Dolores County Community Fire Plan

A component of the National Fire Plan

Background:

The Dolores County Wild Lands Fire Plan is a direct extension of the National Fire Plan authorized by Congress, as a response to the tragic summer fires of 2000. As a component of the National Fire Plan, the County Wild Lands Fire Plan is meant to help coordinate fire readiness efforts between local communities and federal agencies through four major goals.

- 1.) Ensure firefighting resources.
- 2.) Rebuild communities and ecosystems damaged by the fires of 2000.
- 3.) Thin vegetation in areas that are adjacent to public lands.
- 4.) Help local residents to reduce fire risk and improve fire protection.

This Community Fire Plan (CAP) has been developed to assist the Sheriff, Fire officials, and residents of Dolores County, Colorado, in the identification of private and public lands at risk of severe wild land fires, and to explore strategies for the prevention and suppression of such fires.

Over 50% of the total landmass in Dolores County is in public ownership. Federal Lands in Dolores County consist primarily of the San Juan National Forest, the Bureau of Land Management and The Canyons of the Ancients BLM National Monument. All three have fire management programs in place. Colorado State Parks also operate a 18,000 acre State Park near the central portion of the County. Fire management plans are currently being developed for this area

While the risk of wildfire on public land is generally understood, much of the adjacent private land is equally at risk. These areas adjoining public lands are becoming increasingly valued for their scenic beauty, solitude, and access to recreation opportunities. As development in these areas continues to increase, the risk to lives, property, and resources correspondingly increases.

<u>Authorization:</u>

Under Colorado law, the county Sheriff has been given the authority to act as fire warden for the county as provided by the following statutes:

- o C.R.S. v.9 30-10-512 Sheriff to act as fire warden
- C.R.S. v.9 30-10-513 Sheriff in charge of forest or prairie fire

 C.R.S. v.9 30-10-513.5 Authority of Sheriff relating to fire within unincorporated areas of county.

Dolores County's Fire Protection Infrastructure:

Dolores County also has two fire protection districts, one in Dove Creek and one in Rico. The Pleasant View Fire Protection District, based in Montezuma County, serves part of the southwestern portion of the county. The Ground Hog area in the central part of the county is not within a fire protection district. Emergencies in the Ground Hog area as well as the West Fork of the Dolores River are generally handled through the Dolores Fire Protection District or the Norwood Fire Protection District.

Overall Goals of the Dolores County Community Fire Plan

- o Identify areas thought to have high or moderate risk of wild fire.
- Document and outline strategies for protecting community values such as watersheds, residences, recreation resources, economic resources etc.
- Outline planning & design strategies that private landowners can use to reduce wildfire risk.
- Improve the fire suppression resources of the community by identifying equipment and training needs.
- Coordinate fire suppression efforts between the county and federal land agencies
- Coordinate fuels reduction opportunities between private landowners and federal land management agencies.
- Identify potential public/ private lands fuels reduction demonstration projects that can illustrate fuels mitigation techniques and results.
- Identify economic development and networking opportunities regarding fuel reduction enterprises.
- Identify public education strategies using information gathered through the development of this plan.

Dolores County Wild Lands Fire Plan--- The Process:

Wildfire Risk Mapping

Community leaders, and individuals with specialized knowledge of the surrounding land base were interviewed to provide information and opinions on the level of fire risk for private and public lands within the county. Information gathered through these interviews was used to map areas where the risk of wildfire could pose a special threat to homes, property or other cultural resources.

Mapping criteria:

Areas were identified and mapped based in part on the following subjective criteria:

- Remote areas where fire starts would prove to be difficult to access or suppress.
- Developing areas with excessive fuel loading.
- Developing areas that lie outside a fire protection district.
- Developing areas adjacent to public lands which due to terrain and fuel load could pose an increased fire risk. (ie. Home sites situated at the top of heavily wooded canyons etc.)
- Areas where a lack of water sources would hamper fire suppression.
- Areas where pending development may compound fire risk.
- Areas where fire starts could spread to sensitive areas. (Community Watersheds, Archaeological Resources, Wildlife Habitat, Oil or Gas fields, etc.)

Wildfire Risk Areas Identified;

Seven areas of special concern were identified and mapped with the help of the Montezuma County GIS specialist, and consultants from Fort Lewis College. (See Appendix. 1) These areas are;

- A.) Ground Hog Vista A remote subdivision lying in the middle section of the county, which adjoins National Forest lands. Risk is considered to be very high within this subdivision because of thick timber and heavy brush, a lack of water sources for fire fighting efforts, and remote location. Furthermore the subdivision is not located within a fire district. The Dolores Fire Protection District usually handles fire starts in this area, as a response from the Dove Creek Fire Protection District takes approximately two hours by road.
 - B.) Glade Ranch Subdivision A remote subdivision adjoining National Forest Lands near the center of the county. This subdivision is considered to be a high risk due to thick brush, lack of water for fire fighting activities, and remote location. Not located within a fire protection district, responses to ignitions are usually handled by the Dolores Fire Protection District. Travel time to the Dove Creek Fire Protection District is approximately two hours by road.
 - C.) <u>Redstone-</u> Located north of Dove Creek this subdivision adjoins the BLM lands along the rim of the Dolores River Canyon. This subdivision is considered have potentially high risk because of

heavy brush and thick Pinion /Juniper cover, lack of water. Located at the top of the steep slope of the Dolores Canyon this subdivision would be at risk from fire starts within the canyon. Response to fire starts in this area are be handled through the Dove Creek Fire Protection District. Travel time to this area is roughly 30 minuets from Dove Creek.

- D.) <u>West Fork</u>- Located in the eastern portion of the county, the West Fork of the Dolores River is a corridor of private in-holdings surrounded by National Forest Lands. This corridor is considered to be potentially at risk due to the steep slopes, heavy timber, and remoteness. Response to fire starts in this area are handled through the Dolores Fire Protection District. Response time from the Dove Creek Fire Protection District would require two hours by road.
- E.) <u>Rico</u>- Located in the far eastern portion of the county the Town of Rico is surrounded by National Forest Lands. Rico is potentially considered to be at risk because of the steep slopes and heavy timber. Response to fire starts in this area are handled by the Rico Fire Protection District.
- F.) <u>Cross Canyon</u> Located at the west end of the county the Cross Canyon area consists of fingers of private lands punctuated by deep canyons of the Canyons of the Ancients National Monument. This area is considered to have potentially high risk because many home sites lie at the edge of steep, heavily wooded canyons. Additionally the area lacks water for fire suppression and is relatively remote. Response to fire starts in this area are handled by either the Dove Creek Fire Protection District or the Pleasant View Fire Protection District. Response by either district can take up to 30 minutes of travel time.
- G.) <u>Dolores Rim</u>- Interspersed among the BLM lands along the top of the Dolores River Canyon this area is receiving a steady influx of new homes. This area is considered to have a potentially high risk because of the heavy Pinion /Juniper forests and thick brush, lack of water, and steep slopes of the nearby Dolores Canyon.

Emerging Issues;

Through the interview process a number of issues that can be addressed in the plan have emerged. These issues are;

1.) Existing maps are insufficient for emergency services. Current County maps lack information that would significantly help to coordinate emergency responses to fires, accidents and crimes.

Data gaps within the existing map information have been identified as:

- **A.)** Parcel & Subdivision information. Currently unavailable, this information will be added as the County GIS resources are brought up to full operational capacity.
- **B.)** Road labels. This information will be added to the map from CDOT and other available data sources.
- <u>C.) Ownership status</u>; BLM, National Forest and State Lands will be added from federal data files.
- D.) <u>GPS mile marker reference points</u>. Mile markers have been GPS located on Highway 666 from the Montezuma County Line to the Town of Dove Creek. Mile markers will be GPS located and added to the map for the remaining section of Highway 666 from the Town of Dove Creek to the Utah State Line. This process will also be done for portions of Highways 145 and 141 within the Dolores County boundaries. GPS mapping will be done as a courtesy of the Montezuma County GIS program.
- **E.)** Fire protection district boundaries. The boundary between the Dove Creek Fire District and the Pleasant View Fire District will be indicated on the map.
- **F.)** Existing fire hydrants and service line sizes. Locations of fire Hydrants will be located on the map including service line sizes.
- **G.)** Section lines. Section lines from USGS data files will be added to map to aid in reference location.
- 2.) Federal land boundaries are difficult to locate on the ground. There is concern over fire suppression efforts that inadvertently cross federal land property lines. Coordination between federal and local fire suppression efforts needs to be improved. Because they are typically the first responders on the scene, local fire fighters need to have some latitude to perform fire suppression activities in areas where fire starts on federal ground may pose a direct threat to private property.

- 3.) Continued air support is essential in suppression of fire in remote areas, and along private/ public interface lands. Continued and if possible expanded air support is key in controlling fire starts in inaccessible or remote areas in effort to maintain control over the situation until ground efforts can get in place.
- **4.) Fire fighting equipment needs.** A 500 gal. (Min.) brush truck is needed in both the Dove Creek and Rico fire districts. County fire equipment is generally oriented to fighting structural fires, heavier equipment and fourwheel drive is needed for wild land fires. The Rico fire protection district is also in need of personal fire protection gear & hand tools.
- **5.)** Access to water. Lack of water is the biggest obstacle to fire suppression once a fire starts. Having air support helps to alleviate this problem. However remote development should plan ahead to provide on site water sources of at least 2,500 gallons.
- 6.) Home and Property Insurance. Questions have been raised over the possibility of insurance rate hikes in areas identified as "risk areas". Information gathered so far has indicated that a "state wide" reclassification effort would be required to adjust insurance rates based on wildfire risk. Local insurance agents do not have the authority to make rate changes. Currently the primary criterion used by insurance companies for homes in rural areas is whether or not the home is within 5 miles of an adequately equipped fire station.
- 7.) Bringing the County GIS system on line. The county GIS program is currently on hold. Contracts for outside GIS mapping services are being pursued which will include training for GIS system maintenance and operation. An operational GIS system would greatly aid county planning and emergency coordination efforts. Existing GIS data layers produced as a courtesy of the San Juan National Forest and the Montezuma County GIS program have been made available to Dolores County emergency services in the interim.
- 8.) Archeological & Historical Resource protection. The protection of cultural resources is an important part of fire protection in our area. Fire crews have little training in identification and protection of these sites. Better training for local fire authorities is essential as they are typically the first responders and need good decision making tools. Furthermore, local authorities are in the best position to protect cultural resources on private lands.
- **9.) Federal Fire Crews.** The presence of fire crews in the Ground Hog area was instrumental in the suppression of several recent fire starts on private

lands. Because of the remoteness of this part of county, continued Federal assistance in the area is a great asset.

10.) Planning more comprehensive fire protection in remote developing areas. More development in previously remote locations means more need for comprehensive fire protection where a short time ago it was not an issue. Continued development in the Ground Hog area, for example, increases the area of urban/wild land interface dramatically. To provide comprehensive coverage in these areas, at least two new fire stations would eventually need to be built. Two locations for the possible future development of fire stations have been identified, one near Dunton, and one near Ground Hog reservoir. The Cross canyon area was also an area where the development of a new fire station may eventually be needed. Squaw Point was identified as likely location for such a station.

11.) Radio communications,

Radio communication is hampered by the proliferation of channels being used during a crisis situation. Furthermore, gaps in radio coverage due to terrain, results in inconsistent radio communication between emergency agencies and their personnel. As a consequence, delays in suppression activities can lead to out of control conditions very quickly. Improving radio coverage is difficult because of complex terrain.

12.) Fire plans for new subdivisions,

As new development stretches fire protection resources ever thinner more responsibility for fire protection will need to be taken on by developers. One possible way to proactive engage developers would be to require a fire plan for new developments before approval. Another possibility is requiring new development to help pay for expanded fire protection.

Dolores County Community Fire Plan Implementation ----

The following recommendations have been developed in an effort to reach the goals stated in of the Community Fire Plan. As a living document, these recommendations should be reviewed periodically and new recommendations or amendments to the existing recommendations should be included where appropriate.

Action Recommendation # 1

Continue to refine, update, and circulate the wildfire risk map on an annual basis, between the Sheriff's Department, Fire Districts, County Commission, County Planning Commission, Emergency Management Offices, Federal Agencies and other appropriate stakeholders.

The Wildfire Risk Map (appendix 1) is designed to be a Living Map that provides common geographical reference information for the Community Action Plan. The map is intended to be used as a resource to help coordinate the long range, intra-agency strategic fire management goals identified in the (CAP).

As a common resource, the map will help Local and Federal Government agencies;

- Prioritize and coordinate mitigation treatments on private and public lands, to reduce fire risks.
- Provide decision-making data for the County Commissioners, and County Planning Commission, regarding development.
- Identify resource gaps.
- Protect and manage community values such as; residences, watersheds, archeological or historic sites, view-corridors, recreation resources, wildlife habitat, energy resources, grazing and timber resources etc.
- Provide common reference and direction for fire suppression efforts between Fire Districts and Federal Fire Management Officers.

In the months ahead additional map refinement will include a polygon mapping exercise known as the "Quick Fire Plan" to more narrowly focus in on geographical areas where hazardous fuels, residences, and other community values overlap. (See appendix. 2)

Action Recommendation # 2

Develop and sustain a general public education campaign and concentrate special efforts in areas identified as high risk.

Expanding the use of public education tools already in place is an immediate action step that can be taken. Fire-wise publications and videos produced by the Colorado State Forest Service, San Juan Public Lands Center, are available in addition to "Fire wise" information that can be found over the internet.

Additional steps may include:

- Development of an educational presentation booth to be used at public events such as the County Fair, The Pick & Hoe festival, school events etc. Such a display may include photo documentation of good mitigation work examples, and graphic illustration of "fire wise" homes.
- Local newspaper coverage. Feature articles dealing with wildfire preparedness could be run in the paper on a regular basis to maintain a high level of fire awareness at the community level.
- Seek ways to raise the level of recognition for the fire districts. Possible action steps may include; hosting an "open house", community radio spots, etc.
- Informational briefs and videos can be broadcast over the community closed circuit television station.
- Integrate "fire wise" education into school curriculum. Involve local clubs such as 4H, FFA, boy scouts etc.
- Working with homeowners associations, builders, realtors and a door-todoor outreach program to individual landowners in an effort to jumpstart word- of -mouth community networking.
- o Develop highly visible ongoing demonstration projects.
- Conduct a door- to-door public outreach effort in areas thought to be at risk.

Action Recommendation #3

Develop a set of County policies to regulate "landowner initiated burns."

Controlled burning is an integral part of agricultural management. Burns can be an effective management tool for improving grazing range and annual cleanup of irrigation ditches and fields. However, landowner initiated fires that get out of control can have catastrophic effects on neighboring structures, property values and other community values. Furthermore fires of this nature carry an enormous amount of liability for the individual responsible for the ignition. Out of control fires of this nature consume vast amounts of community resources in time and in dollars. Good pre-burn planning can help to alleviate much of this threat.

Possible steps to improving the pre-burn planning effort include;

 Low level regulation, such as a courtesy call to the Sheriff department's dispatch, to describe the location, estimated size, and proposed time of burn. Recommendations regarding appropriate procedures could be passed on to the landowner based on burn reports from Mesa Verde. Dispatch could recommend postponement of burning on "Red Flag Warning Days".

Higher level regulation, such as an ordinance requiring a mandatory call to dispatch requesting permission for an open burn. Or by requiring an "open burning permit" from the Sheriffs office. Such permits could be issued based on current fire/weather conditions and could include an onsite visit by a Sheriff's department representative, to evaluate the situation under certain conditions. Penalties for noncompliance would need to be addressed.

Action Recommendation #4

Develop measures to reduce fire hazards in future developments.

As a condition for approval of new subdivisions, "fire wise" development standards and maintenance could be required. An example from the Archuleta County Land Use Code has been included to facilitate discussion of this policy option. (Appendix 3)

Steps that can be taken by the County Commissioners and the County Planning Commission to aid policy compliance could include;

- A Wildfire Hazard Rating Assessment for each proposed subdivision outlining mitigation measures to be undertaken across the entire subdivision. An example of Wildfire Hazard Rating Factors from the Utah Division of Forestry-Fire &State Lands has been included. (Appendix 4)
- A standardized "Defensible Space Assessment" outlining mitigation measures could be required for each individual subdivision lot. An example worksheet from the Utah Division of Forestry-Fire & State Lands has been included. (appendix 5)
- Fire wise construction & landscaping checklists could be made available through the Assessors Office and County Planning Commission prior to final plat approval. (appendix 6 & 7)

Action Recommendation #5

Create a mechanism for the oversight and management of the Dolores County Wild Lands Fire Plan.

To maintain momentum the (CAP) regular monitoring will be required. Some possibilities for accomplishing this duty may include; Continued oversight through the Sheriff's office, Oversight through The Fire Protection District, Oversight through the County Planning Commission, or creating a local Fire Council. Other possibilities for the assumption of this role can be discussed amongst county officials.

Some of the oversight functions may include but not be limited to;

- o Administering a sustained public education strategy.
- Administration and follow –up on grant applications.
- Coordination between Counties/ Fire districts.
- o A contact point for coordination with Federal Agencies.
- Tracking on equipment and training needs.
- Administering/ coordinating post- fire rehabilitation efforts such as damage assessment, erosion control, reseeding, weed control etc.

Action Recommendation #6

Continue to support and promote private contractors who perform fire safe mitigation work.

There are a number of contractors in the region who provide fire safe maintenance and mitigation work for private landowners. For a list of contractors providing these services see (appendix 8.)

Opportunities exist for local contractors to start new businesses or to expand on existing businesses within the fire prevention /fuels reduction market. Some possibilities could include:

- Contracting with private landowners for fire prevention work.
- Contacting for fire prevention work with Federal, State or Tribal entities.
- Extraction of saleable material from fire prevention projects, which could include; saw timber, pulp, fence posts, firewood, mulch products for landscaping, compost material or wood for furniture and other ornamental purposes.

Action Recommendation #7

Work to improve interagency efficiency, as it pertains first responders and fire suppression efforts along federal lands boundaries.

Fire suppression efforts near federal land boundary have recently come under national attention due to tragedies that occurred during the summer fire season of 2000. Much of the losses to both life and land have been blamed on delays, and poor communication. Initially small fire starts can easily turn into an unmanageable problem because of delayed action over procedural concerns.

Some possible actions could include:

- Development of a common, interagency "crash course" in archeological evaluations which would enable firefighters to make quick and accurate field decisions during the course of a fire.
- Develop an adaptive fire suppression strategy and MOU between agencies, outlining the general response protocols by County/Federal suppression personnel.
- Accelerate archaeological surveys and mapping along boundaries to facilitate pre-emptive fire response planning, fuels reduction work, interagency coordination, and protocols. Data gathered needs to be freely exchanged between federal and local fire authorities to achieve the highest level of protection for archeological resources and landscape resources alike.
- Accelerate fuels treatments along both sides of public lands boundaries, to better manage those areas for potential wildfire outbreaks. Partnerships, and coordination between private land owners and federal land management agencies needs to be fostered for this to happen.

Action Recommendation #8

Continue long-range strategic planning to anticipate and prepare for future fire protection needs.

As Dolores County grows it is important to look ahead to prepare for new demands. Three areas have already been identified for possible locations of new fire stations/ fire protection districts (See appendix 9).

(Appendix 2) **Quick Fire Plan**

The quick fire plan will have two basic objectives;

- 1.) Identify areas where wildland fire would be **highly undesirable** (**Class A**). Where management activities will be focused on aggressive suppression, prevention, and where there is a need for immediate mitigation work.
- 2.) Identify areas where wildland fire would be **undesirable under current conditions** (**Class B**). Where <u>short -term</u> management activities will be focused on aggressive suppression and prevention, and <u>long-term</u> management focused on fuels reduction.

The Quick Plan Process

- o Areas will be designated as **Class A**; or **Class B**.
- O Criteria for Class A polygons: are the existence of values that have a high likelihood of being unacceptably altered or damaged as a result of exposure to fire intensities and durations expected under current conditions. (These may be Watersheds, view sheds, infrastructure, cultural resources, sub divisions etc.)
- After areas are designated, the township, range and section number closest to the center of the area will be recorded and an easily recognizable name will be assigned to the area.
- O A written assessment each area will be drafted which will include; a description of the size and shape of the area, an evaluation of the level of ignition risk, a description of fire hazard conditions, an analysis response potential, and an evaluation of potential losses as related to the conditions described.
- Class A areas will be ranked from those most in need of attention to those in less urgent need based on the evaluations.
- o General Fire protection action plans will be developed for each area.
- o Completed maps and evaluations will be circulated amongst cooperating agencies to coordinate fire management and suppression activities.

(Appendix 3)

Archuleta County Fire Policy

<u>Site Development Standards for Conditional Use/Limited Impact U</u>se Permits-

Wildfire Hazard Areas The County shall not approve any development plan if the proposed project is located an identified wildfire hazard area, or is suspected by the County to be in a wildfire hazard area, unless the developer can submit adequate evidence, prepared by a qualified professional forester, that the proposed project meets the following criteria:

- (a) Any project in which residential activity is to take place shall be designed so as to minimize significant hazards to public health and safety or to property.
- (b) All projects shall have adequate roads for emergency service by fire trucks, fire fighting personnel and firebreaks or other means of mitigating conditions conducive to fire.
- (c) Precautions required to reduce or eliminate wildfire hazards shall be provided for at the time of initial development.
- (d) The project will adhere to the Guidelines and Criteria for Wildfire Hazard Areas promulgated by the Colorado State Forest Service.
- (e) Consideration shall be given to the recommendations of the Colorado State Forest Service, resulting from review of a proposed project in a wildfire hazard area.

Subdivision Design Regulations for Wildfire

Wildfire Hazard Areas:

The County Planning Office shall keep on file and available for public inspection a set of maps clearly showing all known and identified wildfire hazard areas in Archuleta County as such become available. The County shall not approve any subdivision plan if the proposed subdivision is either in one of these identified wildfire hazard areas, or is suspected by the County to be in a wildfire hazard area, unless the subdivider can submit adequate

evidence, prepared by a qualified professional forester, that the proposed subdivision meets the following criteria:

- (a) Any subdivision in which residential activity is to take place shall be designed so as to minimize significant hazards to public health and safety or to property.
- (b) A subdivision shall have adequate roads for emergency service by fire trucks, fire fighting personnel and firebreaks or other means of mitigating conditions conducive to fire.
- (c) Precautions required to reduce or eliminate wildfire hazards shall be provided for at the time of initial development.
- (d) The subdivision will adhere to the Guidelines and Criteria for Wildfire Hazard Areas promulgated by the Colorado State Forest Service.
- (e) Consideration shall be given to the recommendations of the Colorado State Forest Service resulting from review of a proposed subdivision in a wildfire hazard area.

If the proposed subdivision lies in an identified wildfire hazard area, or is suspected by the Planning Commission to lie in a wildfire hazard area, the subdivider shall submit the following information certified by a qualified professional forester:

- (1) Maps or overlays portraying the existing wildfire conditions of the area with particular attention given to the effects of slope, topographic and vegetative (living and dead) conditions. Such maps shall be on a scale sufficiently detailed to meet the objectives of these regulations.
- (2) The procedures proposed to reduce or control conditions of wildfire hazard.
- (3) The fire protection plan for the proposed land use including all fire suppression facilities, which are necessary to meet the objectives of these regulations.
- (4) Plat notes on the Preliminary Plan map and Final Plat stating that such a hazard exists.

(Appendix 4)

to 1 pc		TOTAL SCORE		4	ω	2	-	Rating Points
to 1 points MODERATE		(1)	>60%	45%	30%	0%	< 10%	Slope
ERATE			West	South	Flat	East	North	Aspect
1 to 1 points HIGH	RATING INDEX		Canyon/Draw	Ridge top	Mid Slope	Low on Slope	Valley Bottom	Topography
	DEX		> 60 Minutes	60 Minutes	4: Minutes	30 Minutes	1 Minutes	Response Time
to 30 points			Conifer	Mtn. Brush	Pin./Juniper	Grass/Sage	Hardwoods	Fuel Type
EXTREME			100%	80%	г 60%	40%	20%	Density

(Appendix 5)

UTAH DIVISION OF FORESTRY-FIRE & STATE LANDS DEFENSIBLE SPACE ASSESSMENT WORKSHEET

Subdivision Name:	Lot Number:	GPS:		
Lot Owner Name:	Legal: TR	Sec	/	
Owner Address:	Evaluator:	Agency:	12022	
Owner Phone:		Moderate High (from hazard rating wor being developed? Y		
Structure: Roof Covering Siding	Openings	Hazards		
Defensible Space: Adequate? Y/N	Fuel Type:	· · · · · · · · · · · · · · · · · · ·		
Is pruning required? Y/N What Height: ff	Is Thinning Require	ed? Y/N Avg. D	iainches	
Insects/Disease present Y / N				
Acres to be treated: Non-treated a	cres A	dequate Water Supply	y? Y/N	
Is access adequate for fire service vehicles? Y/N				
Comments:				
Prescription:				
Permission: As the landowner/agent for the a Monroe Meadow Defensible Space Project. I un Agencies involved and I must commit in-kind resou government funds expended on this parcel. I also us the vegetation and improvements on this parcel in the landowner in-kind commitment to this project.	derstand that this is a parces such as financial bunderstand that this do the event of a wildfire.	partnership with the Wacking and/or labor to es not guaranty the su	Vildfire o match the urvivability of	
Refusal: As the landowner/agent for the abo in the Monroe Meadow Defensible Space Project		el, I / we do not wish	to participate	
	Signature of I	andowner/Agent		

(Appendix 6)

Firewise Landscaping Checklist

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).
- † † rrigation 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 fire resistant species.
- † ₺Zone 2. Fire resistant plant materials should be used here. Plants should be lowgrowing, 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. Thin selectively here, 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.
- † *Carefully space the trees you plant.
- † Take out the "ladder fuels"— vegetation that serves as a link between grass and tree tops. It can carry fire to a structure or from a structure to vegetation.
- † **Give yourself added protection with "fuel breaks" like driveways, **gavel walkways, and lawns.

When maintaining a landscape:

- † Keep trees and shrubs pruned. Prune all trees up to 6' to 10' from the ground.
- † *Remove leaf clutter and dead and overhanging branches.
- † Mow your 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 vegetative 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.

(Appendix 7)

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 led portion of the land, since fire spreads rapidly, even on 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 fireresistant or non-combustible whenever possible.
- † For roof construction, consider using materials such as ClassA asphalt shingles, slate orclay tile, metal, cement and concrete products, or terrecotta tiles.
- † *Constructing a fire-resistant sub-roof can add protection, as well.
- † †On exterior wall cladding, fire resistive materials such as stucco or masonry are much better than vinyl which can soften and melt.
- † *Consider both size and materials for windows; smaller panes hold up better in their frames than larger ones; double pane glass and tempered glass are more effective than single pane glass; plastic skylights can melt.
- † *Cover windows and skylights with nonflammable screening shutters.
- † ¶To prevent sparks from entering your home through vents, cover exterior attic and underfloor vents with wire mesh no larger than 1/8 of an inch; make sure undereave and soffit vents are closer to the roof line than the wall; and box in eaves, but provide adequate ventilation to prevent condensation.
- † Include a driveway that is wide enough—12 feet wide with a vertical clearance of 15 feet and a slope that is less than 12 percent—to provide easy access for fire engines. The driveway and access roads should be well-maintained, clearly marked, and include ample turnaround space near the house. Also consider access to water supply, if possible.
- † Provide at least two ground level doors for for after exits and at least two means of escapeeither a door or window – in each room, so that everyone has a way out.
- * Keep gutters, eaves, and roof clear of leaves and other debris.
- † *Make an occasional inspection of your home, looking for deterioration such as breaks and spaces between roof tiles, warping wood, or cracks and crevices in the structure.
- † †Also, inspect your property, clearing dead wood and dense vegetation from at least 30 feet from your house, and moving firewood away from the house cattachments, like fences or decks.

Any structures attached to the house, such as decks, porches, fences, and outbuildings

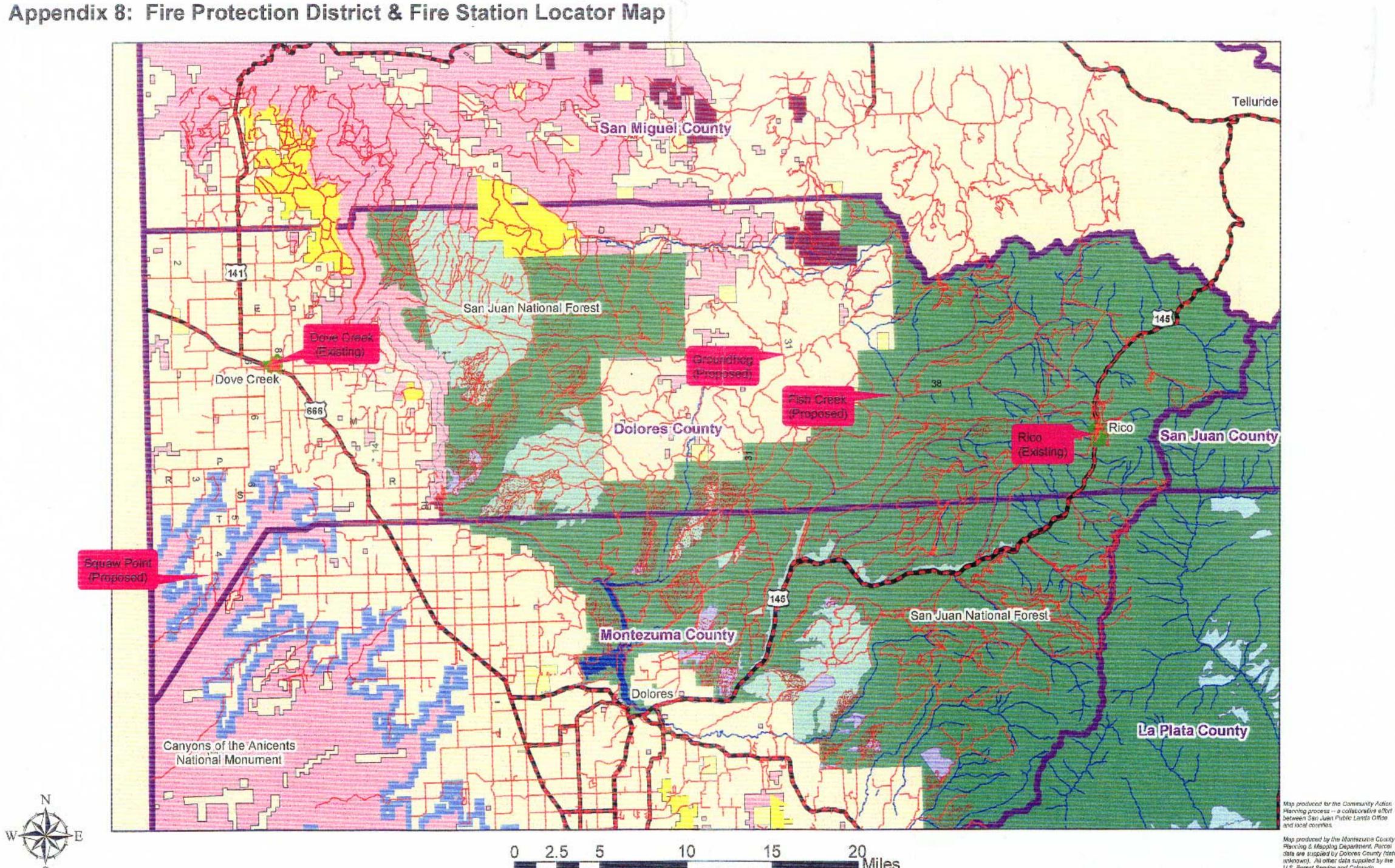
should be considered part of the house. These structures can act as fuses or fuel bridges,

particularly if constructed from flammable materials. Therefore, consider the following:

- † 11 f you wish to attach an all-wood fence to your home, use masonry or metal as a protective barrier between the fence and house.
- † *Use non-flammable metal when constructing a trellis and cover with highmoisture, nonflammable vegetation.

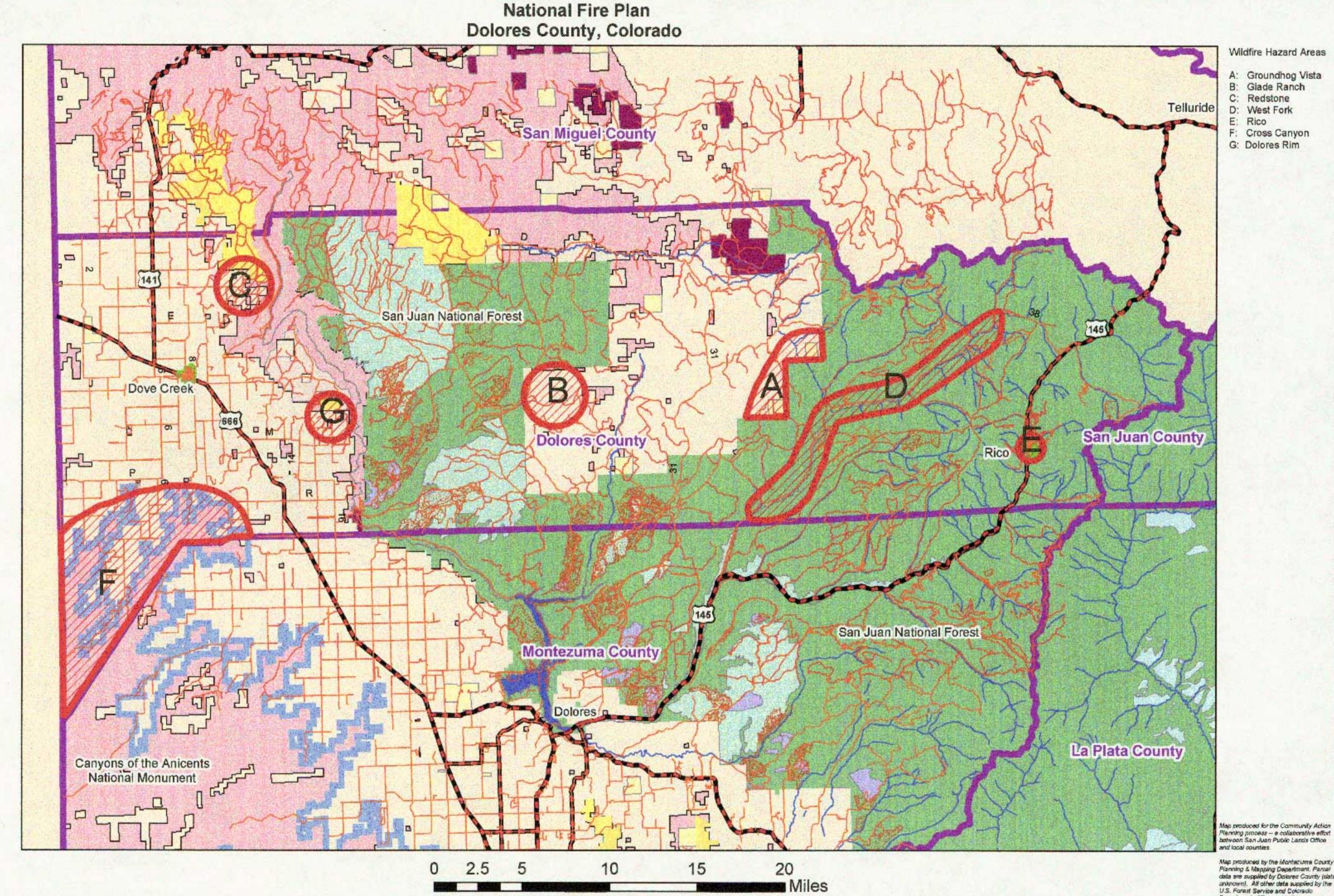
- † Prevent combustible materials and debris from accumulating beneath patio deck or elevated porches; screen under or box in areas below ground line with wire mesh no larger than 1/8 of an inch.
- † *Make sure an elevated wooden deck is not located at the top of a hill where it will be in direct line 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.



Planning process -- a collaborative effort between San Juan Public Landa Office and local counties. Map produced by the Montezuma County Planning & Mapping Department, Parcel

date are supplied by Dolores County (date unknown), All other data supplied by the U.S. Forest Service and Colorado Department of Transportation.



Map produced by the Montecume County Planning & Mapping Department, Parcel data are supplied by Dateres County (data unknown). All other data supplied by the U.S. Forest Service and Colorado Department of Transportation