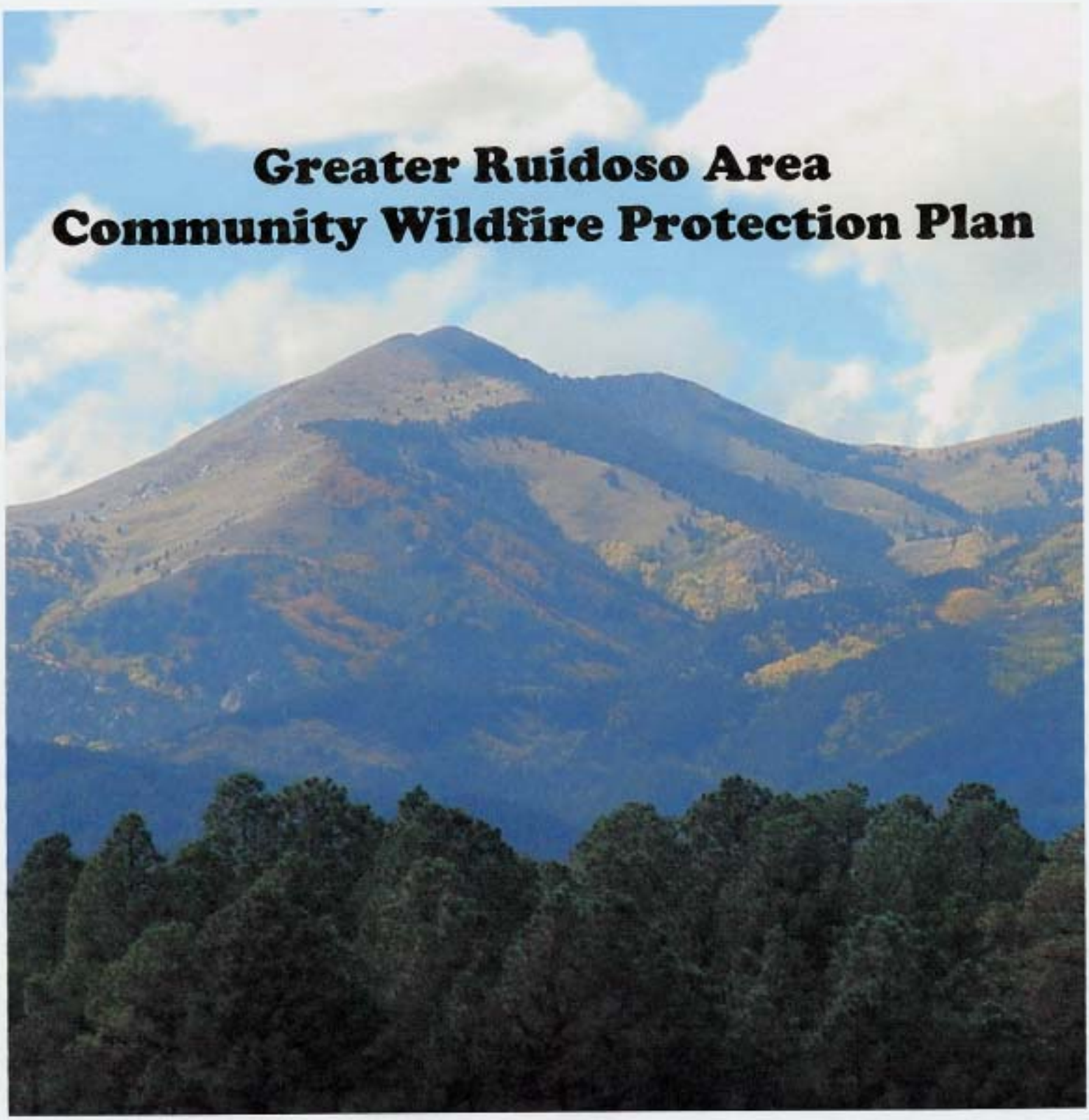
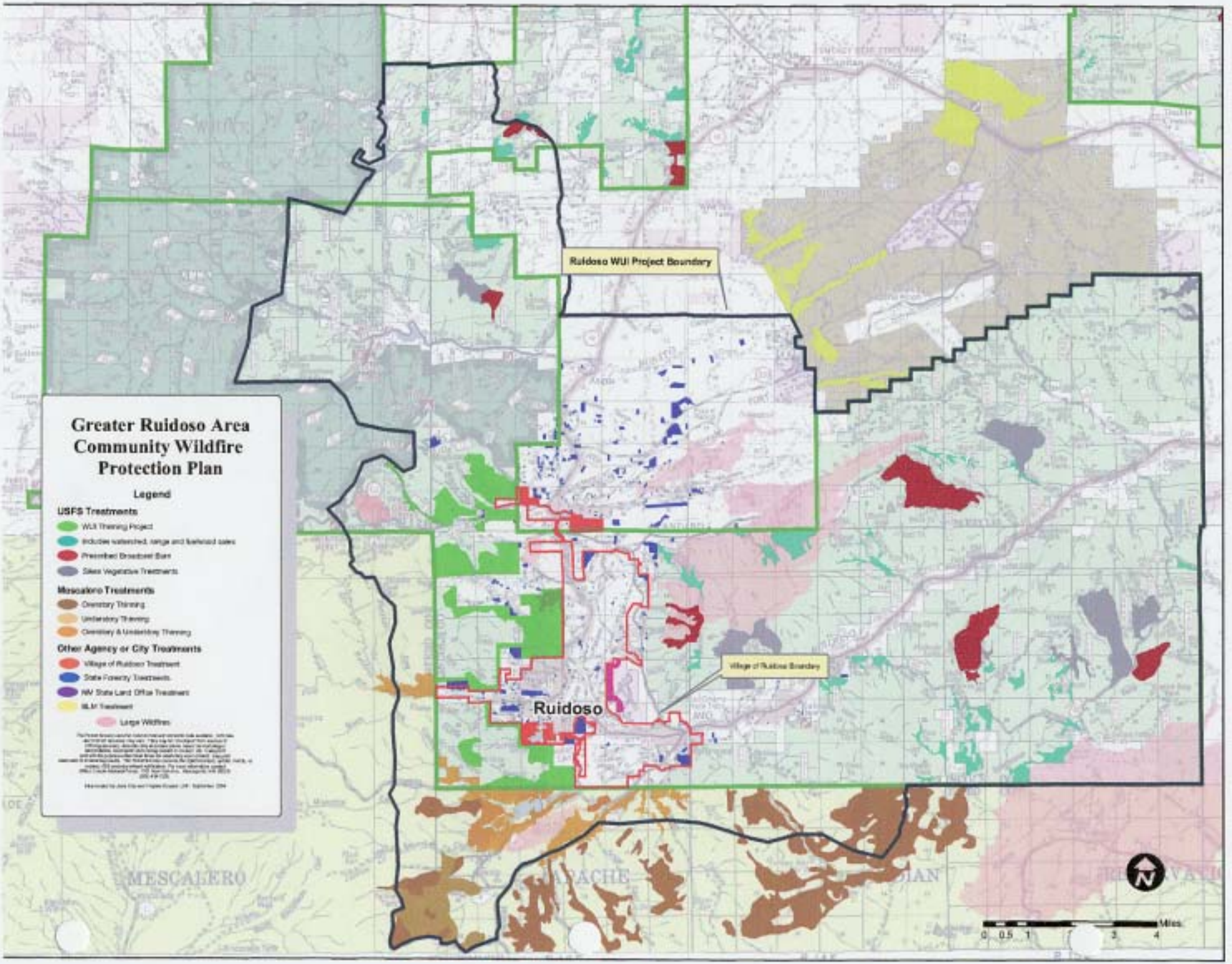
Greater Ruidoso Area Community Wildfire Protection Plan




Greater Ruidoso Area Community Wildfire Protection Plan
Legend
USFS Treatments
WUI Thinning Project
Includes watershed, range and fuelwood sales
Prescribed Broadcast Burn
Sales Vegetative Treatments
Mescalero Treatments
Overstory Thinning
Understory Thinning
Overstory & Understory Thinning
Other Agency or City Treatments
Village of Ruidoso Treatment
State Forestry Treatments
NM State Land Office Treatment
BLM Treatment
Large Wildfires
Ruidoso WUI Project Boundary
Village of Ruidoso Boundary
Ruidoso
MESCALERO
APACHE
N
0 0.5 1 3 4
Miles

COMMUNITY WILDFIRE PROTECTION PLAN

for jurisdictions and stakeholders located within the

Greater Ruidoso Area Wildland Urban Interface

In accordance with the requirements and guidelines set forth in the *Healthy Forest Restoration Act* of 2003, the land management agencies and entities represented below, have agreed to address the challenges of forest health and wildfire hazard risk reduction within the jurisdictions of the *Greater Ruidoso Area Wildland Urban Interface Working Group*. This Community Wildfire Protection Plan (CWPP) represents a collaborative effort to address hazard mitigation, structure protection, and community preparedness.

COLLABORATION

Formal community-based forest planning and prioritization began in November of 2000 with the formation of the *Greater Ruidoso Area Wildland Urban Interface Working Group*. (formerly the Ruidoso Willand Urban Interface Group) **Each month, state, local, tribal, and federal agencies, in addition to fire departments, private landowners, insurers, and local businesses convene. The group discusses, fire hazard mitigation and fire protection planning projects that are focused in the established priority areas.** The collaborative group has identified numerous values at risk, including public safety, community infrastructure, economics, real estate, watershed productivity, cultural resources and values, recreational opportunities, woody products, wildlife habitat, ecosystem health, aesthetics, and historical sites. In addition, the group acts as a forum to share information regarding grant opportunities, public awareness themes, and system resources such as forest contractors and woody materials utilization enterprises.

Partners in the *Greater Ruidoso Area Wildland Urban Interface Working Group* include:

Bureau of Indian Affairs Mescalero Agency	Lincoln National Forest	Natural Resources Conservation Service
Bureau of Land Management	County of Lincoln	US Fish & Wildlife Service
EMNRD Forestry Division	Mescalero Apache Tribe	Village of Ruidoso
Ruidoso Fire Department	City of Ruidoso Downs	City of Alamogordo
Lincoln County Emergency Services	Ruidoso Downs Volunteer Fire Department	Bonito Volunteer Fire Department
Nogal Volunteer Fire Department	Glencoe/PaloVerde Volunteer Fire Department	South Central Mountain Resource Conservation & Development Council
Upper Hondo Soil and Water Conservation District	Lincoln County Solid Waste Authority	SBS Wood Shavings
Sierra Contracting & Composting	City Bank New Mexico	Ranches of Sonterra Property Owner's Association
High Country Insurance	KBUY/KWES Radio	Ruidoso News
Alto Lakes Golf & Country Club	Sun Valley Water and Sanitation District	Zia Natural Gas
New Mexico Environment Dept	New Mexico State Land Office	Ecological Restoration Institute

additional homeowners associations, local, state and federal elected officials and various thinning contractors.

PRIORITIZED FUEL REDUCTION

As indicated on the attached map, the *Greater Ruidoso Area Wildland Urban Interface Working Group* has established geographical boundaries where priorities and treatments are being applied. **The map is a multi-jurisdictional product showing the collaborations of planning and implementation. Priorities are further defined by location in the southwest portion of the Wildland Urban Interface based on group consensus considering historic wind directions during fire season.** Wildfire entering the Wildland Urban Interface from the southwest during a high wind event is the worst-case scenario. Each individual community within the Wildland Urban Interface will seek funding and implement projects within their jurisdiction. Emphasis will be placed on prioritizing treatable forest areas located on the southwest side of jurisdictions, while all high hazard forest areas, regardless of location, will eventually be considered for treatment. Prioritization of forest health and watershed management issues will be addressed when considering areas for treatment, such as acres affected or susceptible to insect and disease outbreaks.

Approximately 164,000 acres are encompassed within the Greater Ruidoso Area Wildland Urban Interface including two incorporated communities, numerous unincorporated communities, and federal, private, municipal, state trust, and tribal lands.

Treatment goals recognize the need for various management objectives within the different land owning agencies and entities. **Individual treatment prescriptions will vary, but the members of the group have agreed upon general overarching treatment goals. They are to:**

1. **Encourage or Establish and Implement catastrophic fire mitigation measures on public, private, state, and tribal lands utilizing the best available science regarding wildfire hazard reduction.**

2. **Restore and monitor forest ecosystems and watersheds to maintain forest health and protect communities.**

3. **Engage private enterprise by supporting existing and emerging forest-based economic development.**

4. **Maintain the high quality of life in forest areas while sustaining and nurturing real estate and tourism-based economies.**

Each community will build their own "piece of the puzzle," with regard to fuels management projects, based on available resources including grant opportunities and collaborations with local, state and federal agencies.

TREATMENT OF STRUCTURAL IGNITABILITY

In addition to fuels management measures, the *Greater Ruidoso Area Wildland Urban Interface Working Group* recognizes the need to provide guidelines and recommendations to homeowners and communities within the Wildland Urban Interface to reduce the potential of structural ignitability, through public awareness campaigns such as Firewise Workshops. **The group recommends implementation of programs or methods that assess structural ignitability by use of a "fire hazard rating form" similar to examples provided in the URBAN WILDLAND INTERFACE CODE created by the International Fire Code Institute.** Attached is the fire hazard rating form included in the Village of Ruidoso Ordinance 2004-02. This form can be amended as needed for specific needs of the communities within the Wildand Urban Interface.

"We the undersigned endorse and support the Community Wildfire Protection Plan:"

Mescalero Apache Tribal Council

President Mark Chino 12/21/04
Mark Chino date

Vice President Ferris Palmer 12/21/04
Ferris Palmer date

Secretary Glenda Brusuelas 12/29/04
Glenda Brusuelas date

Treasurer Alfred La Paz 12/21/04
Alfred La Paz date

Council Member Alta M. Branham 12-21-04
Alta May Branham date

Council Member Fredrick Chino Sr. 12/21-04
Fredrick Chino Sr. date

Council Member Albert Platta Sr 12/21/04
Albert Platta Sr. date

Council Member Dorlynn Simmons 12/21/04
Dorlynn Simmons date

Council Member Larry Shay 12/21/04
Larry Shay date

Council Member Naomi Sainz 12-22-04
Naomi Sainz date

"We the undersigned endorse and support the Community Wildfire Protection Plan:"

City Of Ruidoso Downs

Mayor Bob A. Miller — date 10/25/04

Councilor Judy Miller — date 10/25/04

Councilor Susan J. Garrett — date 10/25/04

Councilor Margie Morales — date 10/25/04

Councilor Rene G. Olivo — date 10/25/04

"We the undersigned endorse and support the Community Wildfire Protection Plan:"

Lincoln County

Commissioner _____
Rex Wilson date

Commissioner Maurice St. John 10-19-04
Maurice St. John date

Commissioner approved - but absent for signature T. Stewart
Leo Martinez date

Commissioner _____
Earl B. Hobbs date

Commissioner _____
Rick Simpson date

VILLAGE OF RUIDOSO
RESOLUTION 2004-24

A RESOLUTION ADOPTING THE "COMMUNITY WILDFIRE PROTECTION PLAN" DEVELOPED BY THE ***GREATER RUIDOSO AREA WILDLAND URBAN INTERFACE WORKING GROUP*** IN COMPLIANCE WITH THE REQUIREMENTS OF THE HEALTHY FOREST RESTORATION ACT OF 2003 FOR THE PURPOSE OF FUNDING, PLANNING AND IMPLEMENTING COMMUNITY PROTECTION AND WILDFIRE HAZARD MITIGATION ACTIVITIES

WHEREAS, the Healthy Forest Restoration Act of 2003 makes funds available through programs to conduct community protection and wildfire hazard mitigation activities on federal and non federal lands to qualifying agencies and entities; and

WHEREAS, a mandatory qualification defined in the Healthy Forest Restoration Act of 2003 to access funding programs is to develop a plan called a "Community Wildfire Protection Plan" (CWPP) through local *collaboration* that *prioritizes fuels reduction* and addresses *treatment of structural ignitability*; and

WHEREAS, the Village of Ruidoso has participated in the ***GREATER RUIDOSO AREA WILDLAND URBAN INTERFACE WORKING GROUP*** since November of 2000 serving the Village of Ruidoso as well as other agencies and entities located within a geographic area called the Greater Ruidoso Area Wildland Urban Interface; and

WHEREAS, this collaboratively developed CWPP including the Village of Ruidoso's specific programs, services and activities referred to as Ruidoso's *Community Forest Management Plan* meet requirements and is supported by New Mexico Energy, Minerals, Natural Resources Department – Forestry Division and the Village of Ruidoso's Fire Chief:

NOW THEREFORE, be it resolved by the Governing Body of the Village of Ruidoso that the attached "Community Wildfire Protection Plan" be and hereby is adopted.

PASSED, APPROVED, AND ADOPTED this 12th day of October 2004.

Leon Eggleston

E. Leon Eggleston, Mayor

SEAL
ATTEST:

Irma Nava, Village Clerk

"We the undersigned endorse and support the Community Wildfire Protection Plan:"

New Mexico Forestry Division:

Capitan District Forester _____ 10/4/04
Barbara E. Luna date

Fire Departments:

Lincoln Co. Emergencey Services: _____ 10/4/04
William Martin date

For:

Bonito Fire Volunteer Fire Department

Glencoe/PaloVerde Volunteer Fire Department

Nogal Volunteer Fire Department

Municipal Fire Department Chiefs:

Ruidoso Fire Department _____ 10/4/04
Virgil Reynolds date

Ruidoso Downs Fire Department
Department of Public Safety _____ 10-04-04
Robert Logan date

"We the undersigned support the Community Wildfire Protection Plan:"

Collaborating Agencies

Bureau of Indian Affairs

Bernie Ryan — 10-6-04 date

Lincoln National Forest
Forest Supervisor

acting for:
Jose M. Martinez — 10/6/04 date

Smokey Bear Ranger District
District Ranger

Juan E. (Buck) Sanchez — 10/6/04 date

Bureau of Land Management
Pecos District

for Doug Burger Acting — 10/7/04 date

New Mexico State Land Office

Jim Norwick — 10/8/04 date

"We the undersigned endorse and support the Community Wildfire Protection Plan:"

Unincorporated Communities:

Alto Lakes Golf & Country Club

Roy Reynolds 10/6/04
Roy Reynolds date

Ranches of Sontera Property Owners Association

10/7/04
Gil Foster date

Sun Valley Water & Sanitation District

10-6-04
Harry Tiemersma date

Supporting Stakeholders:

Natural Resources Conservation Service

New Mexico Environment Department

U. S. Fish & Wildlife Service

NAU Ecological Restoration Institute

City of Alamogordo

South Central Mountain RC&D

Upper Hondo SWCD

Lincoln County Solid Waste Authority

Mescalero Forest Products

SBS Wood Shavings

Sierra Contraction & Composting

City Bank New Mexico

Zia Natural Gas

High Country Insurance

KBUY/KWES Radio

Ruidoso News

Southeastern NM Economic Development District

Eastern New Mexico University, Ruidoso

APPENDIX DOCUMENTS (CHECKLIST):

1. CONSIDERATIONS FOR PLANNING PONDEROSA PINE VEGETATIVE TREATMENTS IN THE SOUTHWEST

2. VILLAGE OF RUIDOSO ORDINANCE NO. 2004-05 FOREST MANAGEMENT
   VILLAGE OF RUIDOSO ORDINANCE NO. 2004-02 URBAN-WILDLAND INTERFACE CODE ADOPTED; AMENDMENTS
   FIRE HAZARD RATING FORM
   VILLAGE OF RUIDOSO ORDINANCE NO. 2004-04 STANDARDS FOR FIRE SAFETY AND FIRE HANDLING
   VILLAGE OF RUIDOSO FUELS MANAGEMENT STANDARDS

3. GREATER RUIDOSO AREA WILDLAND/URBAN INTERFACE WORKING GROUP: LIST OF PARTNERS (ROSTER)

4. GLOSSARY OF TERMS

5. FIREWISE LANDSCAPING CHECKLIST
   FIREWISE CONSTRUCTION CHECKLIST

6. REFERENCE MATERIALS

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CONSIDERATIONS FOR PLANNING PONDEROSA PINE VEGETATIVE TREATMENTS IN THE SOUTHWEST

Research findings compiled by Charles W. Denton,
Ecological Restoration Institute, Northern Arizona University

I. RESTORATION:

Restoration of forest ecosystem health requires that the ecosystem function within its range of natural variability. This requires that the structure of the ecosystem be within the range of natural variability.

Historical Information (Woolsey, 1876):

A. Coconino National Forest: Average of 43 total trees per acre.

SIZE CLASSES (DBH)	PERCENT OF TOTAL STAND	TOTAL TREES
4-10 INCHES	32%	14
10-19.5 INCHES	42%	18
19.5-29 INCHES	19%	8
29+ INCHES	7%	3

B. New Mexico National Forests (Jemez NF, Gila NF, Cibola NF)
Average of 73 trees per acre.

SIZE CLASSES (DBH)	PERCENT OF TOTAL STAND	TOTAL TREES
4-10 INCHES	48%	35
10-19.5 INCHES	37%	27
19.5-29 INCHES	12%	9
29+ INCHES	3%	2

Historical Information (White): 74% of the trees in the 1876 were under 100 years old.

- Structure was uneven-aged clumps and openings. Average clump size ranged from 0.05 to 0.33 acres (White).
- Structure was maintained over hundreds if not thousands of years.
- Consider long- term capacity of land.
- Stands survived several severe, protracted droughts.
- Stands survived several insect epidemics.

II. FIRE

Research has shown:

- Treatments work in reducing fire hazard.
- Newer treatments are better than older treatments.
- Mechanical treatment with pile and burning of slash are the best treatments for reducing fire behavior.
- Prescribed fires, by themselves, work well for one to three years, decreasing in viability each year until there is no effect after year ten.
- Thinnings from below are not effective in reducing crown fires if the crowns are still interlocked or in close relation to each other.
- Winds above 25 miles per hour can carry independent crown fire.
- Fuelbreaks by themselves are not effective. Spot fires can still occur.
- Lop and scatter slash treatments can cause problems for up to ten years after treatment.
- Leaving slash or chips can lock up available nitrogen.
- Treatments thus far have been too narrow, too small, and too few to be effective in reducing stand replacing fire behavior.
- Diameter caps and thinnings from below do not ensure a reduction in crown fire risk.

Considerations:

- What kind of fire are you looking to eliminate or reduce the possibility of? Crown? Catastrophic? Protection of the community and infrastructure?
- Catastrophic and crown fires in the southwest almost always have a wind component, so consider wind when designing prescriptions.
- In considering fire use or "letting fire play its role," realize that the fires in pre-settlement times were large, wind driven grass fires (90% in the spring). Also, consider all the values at risk (communities, recreation areas, private property, critical habitat, watersheds, and smoke issues (legal, social, medical).
- "Natural fire" cannot play a role presently until stand densities are lowered significantly.
- Leaving clumps of dense trees reduces value of a project for fire hazard reduction. The clumps remain a risk to themselves, other clumps, and the entire project.
- Spotting in ponderosa pine is very common up to one-half mile and common up to a mile from a main fire. Recent fires have had active spot fires up to three miles.

III SILVICULTURE

Research has Shown:

- Fire perpetuated and maintained uneven-aged stands.
- Ponderosa pine needs bare soil and a lot of sunlight for regeneration.
- Moderate thinning neither releases trees for growth, nor allows for regeneration, and encourages shade tolerant tree species.
- Moderate thinning requires re-treatment within 10-15 years.
- Research at Taylor Woods has shown that 60 square feet of basal area (BA) is the breaking point for release of tree growth. Higher basal areas show significant reductions in diameter growth.
- A residual stocking level of 30-60 BA allows for the same growth amount as a stocking level of 60 BA but on fewer trees, i.e., wood volume accumulates at the same rate on fewer trees due to faster growing conditions in the more-open stands.
- Low BA must be maintained over time to continue tree growth.
- Vigor and health of individual trees of all ages are improved with full restoration thinnings.
- Dense stands of trees did not exist across the landscape (except for the possibility of seedlings and saplings at certain times which were then removed by wildfire).
- Thinnings from below, and diameter caps, can create even-aged stands while not reducing the wildfire hazard.

Consideration:

- A prescription which takes a stand to a low basal area (60 BA) and develops "clumps and openings" will result in a vegetative structural stage (VSS) of One and possibly a VSS of Two. Additionally, the action will concurrently create the likelihood of VSS Five or VSS Six in the future.

IV UNDERSTORY

Research has shown:

- Ponderosa pine grew in clumps and openings, especially on clay based soils.
- Openings were covered with grasses and forbs and occupied 70-80% of the landscape.
- After full restoration thinnings, the native grass stands re-establish themselves within two to three years (if there is seed in the soil bank).
- Although some invasive species appear after restoration thinnings, they are nowhere near the order of magnitude as the invasion of exotics after a wildfire.
- Some invasive species are temporary, leaving the treatment area after five to eight years.
- Some areas may need protection after treatment from livestock, elk, deer, people, off road vehicles, etc…
- Habitats of several species of mammals, birds, and insects, are improved by full restoration because of an increase in understory forage.
- Density, diversity, and vigor of understory species all increase in fully restored stands.

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VILLAGE OF RUIDOSO

Ordinance No. 2004-05 (INFORMATION VERSION)

AN ORDINANCE AMENDING THE RUIDOSO MUNICIPAL CODE OF ORDINANCES CHAPTER 54 LAND USE, DIVISION 4 DEVELOPMENT STANDARDS, RELATING TO TERRAIN MANAGEMENT, FOREST MANAGEMENT, LANDSCAPING AND RELATED DESIGN STANDARDS ISSUES.

NOW THEREFORE, BE IT ORDAINED BY THE GOVERNING BODY OF THE VILLAGE OF RUIDOSO THAT Chapter 54 Land Use, Division 4 Development Standards, relating to terrain management, forest management, landscaping and related design standards issues be amended by repealing section 54-133 in its entirety and substituting new provisions designated as section 54-133 as follows:

Sec. 54-133. Forest Management.

(a) Purpose; intent. The purpose of this section is to protect the natural environment of the village for social, economic and environmental purposes. To this end, it is the intent of the forest protection standards to:

(1) Provide for the sound management, protection and maintenance of trees and woodland located in the village in order to prevent unhealthy overgrowth, excessive removal of vegetation, minimize damage from erosion and siltation, maintain or enhance appropriate wildlife habitat, reduce fire danger, and ultimately preserve the economic viability of the village, which is dependent upon the proper management of the natural resources in the area and in the interest of health, safety and general welfare of the residents of the village.

(2) Manage and protect the forest areas of the village to restore their health, preserve and protect old and large trees, and facilitate an added value concept to enhance aesthetics and property values.

a. Old or large trees shall be defined as any specie of tree, live or dead, sixteen (16) inches or greater in diameter measured four and a half (4.5) feet from the ground (DBH).

b. Old or large trees must be reviewed for issuance of a permit by the Director of Forestry prior to removal.

c. Old or large trees shall be subject to the provisions of subsection (c)(4) herein, relating to Protected Root Zone, notwithstanding considerations of minimum basal area requirements.

(b) Administration. The Director of Forestry or his duly authorized representative shall

have responsibility for administration of this section.

(c) Fuels management approval; exemptions.

(1) Residential fuels management. On all properties zoned R-1 (Single Family Residential), R-2 (Two Family Residential) and M-1 (Low Density Mobile Home), fuels management shall be in accordance with the provisions of section 42-80.

(2) Multi-family residential and non-residential fuels management. All fuels management on all properties zoned other than R-1, R-2 or M-1 shall be submitted to the Director of Forestry for approval prior to implementation. The director may require site plan approval, and shall utilize the provisions of section 42-80 as minimum standards.

(3) Exemptions. No permit, inspection or site plan is required for the removal of trees under the following conditions:

a. Fuels management treatments are approved by the Director of Forestry through forestry grant programs or site development;

b. When the proposed tree manipulation on R-1, R-2 or M-1 residential property will not reduce the basal area of the remaining trees on the property owner's land below 40 square feet per acre and no individual openings are greater than 25% of the total acreage; or

c. Removal is necessary due to emergency conditions.

d. Nothing herein shall exempt the removal of old or large trees from the permitting requirements of this code.

(4) Protected Root Zone. Trees to remain for consideration of minimum basal area requirements shall be protected above and below ground from damages caused by construction and site development activities as provided herein:

a. The Protected Root Zone shall be defined as a horizontal radius distance from the trunk of the tree. The distance varies by tree size, subject to the following minimums:

Tree height in feet	Horizontal Radius in feet
Less than 10	4
10-20	6
21-30	8
31-40	12
41-50	16
51-60	20
Greater than 60	24

b. No trenching, cut or fill activities, compaction or other ground disturbing activities may intrude closer than fifty (50) percent of the horizontal radius.

c. Paving and other non-pervious surfacing may not reduce the Protected Root Zone more than thirty (30) percent of the horizontal radius.

d. Temporary fencing or equivalent protective measures shall be installed around all trees to be considered for minimum basal area requirements within thirty (30) feet of ground disturbance. The temporary fencing shall be installed at the outer limit of the Protected Root Zone. This protection will remain in place until all construction and site development activities are complete or removal is approved by the Director of Forestry.

(5) Standards for tree removal activities.

a. All chainsaws, weed eaters and like equipment with two-cycle motors used in the removal of trees, slash and debris shall be equipped with spark arresters.

b. It is the responsibility of the property owner to provide for the disposal of the slash in a legal and appropriate manner. Failure to provide for disposal will subject the owner to the nuisance provisions of this Code.

c. Activity slash from all species to remain on site for firewood must comply with Section 42-80 in terms of size and spacing. In addition, each stack of green wood shall be covered with 6 ml. (minimum

thickness) clear/translucent plastic or like for a minimum of ten (10) months to minimize bark beetle habitat and infestation.

d. Individuals or contractors removing trees will be fully responsible for any damage to public and private property or utilities resulting from tree removal.

(6) Utility easements.

a. Rights and duties of utility franchisees. To provide for the general safety of the public, the utility franchisees of the village shall have the right and responsibility to maintain unobstructed utility easements or to cut, trim, thin, and control the growth of trees and shrubbery, within, near, or above the public right-of-way and private utility easements in the village that may interfere with, threaten or endanger the operation of the franchisee's overhead lines.

b. Rights and duties of property owners.

1. The property owner is primarily responsible for maintaining the low vegetation and other flammable matter in the private easements and right-of-ways in such a manner that the low vegetation and other flammable matter will not be a potential fire hazard.

A property owner who refuses access to the utility easement by a utility franchisee shall be solely responsible for the cost to provide for an unobstructed utility easement.

c. In the event of disputes between property owners and franchisees over control of a particular tree, shrub, private easement or right-of-way, the village manager shall have final authority, subject to any judicial remedies existing under municipal or state law.

VILLAGE OF RUIDOSO

ORDINANCE 2004-02 (INFORMATION VERSION)

"AN ORDINANCE AMENDING THE URBAN-WILDLAND INTERFACE CODE PRESCRIBING REGULATIONS MITIGATING THE HAZARD TO LIFE AND PROPERTY FROM INTRUSION OF FIRE FROM WILDLAND FIRE EXPOSURES, FIRE EXPOSURES FROM ADJACENT STRUCTURES AND PREVENTION OF STRUCTURE FIRES FROM SPREADING TO WILDLAND FUELS."

NOW, THEREFORE BE IT ORDAINED BY THE GOVERNING BODY OF THE VILLAGE OF RUIDOSO THAT Section 151 is hereby amended in Chapter 54 Land Use, Article 2 Zoning, Division 4 Development Standards, entitled Urban-Wildland Interface Code. (all new material is underlined, deleted material struck through, all is highlighted in green)

Sec. 54-151. Urban-Wildland Interface Code adopted; amendments.

1. *Adoption of Urban-Wildland Interface Code.* There is hereby adopted by the Village of Ruidoso for the purpose of prescribing regulations mitigating the hazard to life and property from intrusion of fire from wildland fire exposures, fire exposures from adjacent structures and prevention of structure fires from spreading to wildland fuels, that certain code known as the Urban-Wildland Interface Code (U/WIC) published by the International Fire Code Institute, being particularly the 2000 edition thereof and the whole thereof, including all amendments thereto and all future editions thereof, save and except such portions as are hereinafter deleted, modified or amended by this ordinance. The same is hereby adopted and incorporated as fully as if set out at length herein, and from the date on which this ordinance shall take effect, the provisions thereof shall be controlling within the jurisdiction of the Village of Ruidoso, as provided by law.

2. *Establishment and Duties of Code Official.* The U/WIC as adopted and amended herein shall be enforced by the Planning Director or his designee. In areas of overlapping jurisdictions, appropriate sections shall be enforced by either the Planning Director, Director of Forestry, or the Fire Chief, as applicable.

3. *Amendments to the U/WIC.* The U/WIC adopted herein is amended as follows: Section 504.3 is amended to read: Combustible eaves, fascias and soffits shall be enclosed. Any exposed material must be a minimum of one-hour-rated fire-resistive material. Appendix I-C is replaced with a new Fire Hazards Rating Form which shall reflect the standards in paragraph (7), below. Appendix I-B is repealed and in its place shall be adopted the Fuels Management Standards of The Village of Ruidoso found in Sec.42-80 of this code.

4. *Appeals.* Whenever the code official disapproves an application or refuses to grant a permit applied for, or when it is claimed that the provisions of the code do not apply or that the true intent and meaning of the code have been misconstrued or wrongly interpreted, the applicant may appeal the decision of the code official to the Planning and Zoning Commission and thereafter to the Governing Body and District Court, all as provided in this chapter.

5. *New materials, processes or occupancies which may require permits.* The Planning Administrator, the Building Inspector, Director of Forestry, and the Fire Chief shall act as a committee to determine and specify, after giving affected persons an opportunity to be heard, any new materials, processes or occupancies for which permits are required in addition to those now enumerated in said code. The Planning Administrator shall post such list in a conspicuous place at the Planning Department and distribute copies thereof to interested persons. Fees shall be assessed in accordance with the provisions of this section or shall be as set forth in the fee schedule of this code.

6. *Enforcement.* The provisions of the UWIC shall be enforceable according to the provisions of this chapter.

7. Fuels Management Requirements (Sec. 42-80 of this Code) and the site related portion of the Fire Hazard Rating Form (Sec. 42-81of this Code) must be assessed BEFORE issuance of a building permit.

    a. Volume of forest debris to be removed from the building site (footprint) shall be estimated by the Director of Forestry and charged as per the Fee Schedule - Exhibit A of the Municipal Code.

    b. Disposal of forest material, excluding tree stumps, must be at a minimum placed at curbside or approved locations for Village Solid Waste Department pick-up if the site is within the Village limits.

        1. Complete removal and disposal of tree stumps is the responsibility of the permitee.

        2. If outside the Village, see Sec. 54-133(f).

    c. Fuels Management Standards (Sec.42-80) shall be completed and inspected prior to issuance of a Certificate of Occupancy or re-certification of the site plan.

Sec. 42-81 Fire Hazard Ratings Form (revised 05-01-03)

Place an "X" next to most appropriate answer (see reverse) in each catagory, then total the numbers at bottom .

Name:

Address:

Permit No:

Subdivision Design

	POINTS
Ingress/Egress	
Two ways to evacuate neighborhood within 1000'	1 ___
One way to evacuate neighborhood within 1000'	3 ___
One way to evacuate neighborhood > 1000' away	5 ___
Width of Primary Road @ driveway	
20 feet or more	1 ___
Less than 20 feet	3 ___
Accessability	
Road grade 5% or less (avg. within 1000')	1 ___
Road grade more than 5% (avg. within 1000')	3 ___
Secondary Road Terminus	
Not a dead-end	0 ___
Loop roads, cul-de-sacs with an outside radius of 45 feet or greater	1 ___
Cul-de-sac turnaround	3 ___
Dead-end roads 200 feet or less in length	3 ___
Dead-end roads greater than 200 feet in length	5 ___
Average Lot Size	
10 acres or larger	1 ___
Larger than 2.5 acres, but less than 10 acres	3 ___
2.5 acres or less	5 ___
Street Signs	
Present	1 ___
Not present	5 ___

Fuels Management

Fuel Types	
Light (grass, forbs, bare ground etc.)	1 ___
Medium (scrub oak, shrubs, etc.)	5 ___
Heavy (pine, fir, juniper)	10 ___
Defensible Space (what is possible?)	
More than 100 feet of treatment from buildings	1 ___
Less than 100 feet of treatment from buildings	5 ___
Installed Landscape (within 10 feet)	
Xeriscape or dirt	0 ___
Flame Resistant Plants	1 ___
Flamable Plants	3 ___
Flamable Ties and Timbers	5 ___

Topography

Slope 10% or less	1 ___
Slope more than 10%, but less than 20%	4 ___
Slope more than 20%, but less than 30%	7 ___
Slope 30% or more	10 ___

Fire Protection

	POINTS
Fire Response	
Property located in Village of Ruidoso	1 ___
Property located in County	5 ___
Water Supply	
Hydrant within 1,000 feet of structure	1 ___
Hydrant farther than 1,000 feet or draft site	3 ___
Water source 20 min or less, round trip	5 ___
Water source farther than 20 min, round trip	10 ___
Utilities (electric service)	
Underground mains and service lines	1 ___
Underground service lines only	3 ___
Aboveground service lines	5 ___

Construction Materials

Siding	
Noncombustible	1 ___
Combustible	5 ___
Deck	
Noncombustible	1 ___
Decks over 6' w/noncombustable uprights	1 ___
Combustible w/firesafe crawlspace	3 ___
Combustible	5 ___
Sofits	
Parapet / Santa Fe style / 1hr. rated enclosed	0 ___
Enclosed	1 ___
Open	5 ___
Windows	
Low E	1 ___
Double Pane	3 ___
Single Pane	5 ___
Roof	
Class A Fire Rated	1 ___
Class B Fire Rated	3 ___
Class C Fire Rated	5 ___
Non- Rated	10 ___
Stem Walls/Structural Support	
Non Combustible Enclosed	1 ___
Combustible Enclosed	3 ___
Non Combustible Post & Beam	5 ___
Combustible Post & Beam	10 ___
Total the points here	_____

YOUR RATING: Med= ≤59; High= 60-74; Extreme= ≥75

VILLAGE OF RUIDOSO

ORDINANCE 2004-04

"AN ORDINANCE AMENDING THE RUIDOSO MUNICIPAL CODE OF ORDINANCES CHAPTER 42, FIRE PREVENTION AND PROTECTION BY: AMENDING SECTIONS 42-71; 42-73; AND REPEALING AND REPLACING SECTIONS 42-80 AND 42-81."

NOW, THEREFORE BE IT ORDAINED BY THE GOVERNING BODY OF THE VILLAGE OF RUIDOSO THAT new language added in chapter 42, Fire Prevention and Protection, by amending Article III entitled Standards for Fire Safety and Fire Handling: Sect 42-71; 42-73; and repealing and replacing 42-80 and 42-81 as follows: (New material is underlined and deleted material is stricken, both highlighted in green)

ARTICLE III. STANDARDS FOR FIRE SAFETY AND FIRE HANDLING

Sec. 42-40. Improper handling of fire.

(a) It shall be unlawful for any person to set a fire or to cause or procure a fire to be set to any trash, refuse, flammable vegetation or forest material, or to any other flammable substance, on the land of another person and without the permission of the owner thereof.

(b) It shall be unlawful for any person to allow fire to escape or spread from the control of the person setting such fire or having charge thereof without using reasonable and proper precaution to prevent such fire from escaping or spreading.

(c) It shall be unlawful for any person to set a fire or to cause or procure a fire to be set to any trash, refuse, flammable vegetation or forest material, or to any other flammable substance, on his own land or that of another person, without using proper and reasonable precaution at all times to prevent the escape of such fire.

(d) All burning of trash in the streets and alleys is prohibited. Where not prohibited, refuse may be burned on private premises in any incinerator which has been approved by the fire chief or health authority of the village. No garbage shall be burned. No cans, cartons, wrappings containing food or organic waste, hair, wool, rubber, plastic or any other substance which would create offensive, obnoxious or dangerous fumes or odors shall be burned.

(e) It shall be unlawful for any person to leave any campfire burning and unattended upon his own land or the land of another person.

(f) Smoking materials.

(1) It shall be unlawful for any person to cause a fire to be started upon his own land or the land of another person by means of any lighted cigar, cigarette, match or other manner, and leave such fire unquenched.

(2) It shall be unlawful for any person to discard a lit cigarette, cigar, match or other type of incendiary material on a public right-of-way, public property, or areas open to the public.

(3) Any person violating the provisions of this subsection shall be assessed either:

A $500.00 fine; or

A period of community services as determined by the court; or

A combination of subsections a. and b. as determined by the court.

(g) Nothing in this section shall constitute improper handling of fire where the fire is a backfire set for the purpose of stopping the progress of a fire then actually burning.

(h) A person found guilty of violating the provisions of this section shall be punished in accordance with the provisions of section 1-6, unless otherwise provided herein.

Sec. 42-41. Disposal of ashes.

(a) Definitions.

(1) "Ashes" means fire residue of any kind, including, but not limited to, fireplace ashes, barbecue grill briquettes, wood chips, wood stove ashes, campfire ashes, hot waste or other material susceptible of spontaneous combustion.

(2) "Ashes, hot" means any ashes that have not cooled according to the provisions specified herein.

(b) It shall be unlawful to dispose of hot ashes in any manner.

(c) Hot ashes may become cold ashes and subject to disposal as provided in chapter 70, Solid Waste Management, by:

(1) Cooling in place for a minimum of forty-eight (48) hours and inspection to determine that no live embers capable of spontaneous combustion are present; or

(2) Extinguishment with water or sand and stirring to the point where inspection reveals that no embers capable of spontaneous combustion are present.

(3) cold ashes shall be placed in a bag or other enclosed container before placing in a Village dumpster.

Sections 42-42 through 42-69 reserved.

Sec. 42-70. Fuels Management: Duty to abate and control wildfire fuels.

It shall be the duty of every owner, occupant, and person in control of any land or interest therein or premises which are located within the jurisdictional limits of the Village, to control and/or abate therefrom all flammable vegetation that constitutes a fire hazard which may endanger or damage neighboring property.

Sec. 42-71. Standards for abatement and control.

The standards for abatement and control are specified in ~~the Village of Ruidoso Forest Task Force Findings and Recommendations, dated May 21, 2002, incorporated herein as~~ Sec.42-80.

Sec. 42-72. Enforcement on private and public property.

(a) Cooperation from all landowners, private and public, will be encouraged through positive communication by mail and through personal contact. When flammable vegetation control measures are not carried out by a landowner, enforcement measures may be instituted. Procedures for enforcement shall be as specified in this article.

(b) Abatement and control priorities shall be established due to the size of the Village and the number of landowners therein. The priority for enforcement shall be as follows:

(1) Lands within the Urban Wildland Interface zone <u>located West of Mechem Drive and South of Sudderth Drive.</u>

(2) Property bordering lands of the federal government, including Indian lands.

(3) Properties found to be over seventy-five (75) on the fire hazard rating.

(4) Properties found to be over sixty (60) on the fire hazard rating.

(5) All other property.

Sec. 42-73. Notice to remove.

It shall be the concurrent duty of the <u>Director of Forestry,</u> Fire Chief, and the Planning Administrator either of whom shall have authority to issue notices, together with their duly authorized representatives, to enforce the abatement and control measures of this article by issuing a

"Notice to Remove" by mailing the notice to the property owner as his or her name appears on the county tax rolls and to the address as shown in the records of the county tax assessor. The notice shall be substantially in the form used to notify property owners of code violations. The notice shall include a copy of the standards for abatement and control specified in Sec.42-80.

Sec. 42-74. Appeals.

Any person who is adversely affected by a notice as provided herein shall have the right to appeal to the Planning Commission, the Governing Body and District Court as provided in chapter 54 of this code.

Sec. 42-75. Removal of hazardous vegetation by private contractor and establishment of costs and administrative fee.

If, at the end of the time allowed for compliance in the original notice, or as extended in cases of appeal, compliance has not been accomplished, the officer issuing the notice or the agency of which he is an officer, *may pursue judicial enforcement according to the provisions of sections 54-38 and 42-78 of this code. The Village may, upon court order, provide for* abatement and control to be performed by public officers or employees of the Village, or may cause the removal to be carried out by a private contractor selected by the Village in accordance with applicable purchasing procedures and in the manner and under the terms specified by the officer. The cost of such removal accompanied by a reasonable administrative charge may be imposed as a Special Assessment upon the property, and such property shall be subject to a Special Assessment Lien for said purpose. The costs so assessed shall be limited to the actual costs incurred by the Village in enforcing abatement and control upon the parcels, including payment to the contractor, costs of investigation, boundary determination, measurement, clerical, personnel, consultant, legal and an administrative cost to be set by the Village on those properties where such hazardous vegetation has not been removed by the property owner at his or her own expense.

Sec. 42-76. Mailing and recording of assessments.

All assessments provided for herein shall be mailed by certified mail to the property owner as specified in the provisions for mailing notices. The assessment shall be filed as a lien against the property in the manner provided by law for filing of liens.

Sec. 42-77. Enforcement of lien.

Liens may be enforced and foreclosed as provided by law.

Sec. 42-78. Violations.

Failure of a person to abate and control hazardous vegetation upon notice shall be a violation of this code, and may be prosecuted and punished in Ruidoso Municipal Court as provided in this code. Any such prosecution shall be in addition to the abatement and control measures provided for in this article.

Sec. 42-79. Non-waiver of immunity.

Nothing contained herein shall be construed as waiving the immunity of the Village, its officers, agents, servants and employees, as may be provided for in the New Mexico Tort Claims Act, and neither the Village, nor its officers, agents, servants and employees shall be liable to any person for enforcement of the provisions of this article.

Defensible Space	Requirements	Recommendations	Comments
Zone 1: Structure Protection 0-10 feet from structure or deck	*Remove all non-decomposing pine needles & flammable ground materials and activity slash. *Remove all ladder fuels. *Min. 10 feet between crowns of native trees or "clumps" (max.4 trees/clump). **Does not apply to ornamentals.** *Prune all species except ornamentals 15' above ground 25% whichever is less. *Remove branches within 15' of chimney. *Removal of any tree >16" DBH requires permit. ***Slash Treatment:** 1) No wood chips allowed except in planting beds; 2) No firewood stacked unless under approved cover; 3) No standing dead.	*Minimize flammable native trees in this zone. *Maintain non-combustible ground material 2-3 feet around structure (Planting beds, rock gardens, gravel or bare soil). *Prune native tree limbs overhanging roof. *Bedding plants (<18" high). *Consider non-flammable landscape material (ex. do not us railroad ties, wood fencing etc).	Consultation with the property owner will explain the "blended eye" assessment of the property. Using this "added value" approach landscape elements and forest health issues, as well as fire hazard reduction, will be considered. The property owner can better achieve his land objectives. **NOTE: Five "native trees" considered here are Ponderosa pine, Pinon pine, Douglas fir, White fir, and all Junipers. Blue Spruce and fruit trees considered ornamentals. Deciduous broadleaf trees like Gambels oak must be pruned as per zone, but not considered for spacing. For additional forest management see Sec. 54-133.**
Zone 2: Defensible Space 10-30 feet from structure or deck	*Remove all non-decomposing pine needles and flammable ground materials and activity slash. *Remove all ladder fuels. *Min. 10' between crowns of native trees or "clumps" (max.5 trees/clump). **Does not apply to ornamentals.** *Prune all species except ornamentals min.10' from ground or 25% of tree height which ever is less. *10 - 15' between planting islands & groups of shrubs. *Removal of any tree >16" DBH requires permit. ***Slash Treatment:** 1) No wood chips allowed except in planting beds; 2) No firewood stacked within 20' of structures unless under approved cover. Firewood stacked outside 20' must not create nuisance. Beetle habitat reduction per Sec. 54-133(c)(5)(c); 3) No standing dead.	*Maintain low combustible ground covers. *Keep lawns watered (as conditions allow). *Consider planting beds, rock gardens, xeroscaping and fire resistant plants. *Bedding plants (<18" high). *Consider non-flammable landscape material.	In both Zone 1 and 2 attention will be paid to the potential threat posed by creeping and spot fire behavior. It's highly likely, given the number of lots 1/4 acre and less, that this zone will often overlap with neighboring property defensible space. It's also likely that assessments in areas with higher densities will be looked at as "neighborhoods" rather than individual properties. Individual consultations will occur in every case. Lots <1/4 acre are dealing with zone 1 & 2 for the most part.

Defensible Space	Requirements	Recommendations	Comments
Zone 3: Forest Woodland 30-60 feet from structure or deck	*Max densities for target vegetation: Pondo pine - 60 sq.ft.BA *Mixed Conifer - 60 sq.ft.BA *Pinon/Juniper - 20 sq.ft.BA *Remove all ladder fuels *10 - 15' between crowns of native trees or "clumps" (max. 6 trees/clump) *10 - 15' between planting islands. *Prune all species except ornamentals min. 6' from ground or 25% of tree height which ever is less. *Removal of any tree >16" DBH requires permit. ***Slash Treatment:** 1) If used, max. depth of wood chips is 2 inches; 2) Firewood stacks must not create nuisance. Beetle habitat reduction per Sec. 54-133(c)(5)(c); 3) No standing dead except optional three (3) non-hazardous, standing dead trees >12" DBH per acre allowed for wildlife habitat; 4) All non-decomposing ground debris > 5" diameter must be removed. 5) Remove all activity slash.	*Remove all non-decomposing pine needles and flammable ground materials. *Additional fuels reduction: *Ponderosa pine - 40 sq.ft.BA *Mixed Conifer - 40 sq.ft.BA *Pinon/Juniper - 20 sq.ft.BA *15 - 20' between stems of native trees or "clumps" (max. 6 trees/clump). *Prune all species min. 8 - 15' from ground or 25% of tree height which ever is less. *Where slopes exceed 25% approved **contour felling** is acceptable. *Forestry Department can explain BA (basal area) density and help calculate.	In terms of thinning stems, the property owner will be advised of the different marking prescriptions that will achieve the requirements but could result in different aesthetics (multi-story, even aged, park-like, etc.). The property owner will decide. **Zones 1, 2 & 3 constitute the minimum requirements around structures regardless of lot size. These zones have much to do with the ignitability of a structure and individual protection.**
Zone 4: Property Perimeter Buffer (& vacant) 60 feet - property line for lots 2.5 acres or less. 120 foot wide buffer around perimeter for lots > 2.5 acres.	*Max densities for target vegetation: Ponderosa pine - 80 sq.ft BA *Mixed Conifer - 90 sq.ft.BA *Pinon/Juniper - 50 sq.ft.BA *Remove all ladder fuels *10 - 15 ' between crowns of native trees or "clumps" (max.7 trees/clump). *10 - 15' between planting islands. *Prune all species except ornementals min. 6' from ground or 25% of tree height which ever is less. *Removal of any tree >16" DBH requires permit. ***Slash Treatment:** 1) If used, max. depth of wood chips is 2 inches; 2) Firewood stacks must not create nuisance. Beetle habitat reduction as per 54-133(c)(5)(c); 3) No standing dead except optional three (3) non-hazardous, standing dead trees >12" DBH per acre allowed for wildlife habitat; 4) All non-decomposing ground debris >5" diameter must be removed. A maximum of three (3) downed logs greater than 12" in diameter per acre are allowed for wildlife habitat. 5) **All activity slash within 120' of all structures, property lines, & roads must be removed.**	*Additional fuels reduction: *Ponderosa pine - 40 sq.ft.BA *Mixed Conifer - 60 sq.ft.BA *Pinon/Juniper - 20 sq.ft.BA *Prune all species min. 8 - 15' from ground or 25% of tree height which ever is less. *Consider coordination with neighboring *Recommend treatment of entire property. *Where slopes exceed 25% approved **contour felling** is acceptable. *Forestry Department can explain BA (basal area) density and help calculate.	**Treatment in this zone addresses wildfire rate of spread and intensity.** Consistent application of these treatments will create conditions where crown fire could be transformed into a ground fire, slowing its rate of spread and creating opportunity for fire resources to safely respond. A property owner with < 2.5 acres is required to treat all of the property. A property owner with > 2.5 acres is required to implement Zones 1, 2, & 3 around any structures > 50 sq.ft. out to 60 feet. In addition, property owner shall create a buffer zone as described in zone 4. This zone now starts at the property line and comes in 120 feet minimum. For additional forest management see Sec.54-133.

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Ruidoso Wildland Urban Interface Group

8/31/04 Resource Roster

Name	Agency	Phone # Cell #	E-Mail Address	Check if Here
Allen Ted	Americorp	624-2773	daisyoaks@pvtnetworks.net	
Andrews John	Bia- Mescalero Agency	464-4410		
Armstrong Tom	Ruidoso Downs	378-1342	tomvord@zianet.com	
Baca Janet	USFS-SO Alamogordo	434-7215	jbaca@fs.fed.us	
Barrow Glen	SBS Wood Shavings	653-4980 / 653-4981	gr@sbswoodshavings.com	
Barrow Sherry	SBS Wood Shavings	257-5508/430-2325	sherry@sbswoodshavings.com	
Battin Tom	State National Bank	257-1202/258-9089	tbattin@statenationalbank.com	
Bedell John	ERI-NAU	476-3328	john.bedell@nau.edu	
Blazer Butch	EMNRD-Forestry Div	623-341-1637	ablazer@state.nm.us	
Bondurant Tim	Green Acers	257-7945	bondurant@zianet.com	
Bridge Jim	Mescalero Forest Products II	464-4720	ejbridge@netmdc.com	
Cervantes Cornel	BIA - FMO	464-4419		
Chavez Thomas	Ruidoso - Emergency Mngt	257-4694 /937-0597	tchavezem@zianet.com/vorem@zianet.com	
Christensson Larry	Grass Seed Service	622-6200	openheart49@hotmail.com	
Delaco Rick	Ruidoso - Forestry Director	257-5544 / 937-2809	rickdelaco@voruidoso.com	
Delfin Tony	EMNRD-Forestry Div	476-3331	tdelfin@state.nm.us	
Denton Charles	Ecological Restoration Inst	928-523-3850	charlie.denton@nau.edu	
Diaz Manuel	USFS - Lincoln NF	437-7391	mediaz@fs.fed.us	
Ditto Lynn	Senator Bingaman	622-7113	Lynn_ditto@bingaman/senate.com	
Duemling Bill	EMNRD-Forestry Div	354-2231	bduemling@state.nm.us	
Dwyer Dennis	USFS - Sacramento RD	682-2551	ddwyer@fs.fed.us	
Eggleston E Leon	Ruidoso - Mayor	257-9450 / 257-8200	legglest@zianet.com	
Elwin Ryan	Contractor			
Esperance Jay	USFS - Smokey Bear RD	630-3035	jesperance@fs.fed.us	
Fitch Greg	EMNRD-Forestry Div	476-3340	gfitch@state.nm.us	
Forester Larry	Sweat Contracting	601-527-4258	pfsackms@aol.com	
Garcia Joseph	USFS-SO Alamogordo	434-7209	jgarcia@fs.fed.us	
Gladden Mike	Ruidoso Schools	257-4051	gladdenm@ruidoso.k12.nm.us	
Haenelt P J Jr	USFS - Sacramento RD	682-2551	phaenlt@fs.fed.us	
Haines Debbie	Zia Natural Gas	937-0212	debhaines@zianet.com	
Hall Robby	Ruidoso - RFD Capitan	257-4116		
Hannan Ron	USFS - Lincoln NF	434-7200	rhannan@fs.fed.us	
Hardeman Ronald D	Ruidoso - Mayor Pro Tem	257-4634 / 2584200	hardeman@zianet.com	
Hare Mark	Mescalero Forest Products II	430-2210		
Harper Paul	BLM	627-0203	paul_harper@nm.blm.gov	

Ruidoso Wildland Urban Interface Group

8/31/04 Resource Roster

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Hird Rebecca	USFS - Smokey Bear RD	257-4095	rhird@fs.fed.us
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Howard Joe	LEPC	336-9633	
Ingle Debra	LCSWA	378-4697/937-2702	dlib@trailnet.com
Jeffers John	NMMEP	257-2558	johnj@newmexicomep.org
Jones Justice	Ruidoso - Forestry Dept	257-5544 / 937-2816	justicejones@voruidoso.com
Junge Al	Resident	257-7908	
Kalvelage Jim	KBUY-KWES	258-2222	kweskbuy@zianet.com
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King Jack	NM Environment Dept.	258-3272	jack_king@nmenv.state.nm.us
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Knight Eugene	NM Environment Dept.	258-3272	eugene_knight@nmenv.state.nm.us
Little Chris	BIA - Mescalero Agency	464-4410	
Luna Barbara	EMNRD-Forestry Div	354-2231	bluna@state.nm.us
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Martinez Jose M	USFS - SO Alamogordo	434-7200	jmmartinez@fs.fed.us
Martinez Leo	Lincoln Co. Commissioner	258-2212 / 258-2117	chileos@hotmail.com
Mason James	Ruidoso FDPIO/FPO	491-6691	rfdfpo@zianet.com
Messick Virginia	USFS - Smokey Bear RD	257-4095	vmessick@fs.fed.us
Midkiff Nora	Resident	336-2095	nora_midkiff@hotmail.com
Murry Bill	BLM - Roswell	648-2241	bill_murry@nm.blm.gov
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Norwick Jim	State Land Office	827-5095	jnorwick@slo.state.nm.us
Nunley L Ray	Ruidoso - Village Councilor	258-5767 / 430-1854	raynunley@trailnet.com
Ortega Aaron	USFS - Lincoln NF	434-7200	aortega@fs.fed.us
Padilla Thora	MAT - Resource Mngt. & Prot.	464-9222	thora@mescaleroapache.org
Parks Dave	Insurance	s	daddyddp@netscape.net
Parman Howard	BLM	627-0212	howard_parman@blm.gov
Patton Van	Sierra Contracting/Compost	378-1091	vanpatton4923@yahoo.com
Paul Sharon	MAT - DRMP	464-4711	sharon@mescaleroapache.org
Pellman Leland	BIA Hotshots	464-4419	lelandpellmen@bia.gov
Platero Jolene	Mescalero Fire Prevention	464-3473	sunshyne_m2k@yahoo.com
Racher Brent	Racher Resource Mngt	420-5414	racher@resource-management.us

Ruidoso Wildland Urban Interface Group

8/31/04 Resource Roster

Name	Agency	Phone #	Cell #	E-Mail Address	Check if Here
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Reyes Ruben	Reyes thinning	257-5939		rvr@trilnet.com	
Reynolds Roy	Alto Lakes G&CC	336-8206		rbreynolds@charter.net	
Roberson	BLM	627-0272		edwin_roberson@blm.gov	
Rogge bill	EMNRD-Forestry Div	354-2231		brogge@state.nm.us	
Romero Ralph	Glencoe FD	378-4931			
Rummer Bob	Products Lab	334-826-8700		rrummer@fs.fed.us	
Ryan Bernie	BIA - Mescalero	464-4419 / 464-4410			
Sainz Naomi	Mescalero Fire Prevention			firedept@matisp.net	
Sanchez Buck	USDA - Smokey Bear RD	257-4095		bsanchez@fs.fed.us	
Sanchez Patsy	County of Lincoln	648-2385x106/808-1380		planning@tularosa.net	
Sanchez Tony	Sweat Contracting	235-7299		tsanch10@aol.com	
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Shaw Dick	S.Cen.MT.RC&D	648-2941		richard.shaw@nm.usda.gov	
Singleton Lisa & Smile	Singleton Enterprises	430-7011		singletonenterpriese@yahoo.com	
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Sprott Lois				doodlebug@zianet.com	
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Stewart Sharon	Sun Valley Subdivision	336-7752		stewcat@zianet.com	
Stewart Tom	Lincoln County	648-2385		linclnco@tularosa.net	
Stubbs Carl	NM Environment Dept.	624-6046		carl_stubbs@nmenv.state.nm.us	
Taylor Clark	USFS - Smokey Bear RD	257-4095		clarktaylor@fs.fed.us	
Tongate Butch	NM Envir. Dept. Solid Waste	827-2775		buthc_tongate@nmenv.state.nm.us	
Trujillo Allen	Trujillo Tree Service		3368278		
Valcarcel Reynaldo	Resident	378-4880		rvbdata@zianet.com	
Wells John	NM Environment Dept.	258-3272		john_wells@nmenv.state.nm.us	
Wetzel Paul	Sierra Contracting/Compost	430-3945			
Williams Donald A	Ruidoso - Village Councilor	257-9890		donwilliams@zianet.com	
Williams Dub, Rep	NM District 56	378-4181			
Wilson Johnny	USFS SO - Alamogordo	434-7200		jwilson@fs.fed.us	
Wilson Rex	Lincoln Co Commission Chair	648-2428 / 430-9321		wilranch@nm.net	
Wood Gray	Village of Cloudcroft	682-6029		gray@mountainmonthly.com	
Zipperer Connie	USFS - Lincoln NF	434-7297		czipper@fs.fed.us	

Ruidoso Wildland Urban Interface Group

8/31/04 Resource Roster

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GLOSSARY OF TERMS:

Aspect: The direction that a slope faces. The orientation of a slope in relation to the sun. North aspects tend to be moister than southern exposures, since a south aspect receives more sunlight over time. Aspect can be used to predict potential fire behavior.

Collaboration: The art of involving all affected stakeholders in the decision-making processes that result in the support, implementation, and evaluation of ecological restoration and maintenance.

Canopy: The stratum containing the crowns of the tallest vegetation present, living or dead, usually above 20 feet in height.

Catastrophic Wildfire: A large, landscape-changing conflagration, which consumes anything in its path, including homes and improvements, and threatens the well being of residents in the affected area. Numerous long-term deleterious impacts result, including excess water runoff and erosion, sterilized soils, a loss of wildlife habitat and cultural resources, a loss of timber resources, damaged and destroyed homes and infrastructure, lost aesthetics, diminished recreation and tourism revenue, and depressed real estate values.

Crown Closure: The spacing between individual tree crowns. Closure is usually expressed as the percent of area covered by tree crowns in the forest canopy region as viewed from above. A higher percentage indicates a more-closed crown area and a greater potential for catastrophic fire behavior.

Crown Fire: A fire that advances from top-to-top in trees or shrubs. Crown fires are classified as passive, active, or independent to distinguish the degree of dependence on a surface fire.

Crowning Index: The wind speed required to maintain an active crown fire measured in miles per hour (mph). Crown bulk density is a critical variable. Low Hazard = wind speeds greater than 50 mph are needed to sustain a crown fire. Moderate Hazard = wind speeds between 25 and 50 mph are needed to sustain a crown fire. High Hazard = wind speeds less than 25 mph will sustain a crown fire.

Defensible Space: An area around the perimeter of structures or developments where native vegetation or combustible debris have been manipulated to reduce wildfire behavior. The area is used as a key point of defense/attack against encroaching wildfires or escaping structure fires.

Ecological Restoration: A broad framework of activities for returning ecosystems to healthy functioning or to an acceptable natural range of variability. Restoration incorporates past experience as a guide to sustainable futures, and includes, among other activities, reducing overly-dense woody vegetation, re-establishing native vegetation, improving soil conditions while managing erosion, restoring hydrological function, and monitoring all of these activities for effective long term maintenance.

Ecosystem: A community of plants, animals, and non-living components in a given area.

Forest Ecosystem: A complex of living organisms and their environment which are dynamic and continually changing in time and space within a forest setting.

Forest Health: The **perceived** condition of a forest derived from concerns about such factors as age (young, old, over-mature), structure (single or multiple storied, uniform, groups), composition (species makeup), function (disturbance regimes), vigor (productivity), unusual levels of insects and diseases, and the resilience to disturbance. Perceptions of forest health are influenced by land management objectives, spatial and temporal scales, the relative health of forest stands, and the overall appearance of the forest. Possible indicators of "unhealthy" forests include the introduction of exotic species, or an increase beyond the range of historic variability of agents of change, such as insects, parasitic plants, and fungi, to chronically high levels.

Forest Succession: The replacement of one plant association in a forested area with another. Succession can occur in slow integrating steps, or rapidly, after a major disturbance such as a fire or insect epidemic. **Primary succession** is the initial establishment of hardy "pioneer" plant species on previously non-vegetated areas such as zones of glacial retreat, rock surfaces, or lava flows. As vegetation becomes more established, conditions for survival improve, and other plant species move into the community. Generally the plants that move in later are more shade tolerant than the original pioneer species. If no major disturbances occur, this change in plant association will gradually slow or **climax**. Ponderosa pine and aspen are generally shade intolerant and are excellent primary successional pioneers; white fir and blue spruce are shade tolerant and are often considered climax species. In climax conditions in a mixed conifer forest, spruce and white fir will mature and achieve equal footing with the pine or aspen, or may actually dominate the forest community. **Secondary succession** involves a disturbance within an established community, which prevents or delays the establishment of a climax condition. Obvious disturbances, which can prevent a climax condition, include frequent wildfires and/or grazing. [The "Great American Desert" was once considered to be in a climax condition as a short grass prairie; it has been theorized that such areas were kept in a sub-climax condition or "grazing climax" condition due to heavy use by herds of buffalo].

Hazardous Fuels: Native vegetation, including grasses, forbs, shrubs, and trees, that are receptive to ignition and consumption during a wildfire event.

Historical Range of Natural Variability: The forest stand structures and plant species populations that existed for millennia, both spatially and temporally, before European and Hispanic settlement of the western United States.

Ladder Fuels: Vegetation and debris (fuels) that is found at or near ground level (brush, slash, forest litter, tall grass, lower limbs on trees, etc.); such material can grow and/or extend into larger, taller vegetation (trees) creating a continuous vertical pathway for fires to spread. Once a wildfire spreads from ground level into the canopies of the tallest shrubs or trees, it becomes a crown fire, which is often difficult or impossible to suppress.

Landscape: A spatial mosaic of several ecosystems, land forms, watersheds, and plant communities that are repeated in similar form across a defined area irrespective of ownership or other artificial boundaries.

Overstocked Areas: Areas where growth of trees is significantly reduced by excessive numbers of trees. Stands are considered overstocked when the stocking level is 133 percent or more, where 100 percent represents the minimum level of stocking required to make full use of the site.

Pre-settlement Conditions: The forest conditions that existed in the West before natural fire occurrence was halted by European and Hispanic settlement in the mid to late 1800s.

Structural Ignitability: The receptiveness of a structure or improvement to ignition by a wildfire due to factors such as location, building design and materials, and proximity to surface fuels, native flammable vegetation, or other flammable structures. Ignition sources include direct flame contact, radiant or convective heat, or rolling or windblown embers and firebrands.

Surface Fire: A fire that burns surface litter, debris, and small vegetation. Surface fire behavior is the primary process that sustains fire growth and is a major factor in the loss of structures and improvements. Surface fire behavior often dictates the potential for more serious fire behavior such as torching and crowning.

Sustainability: A comprehensive, multi-scale measure of an ecosystem's organization, resilience, function, and productivity. Sustainability should be expressed in terms of biodiversity, and resilience, as well as human values, uses, and expectations.

Torching: Fire burning principally as a surface fire that intermittently ignites the crowns of trees or shrubs as it advances.

Torching Index: The wind speed needed to move a surface fire into the crowns of shrubs or trees measured in miles per hour (mph). The height to live crown or canopy base height is a critical variable. Low Hazard = wind speeds greater than 50 mph are required to initiate torching. Moderate Hazard - wind speeds between 25 and 50 mph are required to initiate torching. High Hazard = wind speeds less than 25 mph can initiate torching.

Watershed: Any sloping surface, which sheds water into a drainage basin or catchment and redistributes the water into components of the hydrologic cycle. A drainage basin is a watershed that collects and discharges surface steamflow through one outlet or mouth. A catchment is a small drainage basin.

Watershed Management: The management of the natural resources of a drainage basin primarily for the production and protection of water supplies and water-based resources, including the control of erosion and floods, and the protection of aesthetic values associated with water.

Wildfire: A free burning wildland fire undeterred by fire suppression measures. An unplanned wildland fire requiring suppression action, or other action according to land management agency policy, as contrasted with a management-ignited fire burning within prepared lines enclosing a designated area, under prescribed conditions.

Wildfire Danger: The potential for wildfires to occur and become established in a given area. Fire danger ratings range from low to extreme and are based on time of season, precipitation levels, temperature, relative humidity values, wind conditions, fuel conditions, and the presence of ignition sources such as humans or lightning. Fire danger ratings in a given area will fluctuate significantly over time, based on the wide variation in weather conditions and activity in a forest.

Wildland Fuels: Any organic matter, living or dead, in the ground, on the ground, or above the ground, that will ignite and burn. Natural or introduced fuels include vegetation and debris such as trees, tree limbs, shrubs, brush, slash, needle litter, duff, cured grasses, and ***structures.***

Wildfire Hazard: The overall potential for a given area to support extreme wildfire behavior based on existing topography and wildland vegetation type, loading, arrangement, and condition. Hazard ratings range from low to extreme and will vary by location and elevation. A given hazard condition remains relatively static over time, with drastic changes in hazard potential only occurring when vegetation is managed aggressively or after a major conflagration has consumed much of the available wildland fuel.

Wildland/Urban Interface: The boundary between large areas of contiguous native vegetation and developments or improvements. The developed areas can range in size from a single home or small subdivision, to a major village or city. The interface has a distinct break between native vegetation and improvements. Such areas are especially vulnerable to catastrophic wildfires. Examples include Ruidoso Downs, the midtown area of Ruidoso, and downtown Cloudcroft, all in south central New Mexico.

Wildland/Urban Intermix: An area where structures and improvements are intermingled with native vegetation and topography. There is no definitive boundary between the structures and the surrounding native landscape. The potential for a large, uncontrollable wildfire is high in such areas. Examples include Upper Canyon in Ruidoso, Deer Park Woods in Alto, and Sun Valley Subdivision, all in south central New Mexico.

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Firewise Landscaping Checklist

FIREWISE Landscaping

When designing and installing a firewise landscape, consider the following:

- ❑ Local area fire history.
- ❑ Site location and overall terrain.
- ❑ Prevailing winds and seasonal weather.
- ❑ Property contours and boundaries.
- ❑ Native vegetation.
- ❑ Plant characteristics and placement (duffage, water and salt retention ability, aromatic oils, fuel load per area, and size).
- ❑ Irrigation requirements.

To create a firewise landscape, remember that the primary goal is fuel reduction. To this end, initiate the zone concept. Zone 1 is closest to the structure; Zones 2-4 move progressively further away.

- ❑ **Zone 1.** This well-irrigated area encircles the structure for at least 30' on all sides, providing space for fire suppression equipment in the event of an emergency. Plantings should be limited to carefully spaced low flammability species.

- ❑ **Zone 2.** Low flammability plant materials should be used here. Plants should be low-growing, and the irrigation system should extend into this section.

- ❑ **Zone 3.** Place low-growing plants and well-spaced trees in this area, remembering to keep the volume of vegetation (fuel) low.

- ❑ **Zone 4.** This furthest zone from the structure is a natural area. Selectively prune and thin all plants and remove highly flammable vegetation.

Also remember to:

- ❑ Be sure to leave a minimum of 30' around the house to accommodate fire equipment, if necessary.
- ❑ Widely space and carefully situate the trees you plant.
- ❑ Take out the "ladder fuels" — vegetation that serves as a link between grass and tree tops. This arrangement can carry fire to a structure or from a structure to vegetation.
- ❑ Give yourself added protection with "fuel breaks" like driveways, gravel walkways, and lawns.

When maintaining a landscape:

- ❑ Keep trees and shrubs properly pruned. Prune all trees so the lowest limbs are 6' to 10' from the ground.
- ❑ Remove leaf clutter and dead and overhanging branches.
- ❑ Mow the lawn regularly.
- ❑ Dispose of cuttings and debris promptly, according to local regulations.
- ❑ Store firewood away from the house.
- ❑ Be sure the irrigation system is well maintained.
- ❑ Use care when refueling garden equipment and maintain it regularly.
- ❑ Store and use flammable liquids properly.
- ❑ Dispose of smoking materials carefully.
- ❑ Become familiar with local regulations regarding vegetation clearances, disposal of debris, and fire safety requirements for equipment.
- ❑ Follow manufacturers' instructions when using fertilizers and pesticides.

Access additional information on the Firewise home page: ***www.firewise.org***

Please see the other side of this sheet for the ***Firewise Construction Checklist.***

Firewise Construction Checklist

When constructing, renovating, or adding to a firewise home, consider the following:

- ❑ Choose a firewise location.
- ❑ Design and build a firewise structure.
- ❑ Employ firewise landscaping and maintenance.

To select a firewise location, observe the following:

- ❑ Slope of terrain; be sure to build on the most level portion of the land, since fire spreads more rapidly on even minor slopes.
- ❑ Set your single-story structure at least 30 feet back from any ridge or cliff; increase distance if your home will be higher than one story.

In designing and building your firewise structure, remember that the primary goals are fuel and exposure reduction. To this end:

- ❑ Use construction materials that are fire-resistant or non-combustible whenever possible.
- ❑ For roof construction, consider using materials such as Class-A asphalt shingles, slate or clay tile, metal, cement and concrete products, or terra-cotta tiles.
- ❑ Constructing a fire-resistant sub-roof can add protection as well.
- ❑ On exterior wall facing, fire resistive materials such as stucco or masonry are much better choices than vinyl which can soften and melt.
- ❑ Window materials and size are important. Smaller panes hold up better in their frames than larger ones. Double pane glass and tempered glass are more reliable and effective heat barriers than single pane glass. Plastic skylights can melt.
- ❑ Install non-flammable shutters on windows and skylights.
- ❑ To prevent sparks from entering your home through vents, cover exterior attic and underfloor vents with wire screening no larger than 1/8 of an inch mesh. Make sure undereave and soffit vents are as close as possible to the roof line. Box in eaves, but be sure to provide adequate ventilation to prevent condensation.
- ❑ Include a driveway that is wide enough to provide easy access for fire engines (12 feet wide with a vertical clearance of 15 feet and a slope that is less than 5 percent) . The driveway and access roads should be well-maintained, clearly marked, and include ample turnaround space near the house. Also provide easy access to fire service water supplies, whenever possible.
- ❑ Provide at least two ground level doors for easy and safe exit and at least two means of escape (i.e., doors or windows) in each room so that everyone has a way out.
- ❑ Keep gutters, eaves, and roofs clear of leaves and other debris.
- ❑ Make periodic inspections of your home, looking for deterioration such as breaks and spaces between roof tiles, warping wood, or cracks and crevices in the structure.
- ❑ Periodically inspect your property, clearing dead wood and dense vegetation at distance of at least 30 feet from your house. Move firewood away from the house or attachments like fences or decks.

Any structures attached to the house, such as decks, porches, fences, and outbuildings should be considered part of the house. These structures can act as fuel bridges, particularly if constructed from flammable materials. Therefore, consider the following:

- ❑ If you wish to attach an all-wood fence to your house, use masonry or metal as a protective barriers between the fence and house.
- ❑ Use metal when constructing a trellis and cover it with high-moisture, low flammability vegetation.
- ❑ Prevent combustible materials and debris from accumulating beneath patio decks or elevated porches. Screen or box-in areas below patios and decks with wire screen no larger than 1/8 inch mesh.
- ❑ Make sure an elevated wooden deck is not located at the top of a hill where it will be in direct line of a fire moving up slope. Consider a terrace instead.

Access additional information on the Firewise home page: ***www.firewise.org***

Please see the other side of this sheet for the ***Firewise Landscaping Checklist.***

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