



United States  
Department of  
Agriculture

Forest  
Service

Mogollon Rim  
Ranger District

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File Code: 1950-1

Date: July 26, 2005

Dear Friend:

The Mogollon Rim Ranger District has completed an environmental assessment (EA) for the ***Victorine Wildland Urban Interface Project*** and we are requesting your comments on this project. Please refer to the enclosed project description, alternatives and vicinity map for location.

The Coconino National Forest is proposing fuels management treatments on 7,500 - 8200 acres of National Forest System Land to reduce fuel loading in the Victorine WUI. The Victorine WUI project proposes combinations of thinning and prescribed burning activities to provide protection to private lands and homes within the Victorine analysis area. The Victorine WUI project would also provide further protection to portions of the Blue Ridge WUI north of the analysis area. The Victorine WUI project is proposed at this time to respond to goals and objectives of the National Fire Plan (USDA Forest Service 2000a) and the Coconino National Forest Land and Resource Management Plan (USDA Forest Service 1987).

There are three alternatives that have been analyzed in detail for the ***Victorine Wildland Urban Interface Project Environmental Assessment***. Alternative A - the No Action alternative; Alternative B - Proposed Action; and Alternative C - Modified Proposed Action. A detailed description of each of the alternatives are included in the following pages.

This is considered the official Notice and Comment period for public comments on the environmental assessment. Comments will be accepted for 30 days following the date of publication of the legal notice in the Arizona Daily Sun, Flagstaff, Arizona per 36 CFR 215 regulations.

Written comments may be submitted by mail or FAX to the Responsible Official: Larry Sears, District Ranger, Mogollon Rim Ranger District, Coconino National Forest, HC 31, Box 300, Happy Jack, Arizona 86024, FAX: 928-527-8282. Comments may be hand delivered weekdays 7:30 am – 4:00 pm at the same address. Electronic comments may be submitted in Word (.doc), rich text format (.rtf), text (.txt), and hypertext markup language (.html) to: [comments-southwestern-coconino-mogollon@fs.fed.us](mailto:comments-southwestern-coconino-mogollon@fs.fed.us) Upon receipt of an electronically mailed comment, the sender should normally receive an automated electronic acknowledgement from the agency as confirmation of receipt. If the sender does not receive an automated acknowledgement of the receipt of the comments, it is the sender's responsibility to ensure timely receipt by other means. Oral comments must be provided at the Responsible Official's office during normal business hours via telephone 928-477-2255 or in person.

Individuals and organizations wishing to be eligible to appeal must provide their name, address, title of the proposed action, specific substantive comments on the proposed action, along with supporting reasons that the Responsible Official should consider in reaching a decision. Only those



who submit timely and substantive comments will be accepted as appellants. To be eligible for appeal, each individual or representative from each organization submitting substantive comments must either sign the comments or have other verification of identity upon request. All commenters should review the 36 CFR 215 regulations for detail on comment requirements.

I am considering Alternative C - Modified Proposed Action as my Preferred Alternative. I have not yet made a decision on this proposed project.

Additional information regarding the proposed action can be obtained from Polly Haessig, NEPA Specialist at the above address, phone: 928-477-2255, e-mail: [phaessig@fs.fed.us](mailto:phaessig@fs.fed.us) The environmental assessment is available upon request from the Mogollon Rim Ranger District and is also available at [www.fs.fed.us/r3/coconino](http://www.fs.fed.us/r3/coconino)

We welcome your comments during this official notice and comment period. Your comments must be received no later than close of business August 26, 2005.

Sincerely,

/s/ Larry G. Sears

LARRY G. SEARS  
District Ranger

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# **Victorine Wildland Urban Interface Project Environmental Assessment Project Summary**

## **Existing Conditions**

The Victorine WUI area lies adjacent to and southeast of the Blue Ridge Urban Interface area. The Blue Ridge WUI contains over 1,000 homes. There are approximately 10 homes within the 2,156 acres of private land in the Victorine analysis area. Area residents, as well as forest users, come to the area for recreation, hunting, and fuel-wood gathering.

Private property in the Victorine area is at risk to crown fire originating on Forest Service lands due to dead and down fuel accumulations and dense forest conditions with low ground to live crown base heights. Over a century of fire exclusion has increased the accumulation of downed-woody fuels and the growth of dense thickets of small diameter trees underneath stands of large trees and into open areas. Surface fuel loading currently averages over 10 tons per acre across the analysis area and is almost wholly comprised of pine litter and woody debris. Fuel loads on the northern half of the analysis area average over 13 tons per acre while the southern half averages just over 10 tons per acre. Ground to live crown base heights are commonly less than 10 feet and canopy cover exceeds 40 percent on over half of the analysis area.

The accumulation of surface and ladder fuels has increased the risk for large stand-replacing fires. In addition, high stand densities decrease tree growth and vigor across all diameter classes and tree species. These factors inhibit resistance to pathogens such as insects and drought at the single-tree, stand, and forest levels, which can further increase the potential future fire hazard. Lightning fires, increasing recreation use, and a growing local population contribute to fire risk by providing ample ignition sources.

## **Desired Conditions**

The following are the desired conditions in the project area:

- Reduction in the threat of stand-replacing crown fires to private property, developments, and habitats for sensitive habitats;
- Future crown fires are confined to isolated pockets as occurred during pre-European settlement times because of low dead and down fuel loading, low stand densities, and high ground to live crown base heights.
- Ground to live crown base heights of ponderosa pine stands averaging 10 feet or greater and average stand densities ranging from 40 – 80 square feet of basal area.
- Dead fuel loading ranges from 1-30 tons per acre but will average less than 10 tons per acre on sites dominated by ponderosa pine and average less than 5 tons per acre in openings with grasses and forbs.

## **Purpose and Need For This Project**

The purpose then of this project is to reduce crown fire hazard in the Victorine WUI. There is a need to apply management activities that move the existing conditions in the direction of the desired conditions by reducing live and dead fuel loading in the Victorine WUI.

The following three alternatives that have been analyzed in detail in the environmental assessment and we are asking your input them.

### **Alternative A -- No Action**

The Council on Environmental Quality (CEQ) regulations (40 CFR 1502.14d) requires that a "No Action" alternative be analyzed in every environmental assessment. This alternative represents the existing condition against which the other alternatives are compared. It provides a baseline to compare the magnitude of environmental effects of the action alternatives. Under this alternative no fuels reduction treatments will be accomplished.

### **Alternative B -- Proposed Action**

The objective of this alternative is to reduce the crown fire hazard to private land, homes, people, and improvements within the Victorine WUI. It would also reduce the probability of crown-fire development, which could threaten life and property to the north and northeast in the Blue Ridge Wildland Urban Interface (the prevailing wind direction is from the southwest). A map showing treatments proposed in Alternative B is provided in Figure 2.

Alternative B includes the following treatments:

#### ***Maintenance Thinning and Burning on 890 previously treated acres.***

This treatment includes thinning of ponderosa pines up to 12" diameter at breast height (DBH) with a spacing guide of at least 15 feet between tree boles or three feet between crowns. Slash would be lopped, scattered, and bucked to a depth of no more than 2 feet. Slash would be burned with low/moderate intensity prescribed fire to remove needles, small twigs, and branches. This treatment would be applied to previously treated areas<sup>1</sup> with moderate crown fire hazard to reduce the hazard to low.

#### ***Maintenance Burning on 911 previously treated acres.***

This treatment involves low intensity prescribed burning of previously thinned and/or burned areas. This treatment would be applied to previously treated areas with low crown fire hazard to maintain the existing low fire hazard.

#### ***Broadcast Burning on 4,915 previously untreated acres.***

This treatment applies prescribed fire to areas with moderate stand densities and low to moderate dead-down fuel loading. The broadcast burn treatment involves low to moderate intensity prescribed broadcast burning that may result in up to 10 percent conifer mortality. This treatment is

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<sup>1</sup> Previously treated areas are areas that received understory thinning and/or burning within the last 20 years.

prescribed for areas with low to moderate canopy closure and low to moderate surface fuel loading. The broadcast burn treatment is applied to stands with low to moderate crown fire hazard to maintain or reduce the existing crown fire hazard respectively by reducing surface fuel loading and, to a more limited extent, by reducing live ladder fuels.

***Burning Thinning and Burning of 782 previously untreated acres.***

This is a three-stage process of fuel reduction in areas with high to moderate crown fire hazard due to high existing dead-down fuel loading, high stand density, and low average crown base heights. The first activity in this treatment is to broadcast burn to reduce the existing dead-down surface fuel loading. Thinning of ponderosa pines up to 12” DBH with a spacing guide of at least 15 feet between tree boles or three feet between crowns would be the second treatment. Slash would be lopped, scattered, and bucked to a depth of no more than 2 feet. Finally, the slash would be burned with low/moderate intensity prescribed fire to remove needles, small twigs, and branches.

***Thinning and Chipping of Slash on 10 acres.***

This treatment is applied immediately adjacent to developed private land to reduce visual and smoke impacts from prescribed burning. The treatment entails understory thinning as described above with chipping of slash rather than lopping and/or burning. Chips are broadcast on site. The treatment would lower crown fire hazard by reducing canopy closure and raising crown base heights.

**Alternative C -- Modified Proposed Action**

The objective of Alternative C – modified proposed action, is to reduce the fire hazard and the probability of crown fires within the Victorine Wildland Urban Interface to private land, homes, people and improvements that lie to the north and northeast of the project area. A map showing treatments proposed in Alternative C is provided in Figure 3.

Alternative C includes the following treatments:

***Maintenance Thinning and Burning of 805 Previously Treated Acres.***

This treatment includes thinning of ponderosa pine trees up to 12 inches diameter at breast height (DBH) with a spacing guide of at least 15 feet between tree boles or three feet between crowns. Slash will be lopped, scattered, and bucked to a depth of no more than 2 feet. Slash will be prescribed burned with low to moderate intensity to remove needles, small twigs, and branches. This treatment will treat areas that currently have a moderate fire hazard, reducing them to a low hazard.

***Maintenance Burning of 839 Previously Treated Acres.***

This treatment involves low intensity prescribed burning of previously thinned and/or burned areas. This treatment will treat areas with low crown fire hazard to maintain the existing low fire hazard.

***Broadcast Burning of 6,083 Previously Treated Acres.***

This treatment applies prescribed fire to areas with moderate stand densities and low to moderate dead and down fuel loading and canopy closures. This prescribed burn treatment involves low to moderate intensity burning that may result in up to 10 percent conifer mortality. The objective of this prescribed burn treatment is to maintain or reduce the existing crown fire hazard respectively by reducing surface fuel loading and, to a more limited extent, by reducing live ladder fuels.

Under this alternative, a pretreatment of fuels may occur within some of the clumps in order to

cause patches of mortality ranging from less than one tenth of an acre to half an acre in size. Pretreatment and resultant clump thinning with fire would occur on approximately 10-20 percent of the 6,083 proposed treated acres and could result in up to 20 percent conifer mortality where applied.

***Burning, Thinning, and Burning of 468 previously untreated acres.***

This is a three-stage process of fuel reduction in areas with high to moderate crown fire hazard due to high existing dead and down fuel loading, high stand density, and low average crown base heights. The first activity in this treatment is to prescribe burn to reduce the existing dead and down surface fuel loading. Secondly, thin ponderosa pine trees up to 12 inches diameter breast height (DBH) with a spacing guide of at least 15 feet between tree boles or three feet between crowns. Slash will be lopped, scattered, and bucked to a depth of no more than 2 feet. Third and lastly, the slash will be burned with low to moderate intensity prescribed burn to remove needles, small twigs, and branches.

***Thinning and Piling of 483 acres.***

This treatment is applied to areas immediately adjacent to developed private land, in or adjacent to sensitive wildlife habitat, and in areas with very high existing surface fuel loading. This treatment is used to improve control of fire effects to private land and residual stand structure. The treatment entails thinning ponderosa pine trees up to 12 inches diameter breast height (DBH) and piling the resulting slash. Treatments adjacent to private property will be hand piled. Sites with excessive pre-existing surface fuel loading that are not immediately adjacent to private property may be hand or machine piled.

***Follow-up Maintenance Burning.***

This treatment involves broadcast burning of 7,939 acres (See Figure 4). Thin and pile treatments located within old growth and goshawk habitat would be excluded (271 acres). This treatment is intended to mimic the historic fire regime in both fire occurrence and fire severity and intensity. The maintenance burns would be conducted within 3-12 years after completion of the initial treatments and would be implemented as needed to keep surface fuel loading low, sustain a low crown fire hazard, and achieve desired conditions of ground to live crown base heights, stand density, and dead fuel loading.

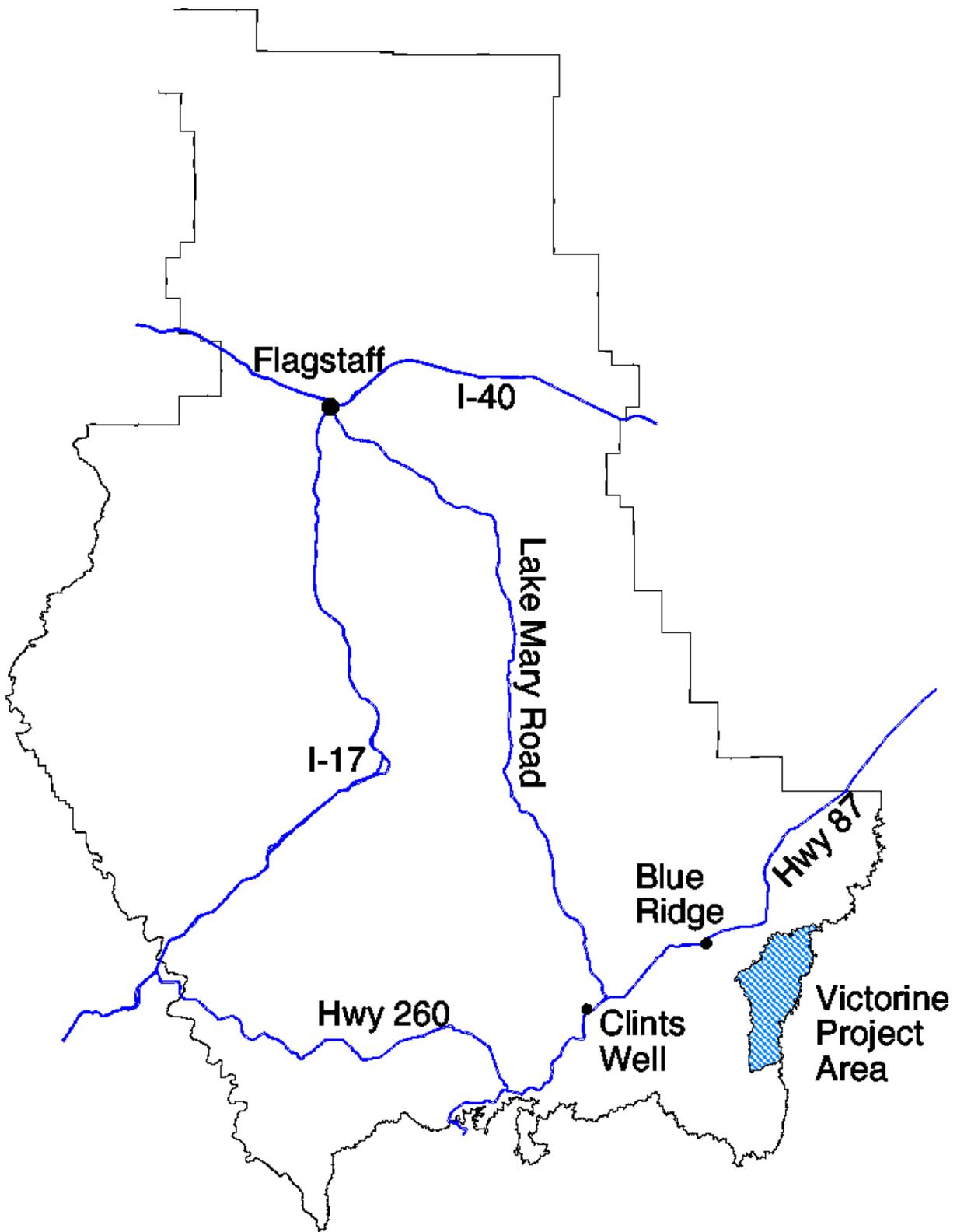


Figure 1: Victorine Wildland/Urban Interface Project Vicinity Map

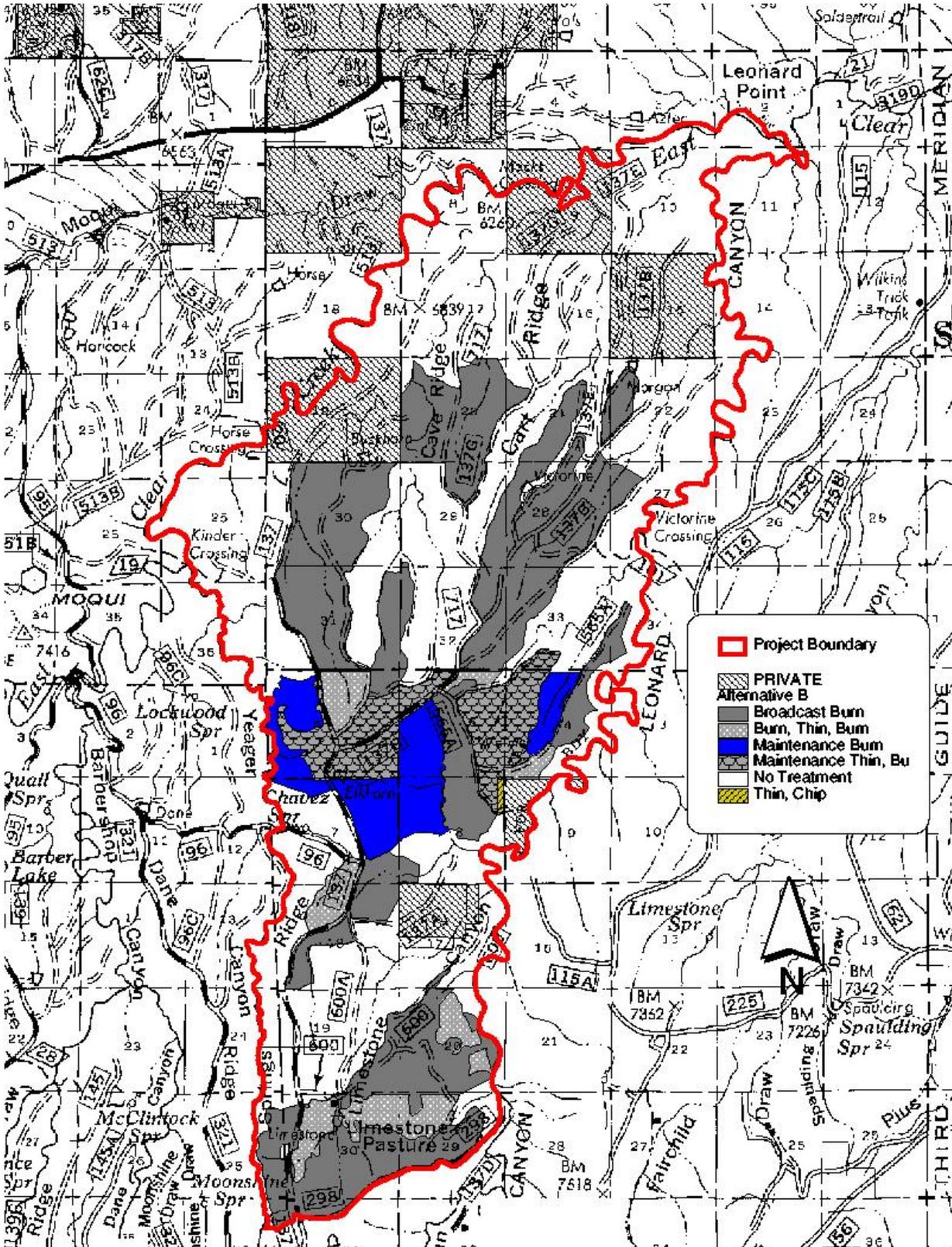


Figure 2: Alternative B -- Proposed Action

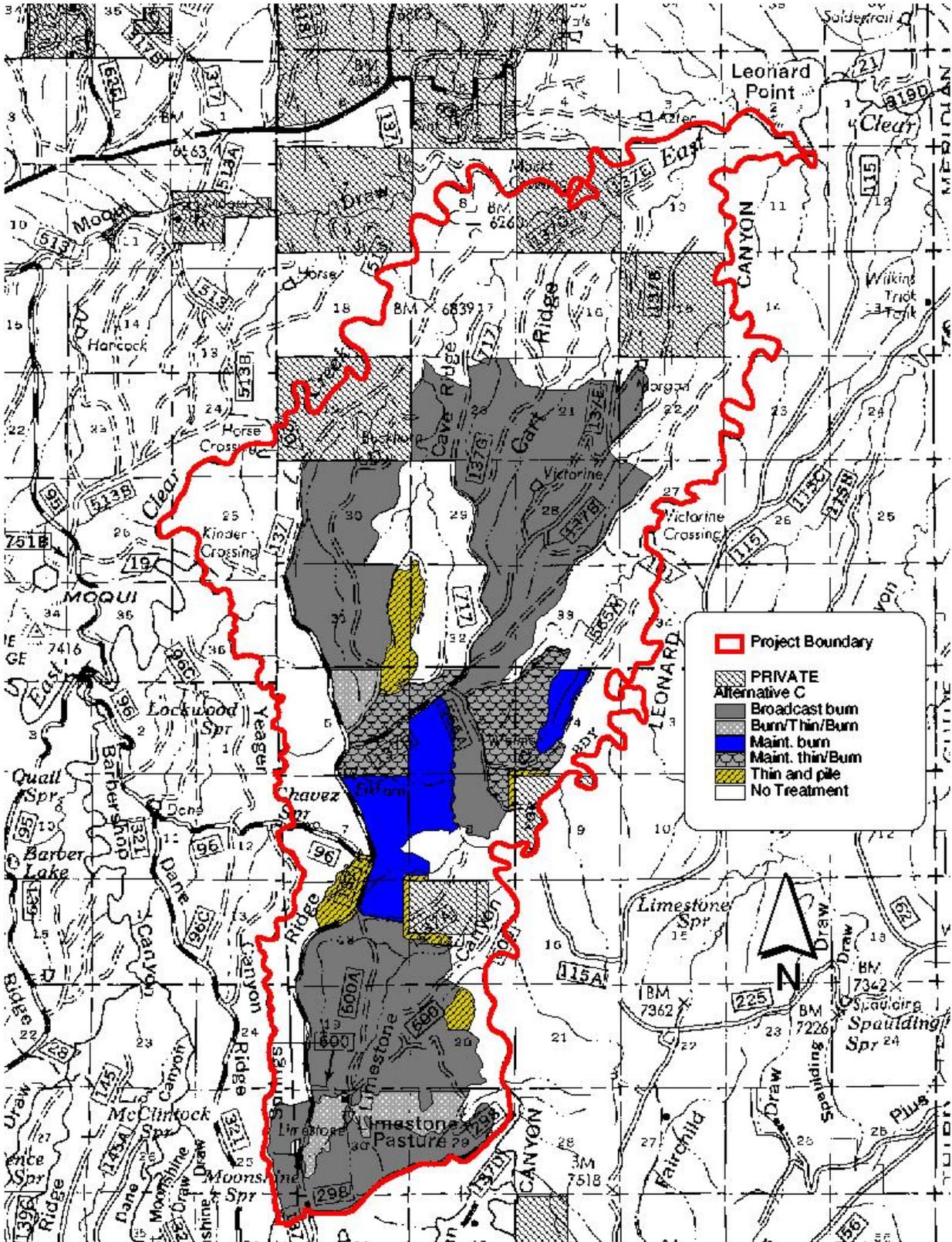


Figure 3: Alternative C Modified Proposed Action Initial Entry Treatments

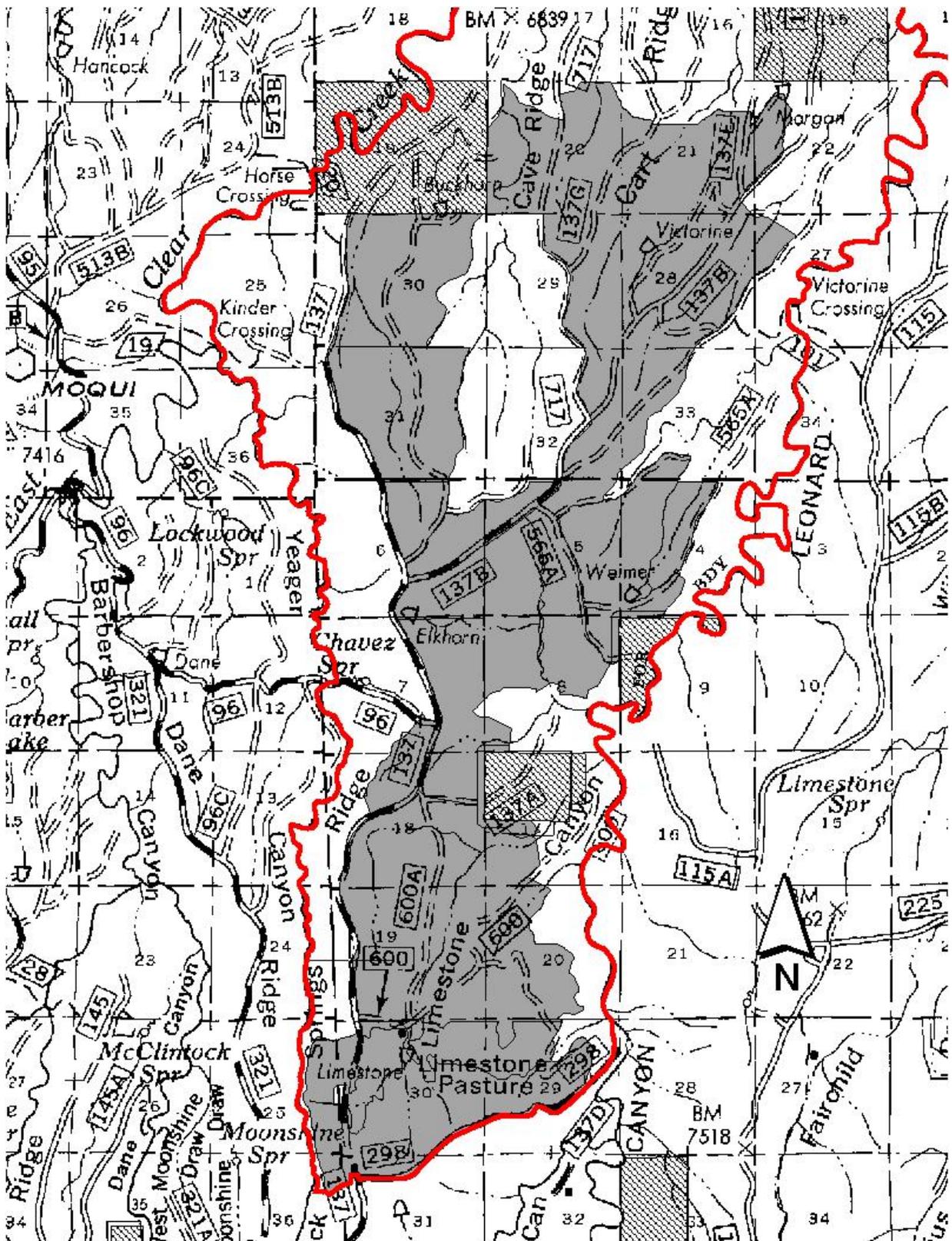


Figure 4: Proposed Secondary Maintenance Burn. The gray area of the map indicates the initial entry treatment acres that are proposed for maintenance burning under Alternative C.

## Comparison of Alternatives

The proposed treatment activities in both Alternatives B and C are quite similar. The key differences between the two action alternatives, aside from acreage, are as follows:

**Table 1: Acreage of Proposed Activity by Alternative for the Victorine WUI Project.**

<b>Proposed Activities</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>
<b>Maintenance Thin/Burn previously treated acres</b>	0 acres	890 acres	805 acres
<b>Maintenance Burn previously treated acres.</b>	0 acres	911 acres	839 acres
<b>Broadcast Burn previously untreated acres</b>	0 acres	4,915 acres	6,083 acres
<b>Burn/Thin/Burn previously untreated acres</b>	0 acres	782 acres	468 acres
<b>Thin and Chip</b>	0 acres	10 acres	0 acres
<b>Thin and Pile</b>	0 acres	0 acres	483 acres
<b>Maintenance Burn all treatment areas within 3 to 12 years after the completion of individual treatments</b>	0 acres	0 acres	7,939 acres

Site preparation is included in the broadcast burn treatment in Alternative C to address a concern that low intensity broadcast burning alone in young stands of ponderosa pine regeneration with light ground fuels would not alter stand characteristics enough to reduce current and future crown fire hazard. Additional acreage of proposed broadcast burning activity within Alternative C is proposed to address a concern that the location and amount of broadcast burning in Alternative B provided inadequate protection to private property within the analysis area. Thinning, piling and burning is proposed in Alternative C to address a concern that broadcast burning may pose a risk to private property along property boundaries with the existing fuel loads or with slash fuel loads. The Alternative B thin and chip acres are included in the Alternative B thin and pile acres because piling costs the same or less than chipping and ultimately removes more fuel from the site. Thinning and piling also addresses a concern that broadcast burning of thinning slash in particular sensitive habitats would cause undesirable losses of logs and snags. Maintenance burning of initial entry treatments is introduced in Alternative C to address a concern that the reduction of crown fire hazard gained by initial entry treatments would not persist without active management of future surface fuel accumulations. Other differences in treatment locations and acreages between the two action alternatives occurred primarily to address potential effects to Mexican spotted owl and Little Colorado spinedace habitats. The rest of the differences in proposed treatment acreages are to lessen the potential for spread of invasive weeds from fireline construction. This was accomplished by using existing open and closed roads for treatment area boundaries wherever possible to limit the need for fireline construction.

The alternatives are compared based on Objectives and Units of Measure, as described in Chapter 1 of the Environmental Assessment and also included here in Table 2. Information in the Table 2 is focused on activities contributing to objective accomplishment, which can be distinguished quantitatively or qualitatively among alternatives.

**Table 2. Objective Accomplishment by Alternative for the Victorine WUI Project**

<b>Objective:</b> Reduce crown fire hazard in the Victorine WUI through thinning and prescribed burning.			
<b>Measure</b>	<b>Alternative A No Action</b>	<b>Alternative B Proposed Action</b>	<b>Alternative C Modified Proposed Action</b>
<b>Change in surface fuels (tons/acre)</b>	No immediate change. Surface fuels would gradually increase over time in all stands.	Surface fuel loading would increase over the short term in thinned stands and decrease in burn only stands. Over the long term, surface fuel loading would be reduced after prescribed burning is completed on all proposed treatment acres with the exception of the 10 acres of proposed chipping, where it would increase. About 7,500 acres of surface fuels would be reduced or maintained at low levels with this alternative.	Surface fuel loading would increase over the short term in thinned stands and decrease in burn only stands. Over the long term, surface fuel loading would be reduced after prescribed burning is completed on all proposed initial entry treatment acres. About 8,680 acres of surface fuels would be reduced or maintained at low levels with this alternative. Maintenance burning of initial entry treatments would keep surface fuel loading low well into the future, extending the effect of surface fuel reduction for a longer duration than Alternative B on about 7,940 acres.
<b>Change in stand density (trees/acre)</b>	No immediate change. Stand density would gradually increase over time in all stands.	In the short term, stand density would be reduced substantially in thinned stands and minimally in burn only stands. Stand density would increase gradually over the long run in all stands as overstory trees grow and pine regeneration fills in available space in the understory. Thinning would substantially reduce stand density on about 1,680 acres with this alternative.	In the short term, stand density would be reduced substantially in thinned stands and minimally to moderately in burn only stands. Stand density would increase gradually over the long run in all stands as overstory trees grow. Maintenance burning of initial entry treatments would kill much of the pine regeneration and a negligible number of saplings, poles, and larger trees, keeping stand densities lower over the long term and for a longer time than Alternative B. Thinning would substantially reduce stand density on about 1,760 acres with this alternative.

Measure	Alternative A No Action	Alternative B Proposed Action	Alternative C Modified Proposed Action
<b>Change in ground to live crown base height (ft)</b>	No immediate change. Ground to Live Crown Base height (GLCB) would decrease in currently lowdensity stands over time as pine regeneration fills in the understory. GLBC would remain stable or slowly increase in currently high-density stands over time due to mortality and self-pruning.	GLCB would increase substantially over the short term in thin/pile and thin/burn stands and would increase negligibly in burn only stands. Over the long term, GLCB would decrease in low-density stands as pine regeneration fills in the understory. GLBC would remain stable or slowly increase in high-density stands due to mortality and self-pruning. Thinning and burning would increase GLCB on about 7,500 acres with this alternative.	GLCB would increase substantially over the short term in thin/pile and thin/burn stands and variably in burn only stands. Over the long term, increased GLCB would be maintained and occasionally increased in stands subject to maintenance burning due to mortality of pine regeneration and scorching of low foliage in overstory trees. Thinning and burning would increase GLCB on about 8,680 acres with the initial entry treatments of this alternative. Maintenance burning of initial entry treatments would sustain or increase GLCB beyond the effective timeframe of Alternative B on about 7,940 acres.
<b>Achievement of Stated Objective</b>	This alternative does not meet the stated objective in the short or long term.	This alternative meets the stated objective over the short term but only partially over the long term.	This alternative meets the stated objective over the short and long term.

Additional information regarding the proposed action can be obtained from Polly Haessig, NEPA Specialist at the Mogollon Rim Ranger District, phone: 928-477-2255, e-mail: phaessig@fs.fed.us.

The environmental assessment is available upon request from the Mogollon Rim Ranger District and is also available at [www.fs.fed.us/r3/coconino](http://www.fs.fed.us/r3/coconino) We welcome your comments during this official notice and comment period.