

ENVIRONMENTAL ASSESSMENT
for the
COYOTE CREEK JUNCTION
FUELS REDUCTION PROJECT
REVISED JANUARY 3, 2001
EA NUMBER OR- 110- 99-08

U.S. DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT
GLENDALE RESOURCE AREA

FOR FURTHER INFORMATION CONTACT:

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Introduction

The Coyote Creek Junction Fuels Reduction Project was first proposed in an Environmental Assessment (EA) dated March 23, 1999. The proposal was considered to have minimal impacts to the human environment and no substantive issues emerged during scoping. “The level of assessment should be commensurate with the anticipated impacts and the degree of public concern” (BLM NEPA Handbook CH. IV B).

The legal notice for the Environmental Assessment was published in the Grants Pass Courier and Umpqua Free Press on March 30, 1999. The Glendale Resource Area received only one set of comments and reviewed them through an interdisciplinary (ID) team scoping process. Although these comments did not provide substantive issues, the ID team determined that the Coyote Creek EA should be revised to provide more detail of the analysis. Since the time that EA was completed, extensive surveys for Survey and manage species were conducted as called for in the RMP. The “No Action” Alternative has also been analyzed in this revised EA. Both of these items were absent at the time of the legal notice to the public. There are no changes to the Proposed Action treatment acres or methods of treatment.

The Coyote Creek Junction Fuels Reduction project is located east of the community of Wolf Creek on BLM administered public land. The purpose of this revised EA is to: assist in planning and decision making; to determine if a supplemental Environmental Impact Statement (EIS) needs to be prepared; or to determine if a Finding of No Significant Impact (FONSI) is appropriate. This Environmental Assessment is tiered to and consistent with the Medford Resource Management Plan (1995) and Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (1994).

A. Purpose and Need for the Proposal

Overview: As a result of the exclusion of repeated, periodic fire from the landscape, much of the Glendale Resource Area has fuel loadings which are either out of the range of natural variability or in the upper part of that range. With these increased fuel levels is an increased probability of large catastrophic wildfires. To lessen the probability of large catastrophic wildfires, the Department of Interior has initiated a program of fuels management across the Western United States. Local managers have been tasked to design treatment scenarios that reduce fuel loadings in order to create defensible space that will help reduce the risk of large catastrophic wildland fire (in the event a wildland fire should occur) and help reduce the costs of wildland fire suppression. In addition to the above objectives, projects are to be designed to improve forest health and maintain or enhance wildlife habitat and forage opportunities.

Site specific: The purpose of broadcast burning the Coyote Creek Junction units would be to reduce fuel loadings on selected units, maintain desired lower fuel levels, set back encroaching young conifers and monitor the effects of broadcast burning in fuel model 2 fine herbaceous and grass components. Additionally this project would be conducted to demonstrate the effects of

fire on the wedgeleaf ceanothus (*Ceanothus cuneatus*) component of the model and how future projects, that reduce fuel loadings and maintain them at desired levels, can produce beneficial effects to forage for big game (elk and deer). Monitoring and evaluation plots would be established to collect data on pre- and post-burn conditions to determine fire effects on overall vegetation, duff, and coarse woody debris, as well as the response of wedgeleaf to fire.

B. Alternatives

Alternative 1: No Action

The “No Action” alternative means that the “proposed activity would not take place, and the resulting environmental effects from taking no action would be compared with the effects of permitting the proposed activity or an alternative activity to go forward” (CEQ 40 FAQ). This No Action alternative serves as the baseline or reference point for evaluating the environmental effects of the Proposed Action. The No Action alternative is a continuation of the environmental conditions and trends that currently exist in the project areas. These conditions and trends include vegetative succession, consequent wildlife habitat changes and trends in fuel hazards and risks.

Alternative 2: Proposed Action

The proposed action would broadcast burn seven units totaling 103 acres. Broadcast burning is a treatment method designed to move across a designated area within defined boundaries for the purpose of reducing fuels or as a silvicultural treatment, or both. Burning would occur during freeze-dried conditions that usually take place in January or February. Ignition would be done either by a hand lighting crew or helicopter (heli-torch). Fire would be allowed to creep (advance at a slow pace) under adjacent timber stands and slowly burn out while being closely monitored by holding personnel.

- No slashing of existing vegetation will be done in order to maintain fuel loadings, fire intensities and flame lengths below desired parameters.
- Prescribed burning conducted on the project area would be managed in a manner consistent with the requirements of the Oregon Department of Forestry’s Smoke Management Plan and the Department of Environmental Quality’s Air Quality and Visibility Protection Program. To reduce the potential level of smoke emissions from the proposed burn site, mop-up would be completed as soon as practical after the fire. Ignition would only be conducted when transport winds were from the west or southwest in order to carry smoke away from designated areas.
- Ignition of existing fuels would not occur within 25 feet of intermittent streams, if found.
- There would be no hand fire lines or machine constructed fire lines installed along the perimeters of these units.
- Burning would not occur if soils are not saturated with water (soil capable of holding

together in a ribbon).

- Burning of large woody debris would be minimized to ensure soil productivity in the long term.

II. ENVIRONMENTAL CONSEQUENCES

The location of the proposed action is within the larger fifth field Grave Creek Watershed and analyzed within the sixth field Coyote Creek and Clark Creek watersheds. These lands are within Josephine County, T33S - R5W - SEC. 22,23 & 26. This chapter discusses the environmental consequences which are site specific, or are not adequately addressed in the Final Resource Management Plan/Environmental Impact Statement (Medford BLM, April 1994), which would result from implementation of the proposed action. In keeping with the directives of the National Environmental policy Act (NEPA), the discussions focus on impacts considered potentially significant. The level of detail and depth of impact/analysis are generally limited to that needed to determine whether new significant environmental effects are anticipated.

The following list of critical elements (BLM Handbook) were analyzed under this EA and are not present or not affected by the proposed action, as determined by applicable statute, regulation or executive order.

<u>Critical Element</u>	Affected		<u>Critical Element</u>	Affected	
	Yes	No		Yes	No
Air Quality	___	✓	T & E Species	___	✓
ACEC	___	✓	Wastes, Hazardous/Solid	___	✓
Cultural Resources	___	✓	Water Quality	___	✓
Farmlands, Prime/Unique	___	✓	Wetlands/Riparian Zones	___	✓
Floodplains	___	✓	Wild & Scenic Rivers	___	✓
Nat.Amer.Rel. Concerns	___	✓	Wilderness	___	✓
Invasive Species	___	✓	Environmental Justice	___	✓

Alternative 1: No Action

Desired treatment of fuels would not occur under the no action alternative. Current trends in vegetation growth and fuels accumulation would continue to occur. Fuels within the units would continue to accumulate. (Although there may be some loss in areas of dead wedgeleaf due to decay.) The risk of large fires occurring would increase over time. Conifers would continue

to encroach into open areas. Conifers in excess of what the site is capable of supporting over the long-term would continue to exist. Since site productivity is low and there are excess stems, larger trees will take longer to develop or may not develop without some other disturbance such as a wildfire. Large snags and large coarse woody debris will likewise take longer to develop.

Alternative 2: Proposed Action

a. Timber

Approximately 100 of the 103 acres proposed for treatment are classified as non-forest or are withdrawn from planned timber harvest. Management objectives for non-forest and withdrawn acres include those that benefit wildlife, water resources, and recreation but do not include those that increase growth and yield for volume purposes. Units proposed for treatment consist largely of areas of shallow and rocky soils. Some scorching may occur on young conifers at edges of proposed units. Young conifer mortality would be acceptable as these trees are encroaching on these units and reducing their size.

b. Vegetation/Silviculture

Wedgeleaf, grasses, Jeffrey pine, and some incense cedar are present on the sites. Vegetation grades from open grass and wedgeleaf to coniferous stands in the draws. There is little active wedgeleaf growth and much of the wedgeleaf is either decadent or dead. Fuels within areas proposed for treatment are at the upper end (more abundant) of the range of natural variability or exceed it. In some units fuels are patchy. In other units fuels are continuous. Since most of the units are non-forest or withdrawn (very low timber productivity) there are few snags and minimal amounts of coarse woody debris. However in areas that do have conifers they are generally overly dense (too many stems) when compared to the range of natural variability. There is also conifer encroachment into naturally open areas. Burning of the decadent vegetation (wedgeleaf/grass) would result in a flush of young vigorous growth and thus more browse for wildlife. A feathered burn edge would be created as the fire creeps under adjacent coniferous stands.

The Fire Effects Information System (1996) has relevant information concerning wedgeleaf: “Wedgeleaf ceanothus is typically killed by fire. Heat generated by fire stimulates the germination of numerous seedlings by breaking down dormancy mechanisms. Concentrations of seedlings are frequently observed in areas which burned particularly hot, such as under brush piles or shrubs. Germination and subsequent seedling establishment appears to be highest following fall burns, and lowest after fires which occur from March 15 through April 1. Seedlings are common during the first postfire year, but few emerge during the second year.”

c. Soils, Floodplain, Wetlands, Water

Soils in the area include Pearsol and Perdin. Pearsol soils are very rocky to rock outcrop, Perdin soils are deeper and are composed of colluvial materials. Both soils are derived from serpentinite and peridotite. These soils are low in calcium and high in magnesium which limits the species of vegetation that grow on them. There are areas within the units that are void of vegetation. It is anticipated that soil impacts would be minimal. Spring-like conditions allow for hydrated soils and organics. Since the majority of the fuels to be burned are light (grasses and shrubs) sufficient heat would not be generated to dry soils and imbedded organics, thereby protecting them from fire damage or consumption. These light fuels are generally very flashy. Based on this the soil scientist opinion is that soil productivity and structure would be maintained.

The project area is situated high on the ridge system and has few draws or riparian zones. These areas are tree covered and it is unlikely that fire will carry in them. It is the hydrologist's opinion that water quality downstream would be maintained since nutrient release from burning would be held within the soil column and not released as free ions in subsurface waters. Water quality would remain well within the range of natural variability since the disturbance area is likely smaller than natural fire regime of the summer months when vast areas would likely burn resulting in more nutrient release and potential hydrophobic soils.

d. **T&E Plants, Survey Vascular Plants, Bryophytes, Lichens, Survey & Manage Plants -**

Special Status and Survey and Manage Vascular Plants

About 46 acres of the 103 acres proposed for burning were surveyed in June, 1998. The entire area was re-surveyed in May and June of 1999.

The serpentine endemic plant *Camassia howellii* was found in the five units containing serpentine soils. This plant is listed as Bureau Sensitive. Population reports estimated 36,500 to 40,500 plants in five populations scattered through the units. The plants grow in an open grassland with scattered Jeffrey pine, incense cedar, wedgeleaf and rock outcrops. Two units (the 18 acre and 11 acre units in section 23) have non-serpentine soils; these units are steep, rocky sites with greenleaf manzanita, canyon live oak and Oregon white oak. *Allium bolanderi* var. *mirabile*, a Bureau Watch species, was found in the 18 acre unit. There are 15-20 plants scattered in an open, gravelly site.

Effects to the above species are expected to be minimal. They grow on relatively barren sites, with little fuel accumulation, so that it is unlikely that the fire will be hot enough to kill individual plants. These species are expected to be fire-resistant, as they grow from deeply embedded bulbs. Because the fire will be conducted in the winter or early spring, there should be little or no burning of green shoots. However, fire lines should not be constructed through populations, and the effects of fire should be monitored.

Threatened and Endangered Vascular Plants

The project area is within the range of *Fritillaria gentneri*, as determined by Andy Robinson

(USFWS). No effect to this endangered plant is expected as it was not found in surveys. The nearest population is on the north slopes of Sexton Mountain, about 6 miles away.

Non-vascular Survey and Manage Plants (Bryophytes, Lichens, Fungi)

No surveys for these species have occurred, and none are proposed. All of the species that require surveys before ground-disturbing actions are unlikely in the dry, open habitats proposed for burning.

Monitoring

Post-burn surveys will be conducted to monitor effects on *Camassia howellii* and *Allium bolanderi* var. *mirabile*.

e. T&E Animals, Prime or Unique Lands, Wildlife-general, Survey & Manage Wildlife -

Threatened and Endangered Animals

There are no threatened or endangered animals that are known to use the proximity of this project area. There are no spotted owl sites within one mile.

Survey and Manage Terrestrial Mollusks

Terrestrial mollusk surveys have been conducted on all 103 acres proposed for burning. One *Prophysaon coeruleum* (blue-gray tail dropper slug) was located on the east edge of unit 2, in pine needle duff under a down log. Canopy cover was estimated at 25% from ponderosa pine. *Prophysaon coeruleum* is a species that is usually located in areas of overstory fir or pine canopy, with woody debris, shrub and duff components. The project area as described is unsuitable habitat, and blends into surrounding suitable habitat as canopy closure increases. *P. coeruleum* is an annual species, with the hatching period usually coinciding with spring rains and therefore unlikely to be affected by the burn. The prescribed burn is not likely to impact any significant amount of suitable habitat by creeping and creating a feathering effect in surrounding areas.

Helminthoglypta hertleini (Oregon shoulderband snail) was located in units 4, 9, and 15. Observations were in serpentine rock or other exposed rock, and under woody debris on rocky soil substrate. This species occupies dry sites with exposed rock, rock fissures, ground cover, and woody debris and is likely to be more tolerant of fire activity than other species. The project area consists of scattered areas of serpentine rock, exposed soil, and low grass and shrub cover. These areas and other areas are likely to be burned with low intensity or not at all, and represent good habitat for *H. hertleini*. An early season burn is lower in intensity and more likely to burn incompletely than historical burning periods. January and February are months of low mollusk activity, with some individuals in estivation in areas of refuge unlikely to be burned or affected by a January or February burn.

Rocky areas in the project area may be potential habitat for the Survey and Manage *Monadenia chaceana* (Chace sideband snail). Mollusk surveys conducted in the Glendale Resource Area

from fall 1998 through fall 2000 did not find any *M. chaceana*.

Great Gray Owl

The project units range from approximately 3200' to 4000', and are bordered by mixed fir and pine forest. The project area is potential great gray owl habitat. The area was surveyed for great gray owls in the spring of 1998 and 1999 with no detections. There are no known great gray owl sites near the project area. However, there is documentation that radio transmitted nesting spotted owls, near prescribed burn areas, remain in their nesting area. Great gray owls would benefit from burning the project area. Maintaining a grass/forb/low density brush habitat condition provides optimum great gray owl habitat.

Del Norte Salamanders

No suitable Del Norte Salamander habitat exists in the project units.

Red Tree Voles

No suitable red tree vole habitat exists in the project units. There are no known nests within approximately 500 feet adjacent to any of the project units.

Northern Goshawks

There are no known Northern goshawk sites near the project area, and the project units are not suitable nesting habitat.

Big game animals

A field examination in August 1998 and mollusk surveys in November 1998 noted signs of elk and deer use in the project area. Meadows and brush fields with south and west exposure provide early spring forage for big game, and can be a critical feeding time. Burning the grass and brush would remove decadent and rank vegetation, allowing regrowth of new grasses, forbs, and shrubs that would provide forage for big game animals. This project should benefit big game animals.

Coarse Woody Debris, Snags

Coarse woody debris (CWD) should be maintained, as it was a structure identified with 2 survey and manage mollusks (*P. coeruleum* and *H. hertleini*). Possible protection measures could be employed (water, hand lines, brushing) to protect identified CWD prior to ignition. Snags are used by bats and neotropical birds, and should also be protected if in danger of being significantly burned. However, the type of burn being proposed would have no substantial impact on snags or coarse woody debris and no protection measures are proposed.

f. Fuel

Fire would consume most of the fine fuels and the wedgeleaf on the 103 acres. This would result in a reduced risk of wildfire, and widen the fuel breaks between timber stands.

g. Cultural Resources and Lands, Noxious Weeds -

No cultural resources or noxious weeds were located in a survey of the proposed project area.

Monitoring

- Post burn surveys for mollusks would be conducted to monitor effects on *H. hertleini*.
- Photo points would be established to monitor the recovery and resprouting of the wedgeleaf buckbrush community.

References

Fire Effects Information System [Online] (1996, September). Prescribed Fire and Fire Effects Research Work Unit, Rocky Mountain Research Station (producer). Available: www.fs.fed.us/database/feis/ [1998, March 12].

Yost, Nicholas C. 1980. Memorandum for Federal NEPA Liaisons, Federal, State, and Local officials and other Persons involved in the NEPA Process (CEQ 40 FAQs Memo).

V. AGENCIES AND PERSONS CONSULTED

The notification that this amended EA is available for review will be published in local newspapers. The EA will be sent to several interested parties who have requested to be on the mailing list for such documents. In addition, several state agencies and local governments will be notified.

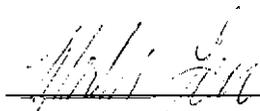
Changes in the preliminary proposal as well as project design features may be based on information received from the public.

IV. LIST OF PREPARERS

<u>NAME</u>	<u>TITLE</u>	<u>RESOURCE(S) ASSIGNED</u>
Gerry Nilles	Forest Manager	Timber
Jim Brimble	Silviculturist	Vegetation/Silviculture
Loren Wittenberg	Soil Scientist	Soils, Floodplain, Wetlands, Water
Doug Goldenberg	Botanist	T&E Plants, Vascular Plants, Bryophytes, Lichens, Survey & Manage Plants
Marlin Pose	Wildlife Biologist	T & E Animals, Prime or Unique Lands, Wildlife- general, Survey & Manage Wildlife
Tom McVey	Fuels Specialist	Fire Risk / Hazard, Fuels Treatment, Timber
Larry Pingel	Forestry/Fuels Technician	Fire Risk / Hazard, Fuels Treatment, Timber
Diane Parry	Geologist	Cultural Resources and lands, Noxious Weeds
Roger Schnoes	Natural Resource Specialist, Ecosystem Planner	Coordination, NEPA

Reviewed by:

Ecosystem Planner.
for consistency and adequacy



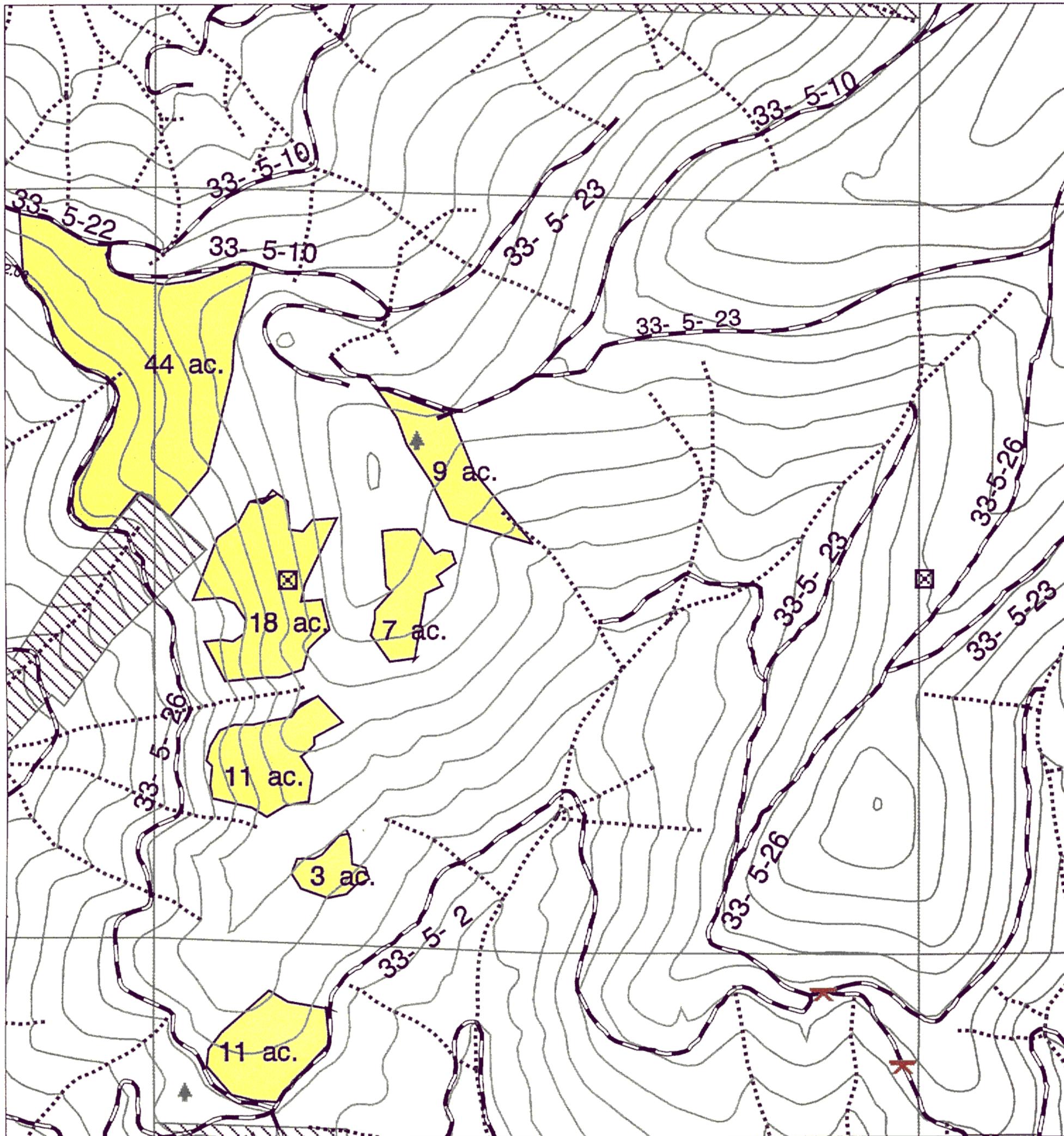
Date 1/10/01

Lynda L. Boody
Resource Area Manager
Glendale Resource Area



Date 1/17/01

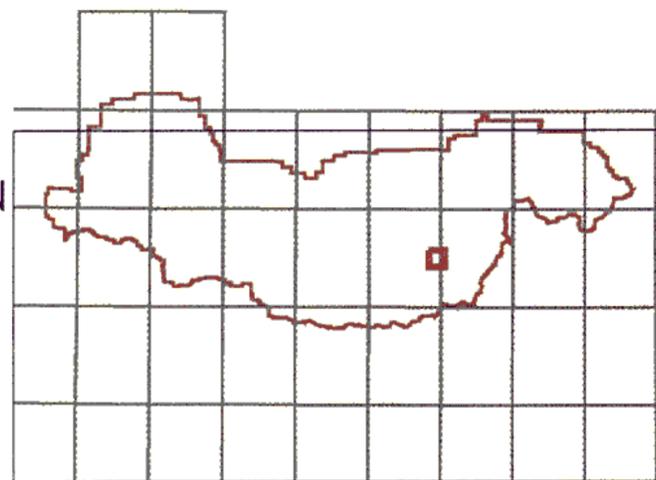
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- ▬ Fmz
- ☒ Cvs
- ▲ Spotted Owl Nest Trees
- ⌘ Gates
- ▬ Roads
- ⋯ Streams
- ▬ Section Lines
- ▨ Non-BLM Land
- ▬ 100' Contours
- Units.s hp

GLENDALE R.A.

COYOTE CREEK JUNCTION
FUELS REDUCTION
PROJECT
FY 1999



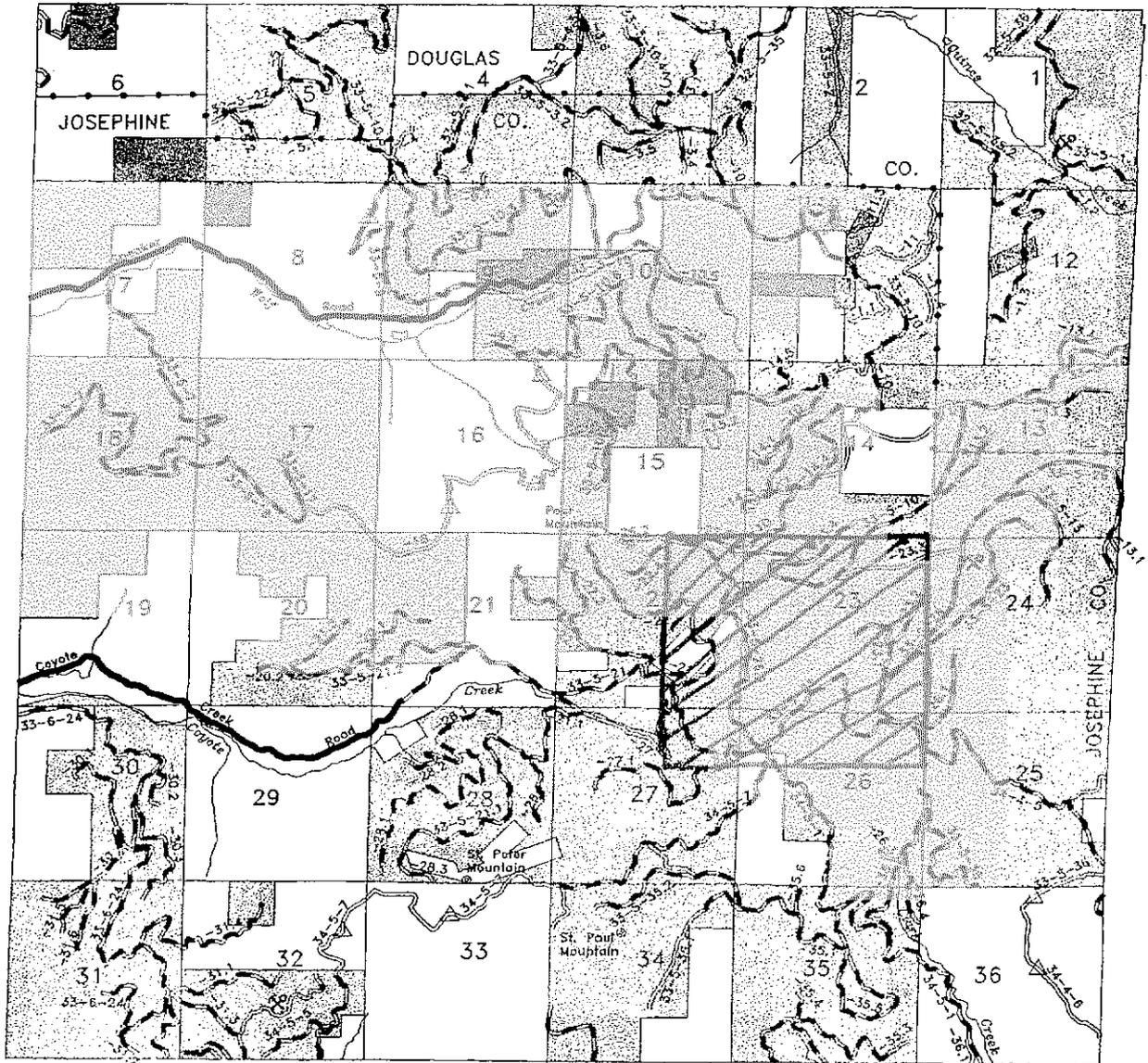
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SCALE: 1" = 1 MILE

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 = Project Area

