergency Operations Plan

Objective

The purpose of this plan is to describe how Socorro County will handle emergency situations and/or disasters within its jurisdiction. It assigns responsibilities for emergency preparedness and planning and for coordinating Emergency response activities before during and after any type of emergency or disaster. A *DRAFT* plan is a part of this Appendix.. Fire departments will develop site-specific plans for their own jurisdictions.

B. UTILITIES

Objective

To open a clear and direct dialogue between the USDA-FS, BLM and other entities and companies on all right-of-way responsibilities and procedures regarding the installation maintenance and responsibilities of all utilities that service areas in Socorro County. Further objectives:

Create a feathered appearance from edge of right-of-way back into the adjoining forest stand so that approaching crown fires would have the potential to become ground fires which would result in reduced spread.

Reduce fuels to minimize arcing of power lines during wildfire prescribed fire and strong wind events. Transmission lines are very sensitive to smoke. The actual lines must be cleaned by hand.

C. In some areas especially on large interstate type transmission lines the lines are very high due to canyon spans and typically are not affected by wildland fires.

D. Approved herbicides and growth retardants would be beneficial in controlling vegetation.

E. Utility substations need to be treated including areas outside of chain link fences.

F. Amend and review all agreements with cooperators as needed to be sure that there are no issues or concerns that will hinder appropriate actions.

ADDITIONAL MITIGATION MEASURES

Electrical Power lines — Includes two classifications:

Interstate Transmission: Plains Electric Co Op

Local Service: Socorro Electric Coop

Telephone Service

Most all lines are underground; the main company serving Socorro County is Qwest Communications, with ENMR-Plateau serving the eastern part of the county, and Western New Mexico Telephone Company serving the western part.

Propane Companies

AX Gas

Cortez Gas

Action Gas

Highway Rights-of-Way.

Socorro County is in District 1 in the State Highway Department's organizational structure. The major highways in Socorro County consist of:

1. State Highway 380 (I-25 to county line east)
2. State Highway 60 (I-25 to county line east)
3. State Highway 60 (I 25 to county line west)
4. Highway 304 (Junction with Highway 60 to county line north).
5. Highway 304 (Junction with Highway 60 to La Joya on the south)
6. Highway 109 (Junction with Highway 60 to county line north).
7. Highway 408 (Lemitar on the south to Polvadera to the north).
8. Highway 169 (Highway 60 to the south through the Alamo to county line to the north)
9. Highway 1 (County line on the south to city of Socorro on the north).

There are numerous secondary roads (County and Forest Service) and private (ranch) roads.

Objective

The primary objective is to develop a procedure where the right-of-ways along all major roads are managed so that tree densities allow motorist to see and avoid wildlife safely. Additionally if these right-of-ways were thinned and maintained they could be used as viable fuel breaks and pre-suppressions lines by wildfire suppression resources.

The USDA Forest Service currently holds the right-of-way titles where the highway crosses National Forest lands. On BLM lands some areas are dedicated highway right-of-ways and others are under special highway designation status. Where highways cross State Trust land the State Land Office holds the title, with a lease being to the State Highway Department.

Maintaining aesthetics and viewsheds is an issue.

Prescriptions for recovery and thinning zones have been approved and implemented by the State Highway Department in other Districts. These prescriptions should be considered for use and could be adapted for areas within Socorro County under a categorical exclusion procedure.

These approved prescriptions consist of:

Recovery Zone: clear everything from white line to 24 feet out regardless of slope.

Thinning Zone: from recovery zone out to 53 feet or to right-of-way fence, whichever comes first; thin Ponderosa Pine under 9" in diameter and all other species under 12" diameter; All trees will be pruned up to 6" above ground level.

(blank)

High Priority NTMB Species
Cibola 2005 list

Blue grouse
Scaled quail
Montezuma quail
Band-tailed pigeon
Flammulated owl
Elf owl
Black-chinned hummingbird
Broad-tailed hummingbird
Williamson's sapsucker
Red-naped sapsucker
Olive-sided flycatcher
Gray flycatcher
Loggerhead shrike
Piñon Jay
Bendire's thrasher
Crissal thrasher
Olive warbler
Virginias warbler
Black-throated gray warbler
Grace's warbler
Red-faced warbler
Painted redstart
Black-chinned sparrow
Vesper sparrow
Eastern meadowlark

Cibola D3 (Magdalena) list of Regional Forester Sensitive Species as of 01/2006

MAMMALS		Status on District
Black-tailed prairie dog	<i>Cynomys ludovicianus</i>	S*
Mexican gray wolf	<i>Canis lupus baileyi</i>	S*
Rocky Mountain bighorn sheep	<i>Ovis canadensis canadensis</i>	S*
BIRDS		
Northern goshawk	<i>Accipiter gentilis</i>	SB
American peregrine falcon	<i>Falco peregrinus anatum</i>	SB
Bald eagle	<i>Haliaeetus leucocephalus</i>	S
Mexican spotted owl	<i>Strix occidentalis lucida</i>	SB
Loggerhead shrike	<i>Lanius ludovicianus</i>	S
Gray vireo	<i>Vireo vicinior</i>	S?
Montezuma quail	<i>Cyrtonyx montezumae</i>	SB
AMPHIBIANS		
Chiricahua leopard frog	<i>Rana chiricahuensis</i>	S?
Northern leopard frog	<i>Rana pipiens</i>	S?
FISHES		
Rio Grande silvery minnow	<i>hybognathus amarus</i>	HD
SNAILS		
Alamosa springsnail	<i>Tryonia alamosae</i>	HD
Socorro springsnail	<i>Pyrgulopsis neomexicana</i>	HD
INSECTS		
Blue-back silverspot butterfly	<i>Speyeria nokomis nokomis</i>	S
NM silverspot butterfly	<i>Speyeria nokomis nictocris</i>	S
PLANTS		
Zuni fleabane	<i>Erigeron rhizomatus</i>	S
Horrid herrickia	<i>Eurybia horrida</i>	S?
San Mateo penstemon (also called Crosswhite Mt. Washington beardtongue)	<i>Penstemon pseudoparvus</i>	S?
Parish's alkali grass	<i>Puccinellia parishii</i>	S?
Spellenberg's groundsel	<i>Senecio spellenbergii</i>	S?

STATUS DEFINITIONS:

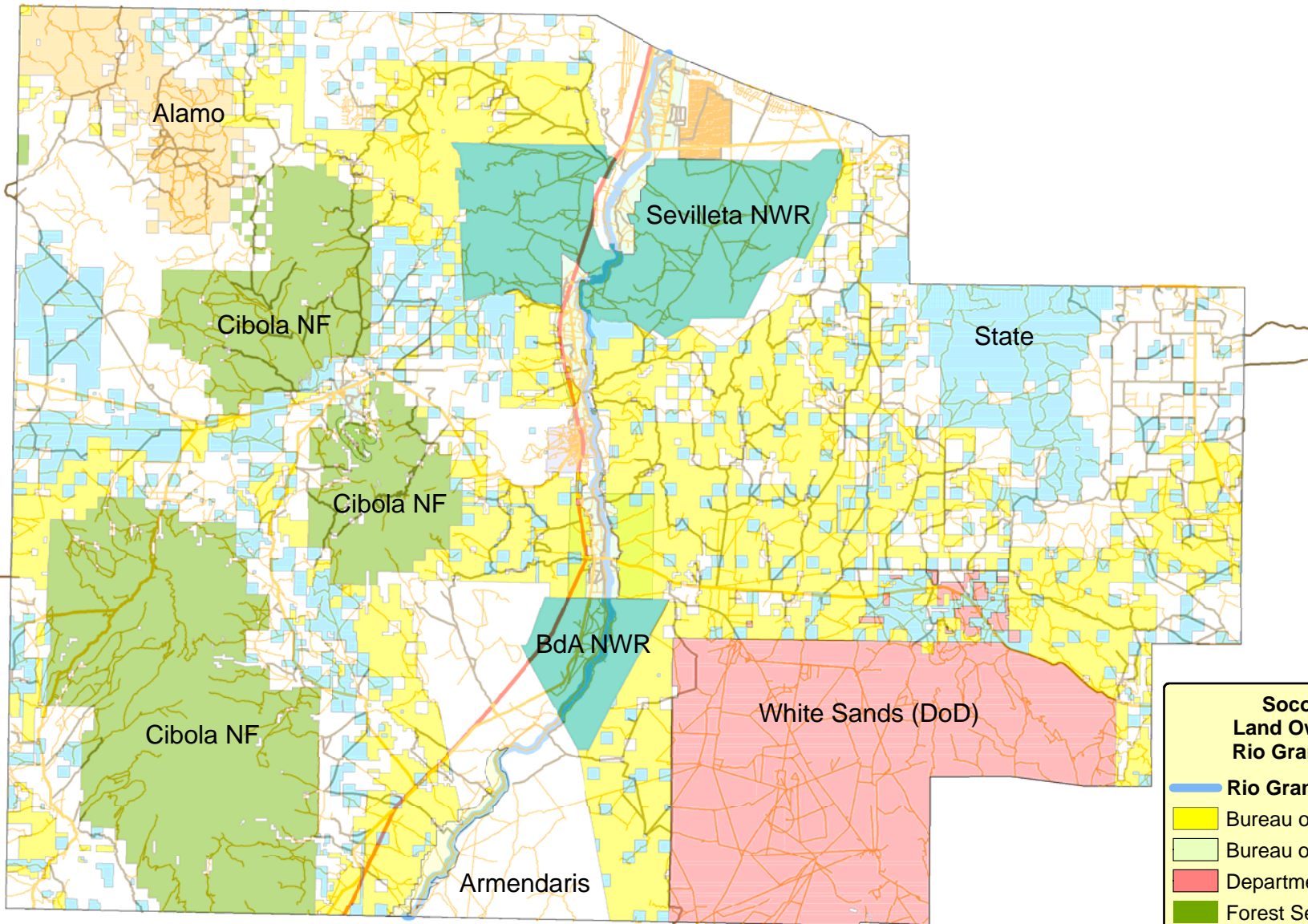
- S Presence of species documented and likely still occurs;
- S* Presence of species documented or almost certainly occurred, but almost certainly no longer occurs on District;
- S? Presence of species not documented, or unknown, but may occur because suitable habitat occurs;
- SB Breeding of species documented;
- HD Habitat not on District, but actions on District may impact habitat downstream of District.

Management Indicator Species (MIS) for Cibola National Forest Mountain Districts
(March 18, 2005)

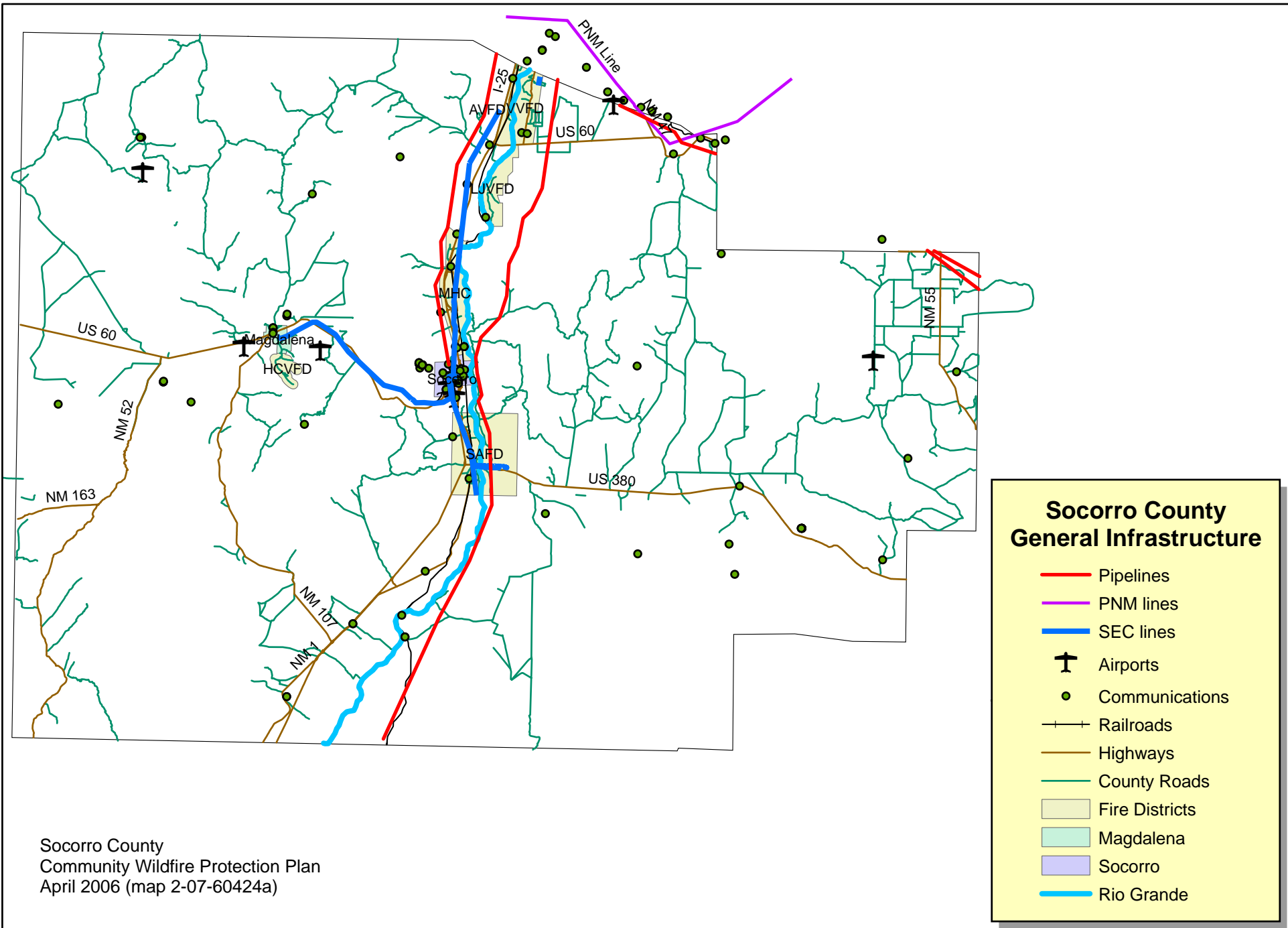
SPECIES

INDICATOR HABITAT

Elk (<i>Cervus elaphus</i>)	Mountain grasslands / mixed conifer
Mule deer (<i>Odocoileus hemionus</i>)	Mountain shrub / Piñon-juniper
Red-naped sapsucker (<i>Sphyrapicus varius</i>)	Deciduous forest
House wren (<i>Troglodytes aedon</i>)	Riparian
Juniper titmouse (<i>Baeolophus ridgwayi</i>)	Piñon-juniper
Red-breasted nuthatch (<i>Sitta Canadensis</i>)	Spruce-fir
Black bear (<i>Ursus americanus</i>)	Spruce-fir / Mixed conifer
Pygmy nuthatch (<i>Sitta pygmaea</i>)	Ponderosa pine
Hairy woodpecker (<i>Dendrocopos villosus</i>)	Mixed conifer
Merriam's turkey (<i>Meleagris gallopavo merriami</i>)	Ponderosa pine



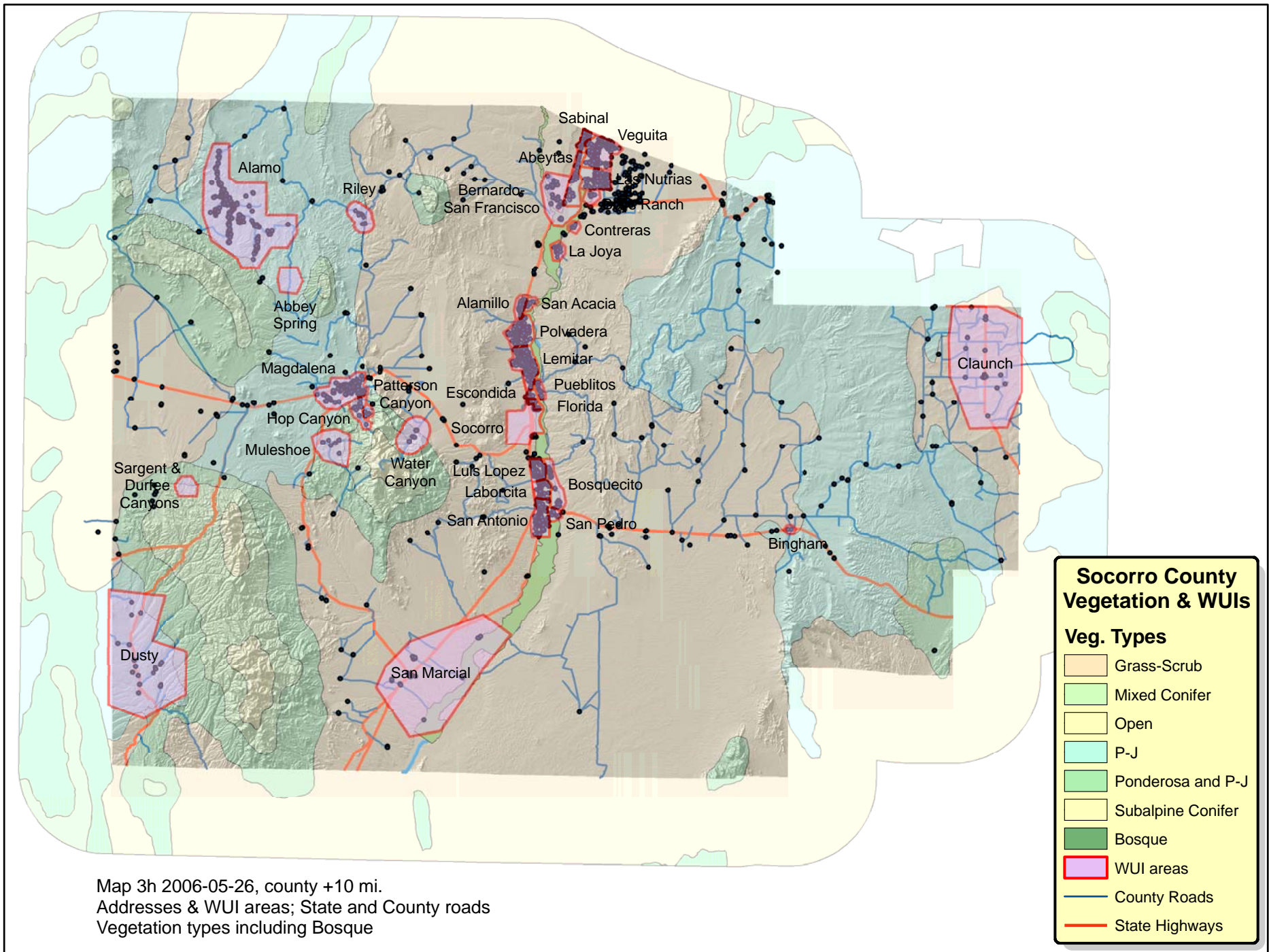
Socorro County
Community Wildfire Protection Plan
May 2006 (map1-03or-60526)



Socorro County General Infrastructure

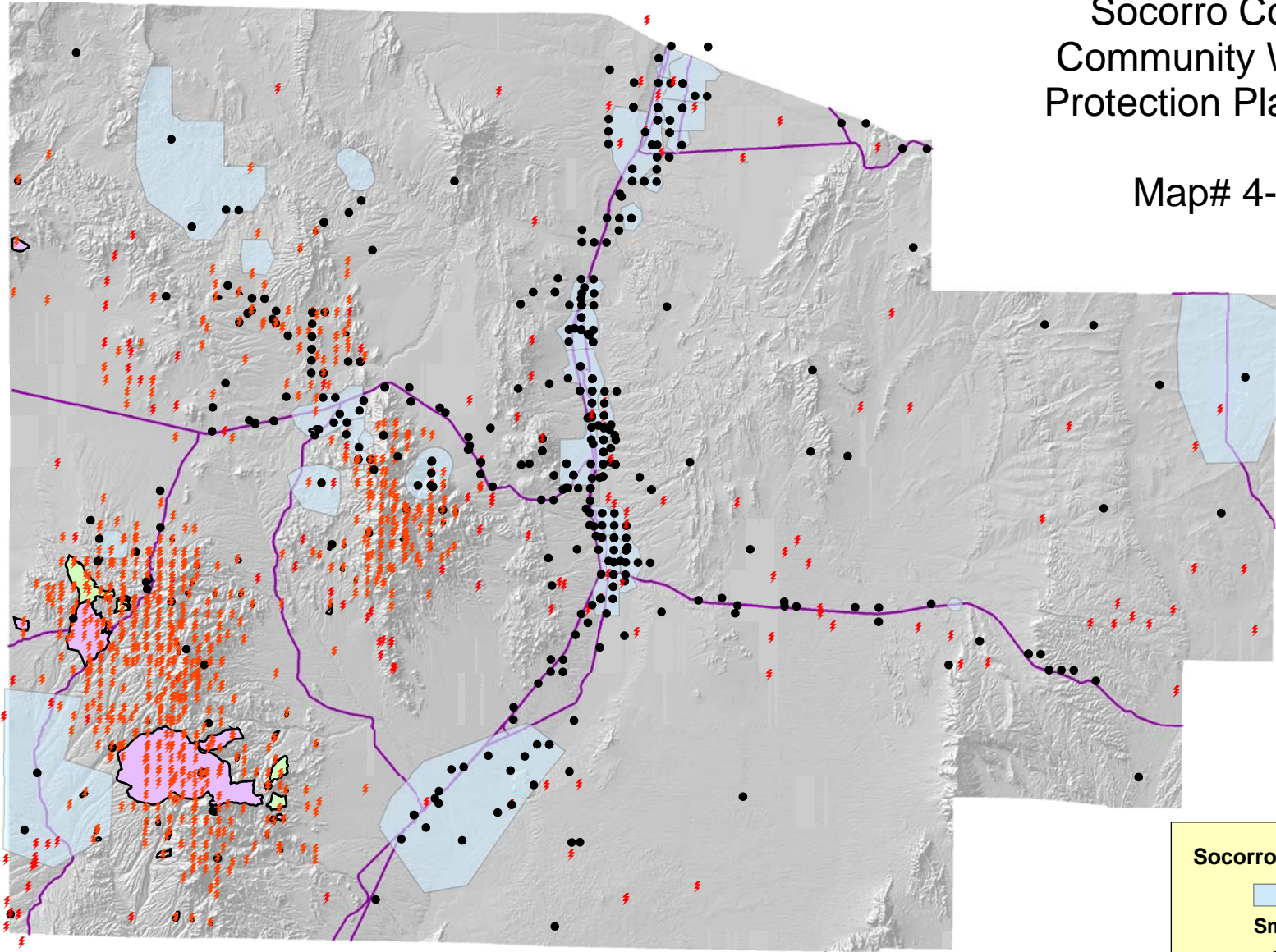
- Pipelines
- PNM lines
- SEC lines
- Airports
- Communications
- Railroads
- Highways
- County Roads
- Fire Districts
- Magdalena
- Socorro
- Rio Grande

Socorro County
 Community Wildfire Protection Plan
 April 2006 (map 2-07-60424a)



Socorro County Community Wildfire Protection Plan 2006

Map# 4-07



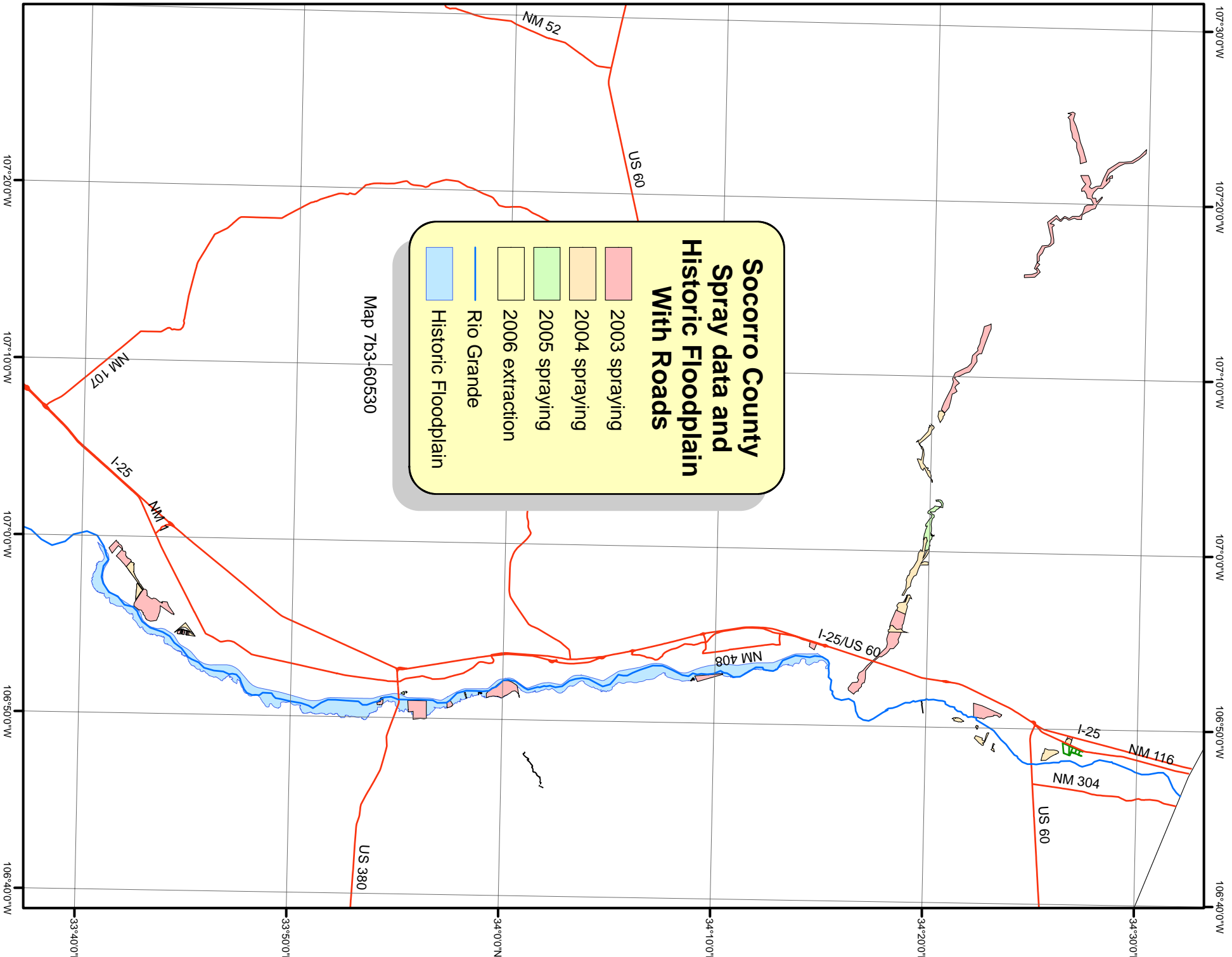
US Forest Service fire history 1970-2004;
NM State Forestry fire history 1987-2005;
BLM fire history 1980-2002

Socorro County Fire History

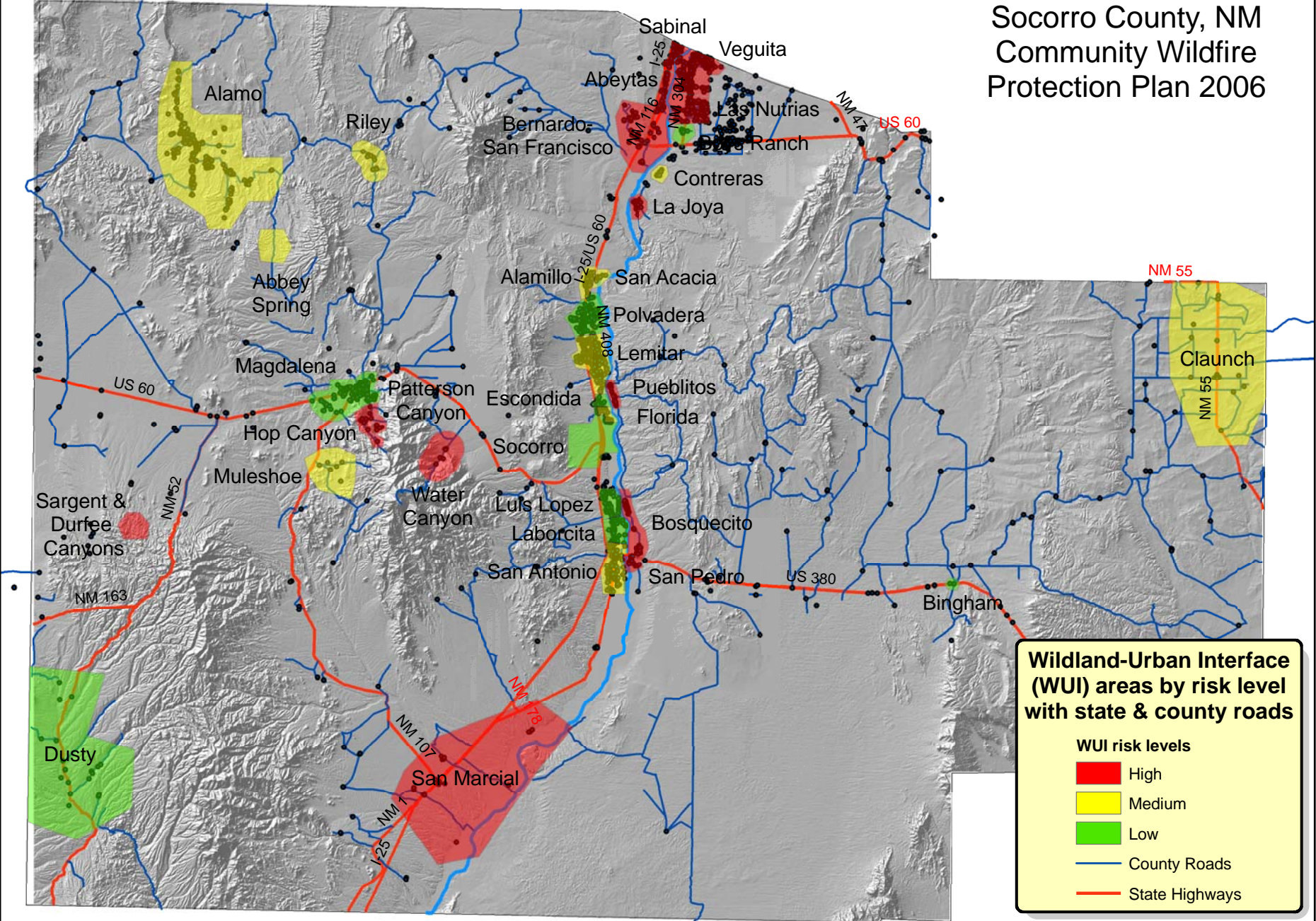
- WUI areas
- Small fires**
 - Human-caused
 - Lightning
- Large fires**
 - Large fires
 - Prescribed burns



Map 6b



Socorro County, NM Community Wildfire Protection Plan 2006



Wildland-Urban Interface (WUI) areas by risk level with state & county roads

WUI risk levels

- High
- Medium
- Low
- County Roads
- State Highways