Environmental Assessment
for the
Glendale Resource Area Road Decommissioning and Barricading FY2000 Project

EA OR-110-00- ___

The proposed Glendale Resource Area Road Decommissioning and Barricading Project involves correcting road drainage, ripping and revegetating road surfaces, and barricading low-standard roads in the Upper Cow, Middle Cow, and Grave Creek watersheds. Different levels of treatment, from full decommissioning to simply barricading the road, would be implemented based on conditions on each road.

The Upper Cow, Middle Cow, and Grave Creek watersheds are located approximately 10-25 miles North of Grants Pass, Oregon (See Map 1 for location).

Purpose and Need

The stream-side and mid-slope location of many of the roads proposed for treatment are contributing to increased sediment loads in habitat used by threatened or endangered fish species. By intercepting natural overland flows and shallow groundwater, these roads also increase the amount and rate of precipitation runoff, which increases the potential for adverse changes in stream channels. High road densities in some areas alter natural overland flows and rate of precipitation runoff.

To reduce sediment loads and the amount and rate of surface run-off, the Bureau of Land Management (BLM) is proposing to issue a construction contract to correct road drainage, rip, mulch, waterbar and barricade 7.9 miles of road in the Upper Cow (5.4mi), Middle Cow (1.45mi), and Grave Creek (1.05mi) watersheds. The roads that would be treated were identified by BLM interdisciplinary teams.

The alternatives are in conformance with the Medford District Record of Decision and Resource Management Plan (RMP), and the Final Supplement Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl (FSEIS), Appendix B1. The FSEIS states in the objectives for Water, Soil, Riparian, and Wetland Resources section that BLM will:

> Manage uplands to minimize non-point source pollution and moderate extremes in stream flows by maintaining or improving hydrologic functions (e.g., infiltration, in stream flow, ground water quality, etc.). (Final SEIS Volume II, page B-12)

> Promote the recovery of depressed fish stocks and implement "Watershed and stream enhancement activities such as reducing soil compaction, vegetating disturbed areas, and stabilizing streambanks." (Final SEIS Volume II, page B-17)

Roads were identified as a primary source of new stream sediments in the Middle Cow Watershed Analysis (WA), 1999.

Most of the Upper Cow watershed roads proposed for work are in the South Umpqua / Galesville Late Successional Reserve (LSR). RMP direction for late successional reserves is to "design and implement watershed restoration projects consistent with late-successional objectives" (RMP Record of Decision, page 35). The draft Galesville LSR Assessment (1999) states, "Generally these road closures would contribute to meeting LSR objectives".

Watershed restoration is a key component of the Aquatic Conservation Strategy of the Northwest Forest Plan ROD/FSEIS (NFP). As stated in the NFP, road decommissioning functions as watershed restoration by:

- helping to restore the natural water flow pattern of the watershed,
- helping to restore the natural stream side functioning (for stream side roads) by increasing stream side vegetation, increasing stream shading, and creating future large woody material,
- helping to restore fish passage, and
- improving wildlife habitat

Road decommissioning also helps stabilize slumping areas and reduce erosion.

Although the Northwest Forest Plan (NFP) specifies road decommissioning for roads in Key Watersheds, the above functions of road decommissioning also help to restore the health of non-key watersheds.

Some roads proposed for treatment are in the Grave Creek watershed, part of the Rogue River basin. These roads were originally identified for decommissioning during Grave Creek West project area planning by an interdisciplinary team.

Affected Environment

This section describes the environmental components of the area that may be affected by the alternatives if implemented. A characterization of the Upper Cow watershed may be found in the final draft of the Galesville Late Successional Reserve Assessment (1999), available for review at the BLM Medford District Office, Medford, Oregon. A characterization of the Middle Cow Creek Watershed and description of the current conditions may be found in the Middle Cow Creek Watershed Analysis (1999), available for review at the BLM Medford District Office, Medford, Oregon. A characterization of the Grave Creek watershed may be found in the the Grave Creek Watershed Analysis (1999), available for review at the BLM Medford District Office, Medford, Oregon. These Watershed Analysis documents are also available for review at the Medford District web site: www.or.blm.gov/Medford .

A. Watershed/Soils

The project area encompasses the drainages of Cow Creek, from Snow Creek on the east end to the confluence with the West Fork of Cow Creek and Middle Cow Creek on the west end. Also included in the project area are some drainages in the Grave Creek watershed. The Cow Creek and Grave Creek drainages are located in the northernmost portion of the Klamath Province, between the Cascade and Coast Range in southwest Oregon. Cow Creek is a tributary of the Umpqua River, flowing in a westerly direction then turning abruptly north and east near the west boundary of this landscape unit. Grave Creek is a tributary of the Rogue River, flowing in a westerly direction to its confluence with the Rogue River on the southwestern boundary of Glendale Resource Area.

Soils in the watersheds are primarily derived from metasedimentary rock types, with metavolcanic-derived soils in some localized areas. Soils associated with metasedimentary rocks tend to be deep and have nutrients available for vegetation. There are some areas of serpentinite-derived soils, which are low in calcium and high in magnesium and other minerals that preclude Douglas-fir and many other plant species that are adapted to calcium-based soils. Some soil types are considered to be sensitive to road construction type management activities. These soil types are generally shallow (less than 20 inches deep), derived from granite or schist, or derived from serpentinite or peridotite (precursor to serpentinite).

B. Threatened, Endangered, Special Species, and Survey and Manage Plants and Animals

The only threatened, endangered, or other special status plant species known to occur on or in the roadbeds to be ripped, seeded, and barricaded is *Lotus stipularis var. stiipularis*. This Bureau assessment species occurs on the last 450 feet of road 34-7-5.3.

Umpqua cutthroat trout (endangered), Oregon Coast steelhead trout (candidate), and Oregon Coast coho salmon (threatened) occur in streams of the Middle Cow watershed. Grave Creek

provides habitat for Southern Oregon/Northern California Coho Salmon (threatened) and Klamath Province Steelhead Trout (Candidate). There are no known aquatic survey and manage mollusks within the Upper Cow, Middle Cow, and Grave Creek fifth-field watersheds. No other aquatic endangered, threatened, special status, or survey and manage species are known to exist in the streams of these watersheds.

No threatened, endangered, or other special status species terrestrial animals are known to occur on or in the roadbeds to be ripped, seeded, and barricaded, however, there are known spotted owl activity centers located within 1/4 mile of roads listed under Alternative I.

Proposed Action

The proposal is to stabilize road surfaces or restrict motor vehicle access on approximately 7.9 miles of roads through removing culverts, ripping the road surface, installing water bars, mulching and barricading, based on resource needs. The following definitions are from the Western Oregon Transportation Management Plan, June, 1996:

> "Barricading" means to block vehicle access to a road by installing a large log, dirt berm, trench or other obstacle which eliminates motor vehicle access.
>
> "Decommission" means that the road would be closed to motor vehicles on a long-term basis, but may be used again in the future. The road would be prepared to avoid future maintenance needs and would be left in an "erosion-resistant" condition by establishing cross drains and removing fills in stream channels and potentially unstable fill areas. The road would be barricaded.
>
> "Full Decommission" means that there is no future need for the road . The road surface would be ripped, seeded, mulched and planted to reestablish vegetation. Cross drains, fills in stream channels and potentially unstable fill areas would be removed to restore natural hydrologic flow. The road would be barricaded.
>
> "Obliteration" means that the natural contours of the land would be restored.

No road obliteration is proposed for this project. The proposed action generally follows these definitions, but there are some minor modifications due to specific conditions on the ground.

Alternatives

Alternative I

This alternative proposes to treat roads using a variety of treatments, including correcting road drainage, ripping, water barring or barricading approximately 7.9 miles of low-standard roads (Table 1). These are roads or segments of roads over which BLM has control. The miles of treatments proposed under this alternative are:

Barricade only	0.65 miles
Decommission	1.35 miles
Full Decommission	5.90 miles

The roads proposed for barricades only are already fairly overgrown and stabilized and it was felt that disturbing the road surface would cause more environmental damage than just leaving them to recover naturally.

Permanent barricades would be constructed to prevent motor vehicle access.

In one case, the spur road in T 32S, R 3W, sec. 17 is proposed to be decommissioned but would not have the instream culverts removed because the private timber company which owns land in those areas prefers them to remain place so that the road can be used in the future without the expense of re-installing the culverts.

Table 1: Roads proposed for treatment under **Alternative I**
See attached vicinity maps for road locations.

Road Number	Road Name	Length in miles	Surface[1]	Road Control	Type of Work Proposed[2]	Reason/Needs
31-4-34.2	Galesville P2 Spur	0.40	GRR	BLM	Full Decomm.	High Road Density
T32S R3W Sec 17	Spur Road	0.70	NAT	BLM	Decomm[3]	Reduce sediment loads
32-3-19	Snow Creek P2 Spur	0.50	PRR	BLM	Barricade	High Road Density
32-4-3.1	Galesville P Spur	0.30	PRR	BLM	Full Decomm	High Road Density
32-4-21.1	Fizzleout Ck Sp2	0.65	NAT	BLM	Decomm	Stream side, Loss of riparian vegetation
32-5-27	Wooden	0.35	GRR	BLM	Full Decomm	Reduce sediment loads
32-5-33	Rocky Wood	0.35	PRR	BLM	Full Decomm	High Road Density
32-5-33.1	Slippery	0.55	NAT	BLM	Full Decomm	Reduce sediment loads
32-5-33.3	S spur	0.50	PRR	BLM	Full Decomm	High Road Density
T33S R4W Sec 3	Spur	0.10	NAT	BLM	Full Decomm	High Road Density Reduce sediment loads
33-5-3.4		0.25	NAT	BLM	Full Decomm	High Road Density
33-5-3.5		0.55	NAT	BLM	Full Decomm	High Road Density
33-5-4		0.15	NAT	BLM	Barricade	High Road Density

Road Number	Road Name	Length in miles	Surface[1]	Road Control	Type of Work Proposed[2]	Reason/Needs
33-5-5	Jeanette Road	0.15	PRR	BLM	Full Decomm	High Road Density
33-7-2.2	Stevens Creek Road	0.95	PRR	BLM	Full Decomm	High Road Density
T33S R7W Section 11	Spur	0.50	NAT	BLM	Full Decomm	High Road Density
34-7-5.3		0.35	PRR	BLM	Full Decomm[4]	High Road Density
T34S R7W Section 5	Spur	0.60	NAT	BLM	Full Decomm	High Road Density

[1] Surface: Total miles : 7.90

GRR Grid Rolled Rock
PRR Pit Run Rock
NAT Native surface
BLM Bureau of Land Management

[2] Proposed work:

Barricade Only barricades would be installed
Decomm Decommission - Road surface would not be ripped
Full Decomm Full Decommission - Road surface would be ripped

[3] Road would be decommissioned, but the instream culverts would not be removed, and due to granitic soils, the road surface would not be ripped.

[4] The last 450 feet of road 34-7-5.3 would not be ripped due to the presence of *Lotus stipularis var. stipularis*.

Project Design Features (PDFs)

The work performed in any stream channels would be accomplished between July 1 and September 15 of the same year, in accordance with Oregon Department of Fish and Wildlife guidelines. The work period for decommissioning road surfaces would be limited to July 1 to October 15 of the same year.

Culverts excavated from the road prism would be disposed of off of federal lands in an appropriate location.

Excavations to remove stream crossing culverts would be matched to the elevation of the existing stream bed, and excavation side slopes would be laid back to at least a 2:1 slope, to reduce erosion potential. The width of the bottom of the excavation would match the width of the bank-full stream channel.

Excess excavated material generated from this work would either be spread in stable locations within the existing road prism or hauled to a stable designated waste disposal area.

Buried logs and other debris from culvert excavation would be placed in designated disposal areas.

Discontinuous ripping with water bar construction would be utilized to prevent longitudinal erosion of the road beds. Water bars would be constructed at the same time as ripping. Ripping would be done with a winged ripper (24" tines) at least 18" deep and 36" apart to provide at least 70 percent fracture of the compacted roadway material.

Equipment refueling would be done where there is minimal chance that toxic materials could enter a stream. Equipment would not be stored in a stream channel overnight. Hydraulic fluid and fuel lines would be in proper working condition in order to minimize leakage into streams.

Heavy equipment would be washed off of federal lands before moving into the area, to remove soil and plant parts to prevent the spread of noxious weeds and disease into the project area.

Cutting vegetation on road fill slopes would be minimized in order to maintain slope stability and shading.

Work would be temporarily suspended if monitoring indicates that rain storms have saturated soils to the extent that there is potential for causing excessive stream sedimentation.

Mulching would be done immediately after excavation or ripping to reduce erosion.

Decommissioned and barricaded roads would be open to non-motorized use, such as foot traffic, bicycles and horses.

Seasonal restrictions would be applied if an active spotted owl nest is located immediately adjacent to the roads to be decommissioned. Road decommissioning activities would not be permitted within 1/4 mile of the active site until June 15, or until the Glendale Resource Area biologist determines that the young have sufficiently dispersed.

The spur road in T 32S, R 3W, sec. 17 would be decommissioned but the instream culverts would not be removed. In this case, water bars would be installed near the culverts to direct water off the road to minimize road damage and sedimentation if the culvert plugs or fails.

The last 450 feet of road 34-7-5.3 would not be ripped due to the presence of *Lotus stipularis var. stipularis*.

Alternative II; **No Action Alternative**

Under the No Action Alternative, the proposed road treatments would not take place at this time. Similar treatments may be considered at a future date in a separate assessment. These roads are a low priority for maintenance and with declining funds for road maintenance it is likely that they will not receive regular maintenance in the next several years.

Environmental Consequences

This section discusses the environmental impacts (beneficial or adverse) which could result from the implementation of the Alternatives.

Alternative I

One road to be barricaded (road 32-3-19) has an instream culvert which would not be removed. Vegetation has already become established on this road and removing the culvert would cause more environmental damage than if the culvert were left; the risk of major road failure in this case is minimal. The other road proposed for barricading has no culverts.

Although stream sedimentation at the site scale in the project area would be reduced under the action alternative, the level of activity would be insufficient to measurably improve current conditions at the sixth-field watershed scale.

Road decommissioning may adversely affect fish, amphibians, and other aquatic species in the short term, but, over the long term, the action would reduce the amount of sediment that enters streams. Some loose soil that is generated by road decommissioning may enter streams during the first major rainstorm of the fall season. The amount of soil that reaches streams would most likely be transitory and minor compared to the amount that would continue to degrade stream habitat by continually eroding or from failure of the road prism. Culvert removal associated with road decommissioning would eliminate the hazard of major road fill failure at stream crossings.

Ripping would increase infiltration of water, facilitate revegetation of the road bed, and reduce long-term erosion from the road bed. Runoff rate and amount would be reduced due to increased infiltration. Runoff would thus be less turbid (carry less sediment). Runoff would also have less velocity, thus be less likely to increase stream bed scour. A very slight reduction in tributary stream peak flows may occur. In the long term, stream sedimentation and turbidity would diminish somewhat from current levels as vegetation becomes established. Runoff rates should also continue to diminish from current levels.

Road maintenance costs would be eliminated on these roads.

Alternative I would produce short-term noise disturbance of terrestrial threatened or special status animal species. Barricading the roads would produce positive long-term effects. Vehicular disturbance to wildlife would be reduced, and foraging habitat would be increased for herbivores.

No suitable northern spotted owl habitat would be removed as a result of Alternative I. However, under Alternative 1, potential short-term impacts may occur from noise disturbances. Currently, there are four northern spotted owl sites that may be affected by Alternative I, if the owls nest within 1/4 mile of roads proposed for decommissioning.

Since the road beds proposed for decommissioning and barricading have already been disturbed and do not contain suitable habitat, there would be no adverse effects to terrestrial survey and manage animal species. No adverse impacts are anticipated to terrestrial threatened, endangered, special status, or survey and manage plant species.

This proposal is covered by the Biological Opinions from the US Fish and Wildlife Service (dated 18 October 1996) and from the National Marine Fisheries Service (dated 9/26/96), so no further consultation is necessary under the Endangered Species Act.

Restricting vehicular traffic on existing roads would negatively impact hunters and other recreationists wishing to drive the roads. Road decommissioning and barricading would restrict vehicular administrative access along the roads. The roads would continue to be open to foot traffic.

Alternative I would reduce road access, including fire access, by 7.90 miles. In the event of fire suppression in these areas, there may be added expense or time required to access areas that were formerly accessible by motorized vehicle.

Visual resources may be improved by encouraging vegetative cover for the roadway. No long term adverse impacts to the visual environment are anticipated.

No adverse impacts to cultural resources are anticipated, since only previously-disturbed roadways are planned to be impacted in this project.

Alternative II; No Action Alternative

Under this alternative, current levels of erosion would continue to occur, with the possibility that they would increase. Road densities would stay at the current level, affecting the watershed, runoff, and wildlife. Vehicular access would not be curtailed, so that erosion and sediment production on unsurfaced roads and along stream side roads would continue.

The short-term addition of sediment to streams as a result of road decommissioning would not occur under Alternative II. On the other hand, the beneficial long-term effects of decommissioning and barricading roads would also not occur. The net effect would be to allow the present levels of erosion and sedimentation to occur and increase over time, resulting in adverse effects on aquatic habitat.

Cumulative Effects

Road closures, decommissioning and construction planned under other recent environmental assessments for the Upper Cow, Middle Cow, and Grave Creek watersheds include:

Grave Creek:

Clark Creek road decommissioning (work is completed)

0.70 miles of existing road fully decommissioned
0.55 miles of existing road decommissioned

Last Chance road decommissioning

1.09 miles of existing road fully decommissioned

Upper Cow Creek:

Cow Creek Road Rehab project

0.92 miles of existing road fully decommissioned

Middle Cow Creek:

Cow Creek Road Rehab project

0.26 miles of existing road fully decommissioned

McCollum T.S.: (work is completed)

1.23 miles of existing road barricaded
No permanent new construction roads
No existing road decommissioned

Lost Fortune T. S.: (work is completed)

0.91 miles of existing road barricaded
No permanent new construction roads
No existing roads decommissioned

McLawson T. S. : (in progress)

No additional road restricted from vehicle use
0.2 miles of permanent new road construction
No existing roads decommissioned

Bonnie and Slyde T. S.: (pending)

4 gates to be installed, restricting traffic on 11.26 miles of road
No permanent new construction roads
1.25 miles of existing road to be barricaded

Road decommissioning/construction planned under other recent draft environmental assessments for the Upper Cow, Middle Cow, and Grave Creek watersheds include:

Middle Cow Creek:

Cotton Snake:	1.7 miles decommissioning 1.9 miles new construction
Papa Cow	1.7 miles decommissioning 1.3 miles new road
Soukow	0.5 miles decommissioning 0.5 miles new road

Grave Creek:

Grave Creek West	2.4 miles decommissioning 0.6 miles new construction

These listings indicate that recent BLM actions and foreseeable plans will result in approximately 6.3 miles of road decommissioning and 4.5 miles of new road construction in these watersheds. The proposed action would reduce road access by 7.9 miles, including 0.65 miles of decommissioning and 6.05 miles of full decommissioning. The net effect would be to more than double the miles of road being decommissioned and more than quadruple the net reduction of open roads.

Road construction on non-federal lands is occurring, but data is not available on the mileage of roads constructed or planned to be constructed in the near future.

No aquatic habitat or watershed indicator in the National Marine Fisheries Service Matrix Checklist would be degraded in the long term at the fifth-field watershed scale (Middle Cow Creek). The action alternatives are therefore consistent with Aquatic Conservation Strategy objectives.

The quality of aquatic habitat is not expected to improve at the scale of the Middle Cow Creek, Upper Cow Creek and Grave Creek (fifth-field) watersheds in the near future. Forest practices and other land uses on non-federal lands (e.g., water diversions, road construction and maintenance, tractor logging and lack of riparian protection) are considered less adequate to protect or restore watershed values, compared with on the standards in the Northwest Forest Plan and the RMP. Nevertheless, multiple projects of this type over time on all ownerships should reduce stream sedimentation and improve quality of riparian habitats over the long term

On an overall fifth-field watershed basis, road density would be reduced less than 1 percent under the proposed action. However, at the seventh-field subwatershed level, decommissioning and barricading would help to reduce localized impacts that result from high road densities in those local areas. The project would help contribute to the overall health of the watershed, albeit to a small degree. With the intermingled pattern of federal and non-federal land ownership in this area, opportunities for large scale road reductions are limited due to a variety of needs for the existing road system.

Monitoring

Barricaded and decommissioned roads would be revisited one year and three years after work is completed. Visual evidence or erosion, rilling, and any rutting from unanticipated vehicle access would be documented.

Persons and Agencies Consulted

Adjacent landowners and land owners affected by the proposals have been contacted by phone and by letter. Concerns raised by these parties have been incorporated into the design of the proposed action. A copy of this EA will be sent to those parties so they can assess potential impacts to access to their property.

The notification that this 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.

List of Preparers

Name	Title	Primary Responsibility
Randy Bryan	Lead Civil Engineering Technician	Roads
Loren Wittenberg	Hydrologist	Watershed
Bob Bessey	Fisheries Biologist	Fish/Fish habitat
Doug Goldenberg	Botanist	Plants
Jen Sanborn	Wildlife Biologist	Terrestrial Animals/Habitat

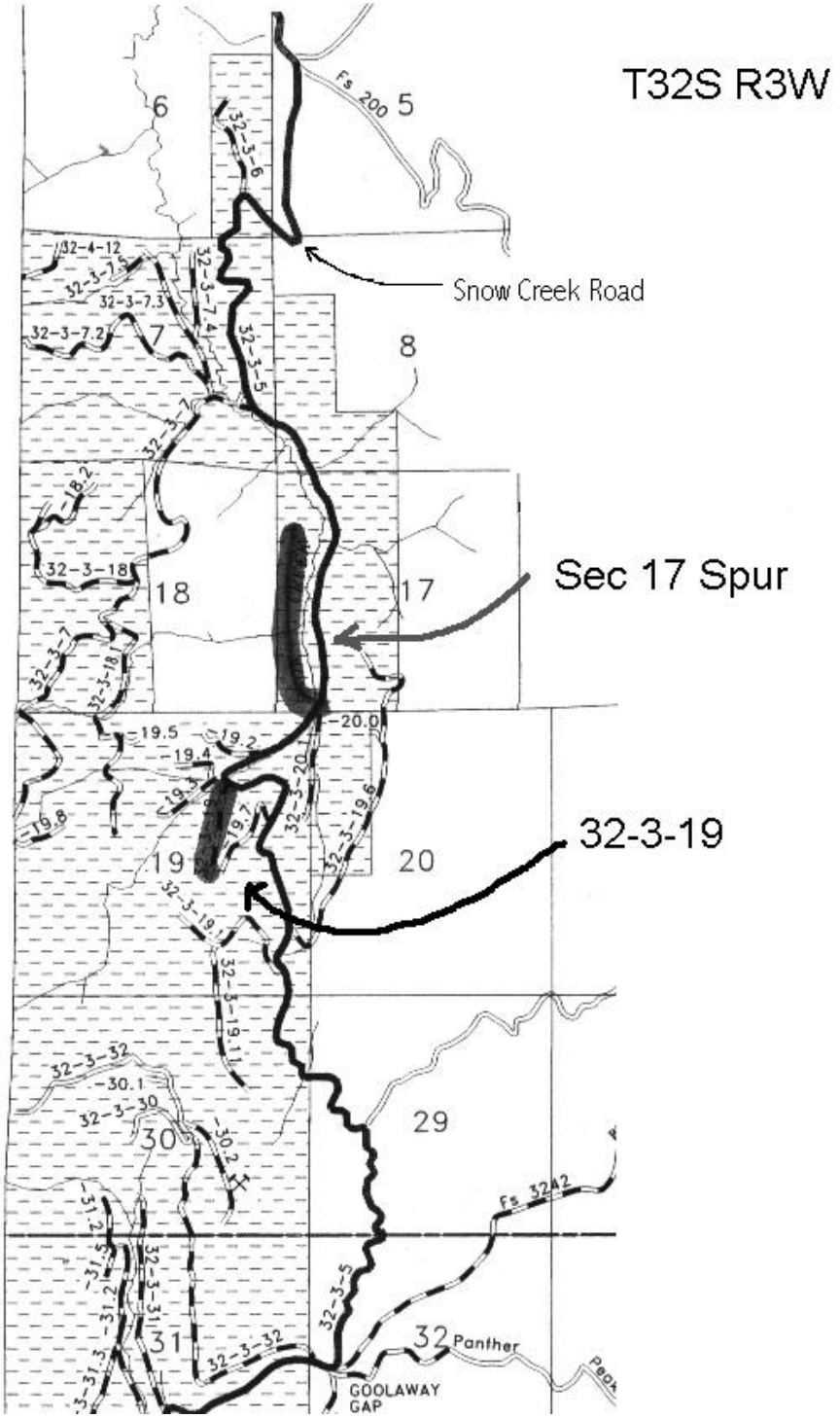
Reviewed By:

Roger Schneider — 2-15-00

Glendale RA Ecosystem Planner
for format and adequacy — Date

Lynda L Boody — 2/17/00

Lynda L. Boody
Field Manager, Glendale Resource Area
Medford District, BLM — Date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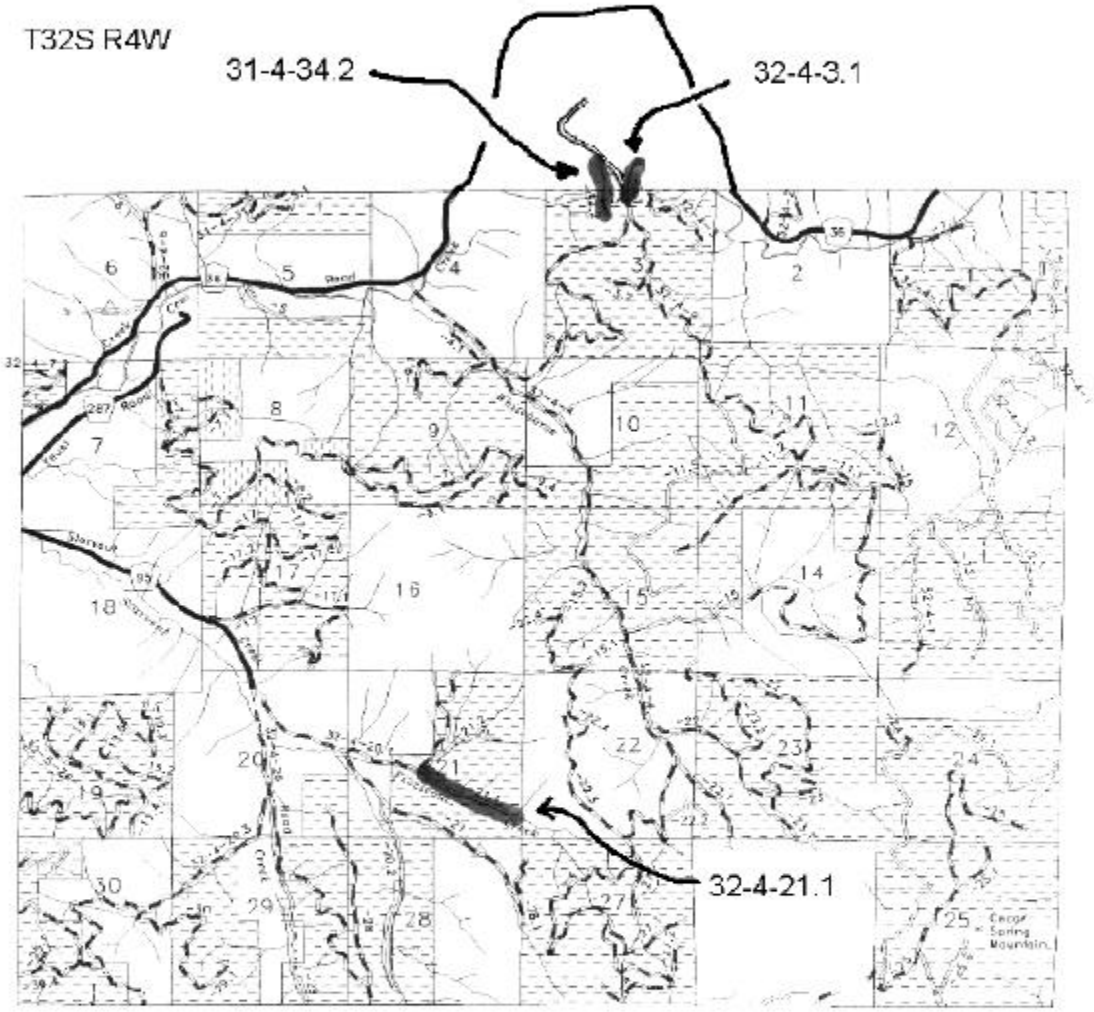

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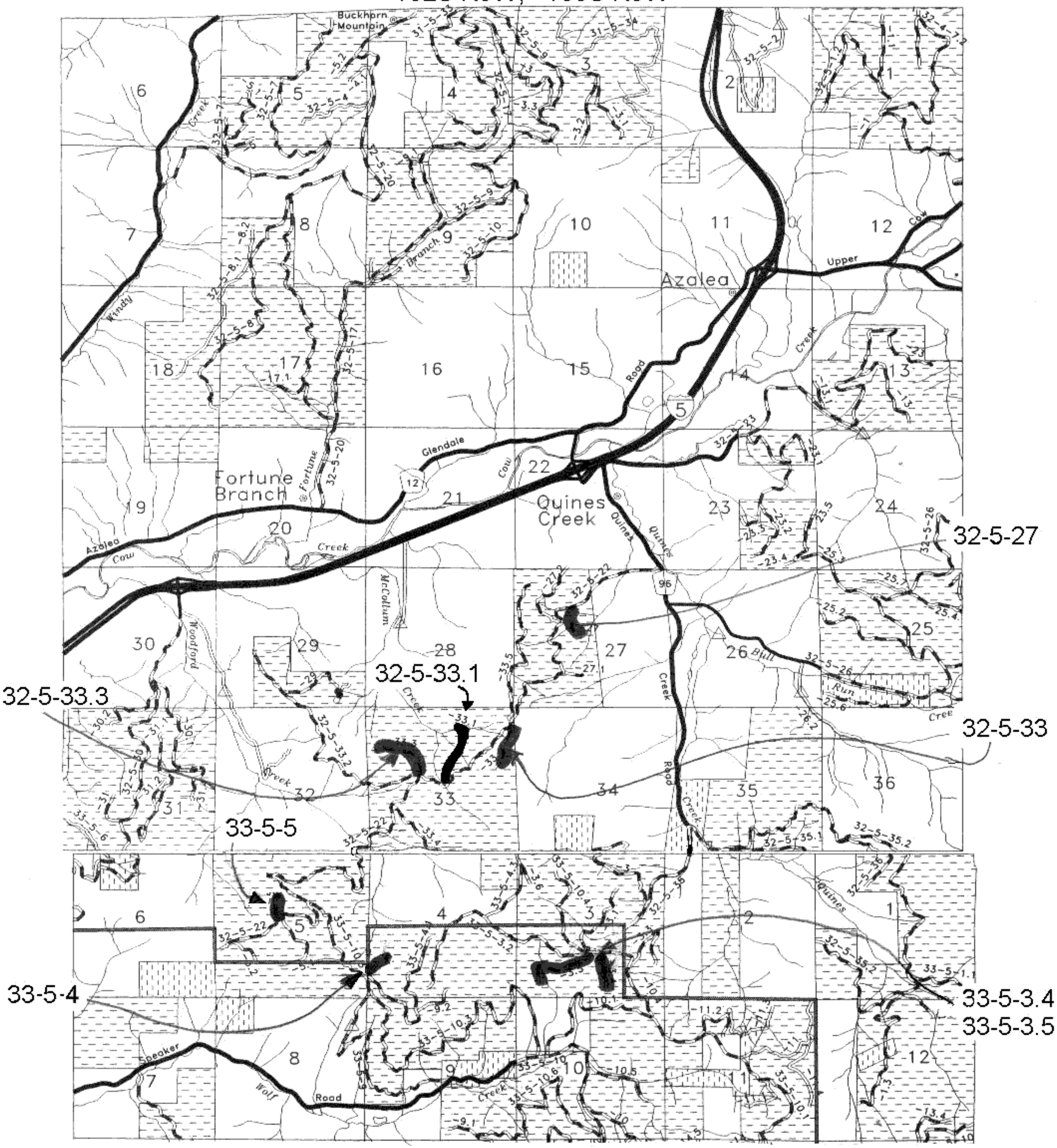

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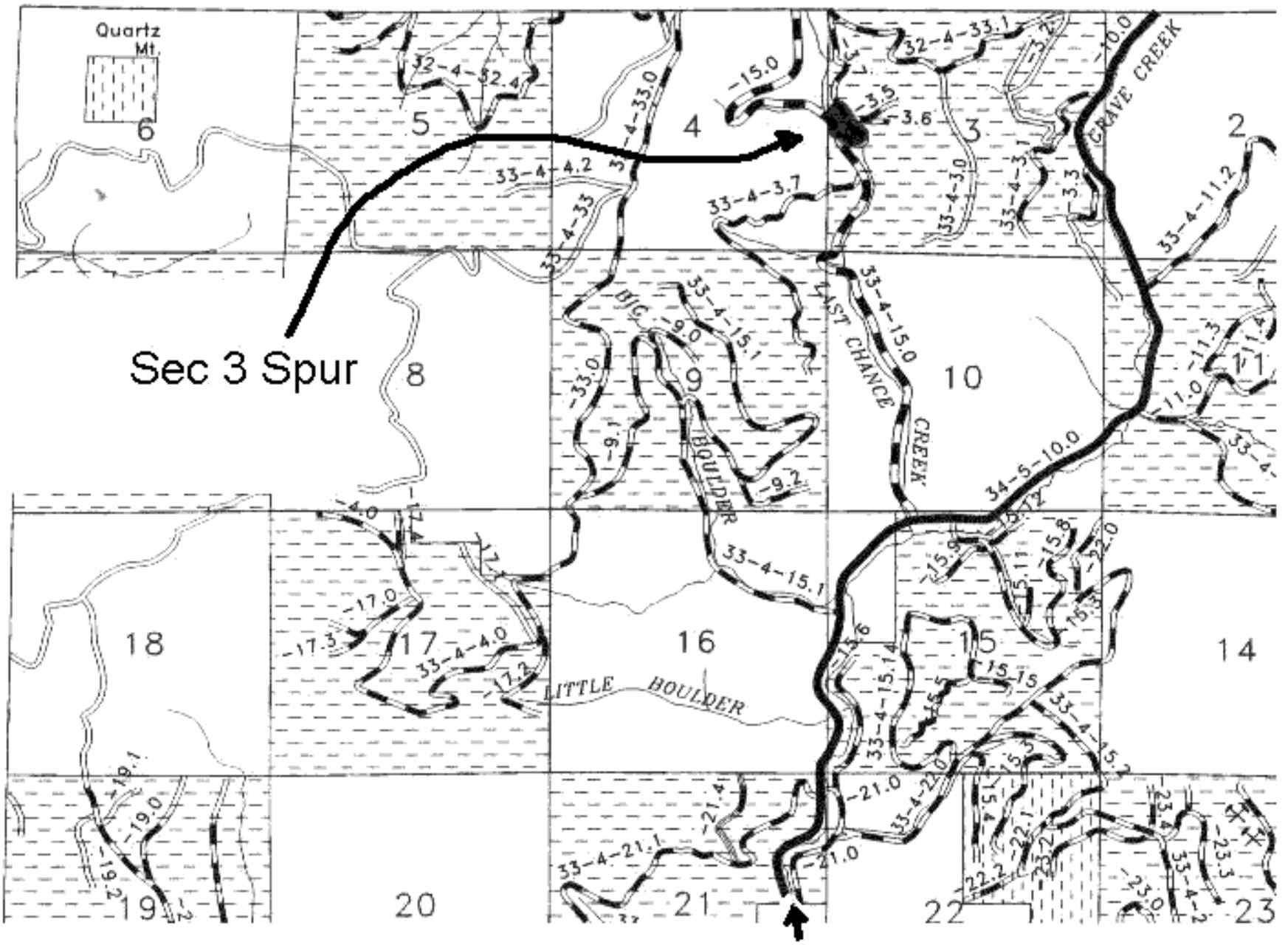
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Grave Creek Road

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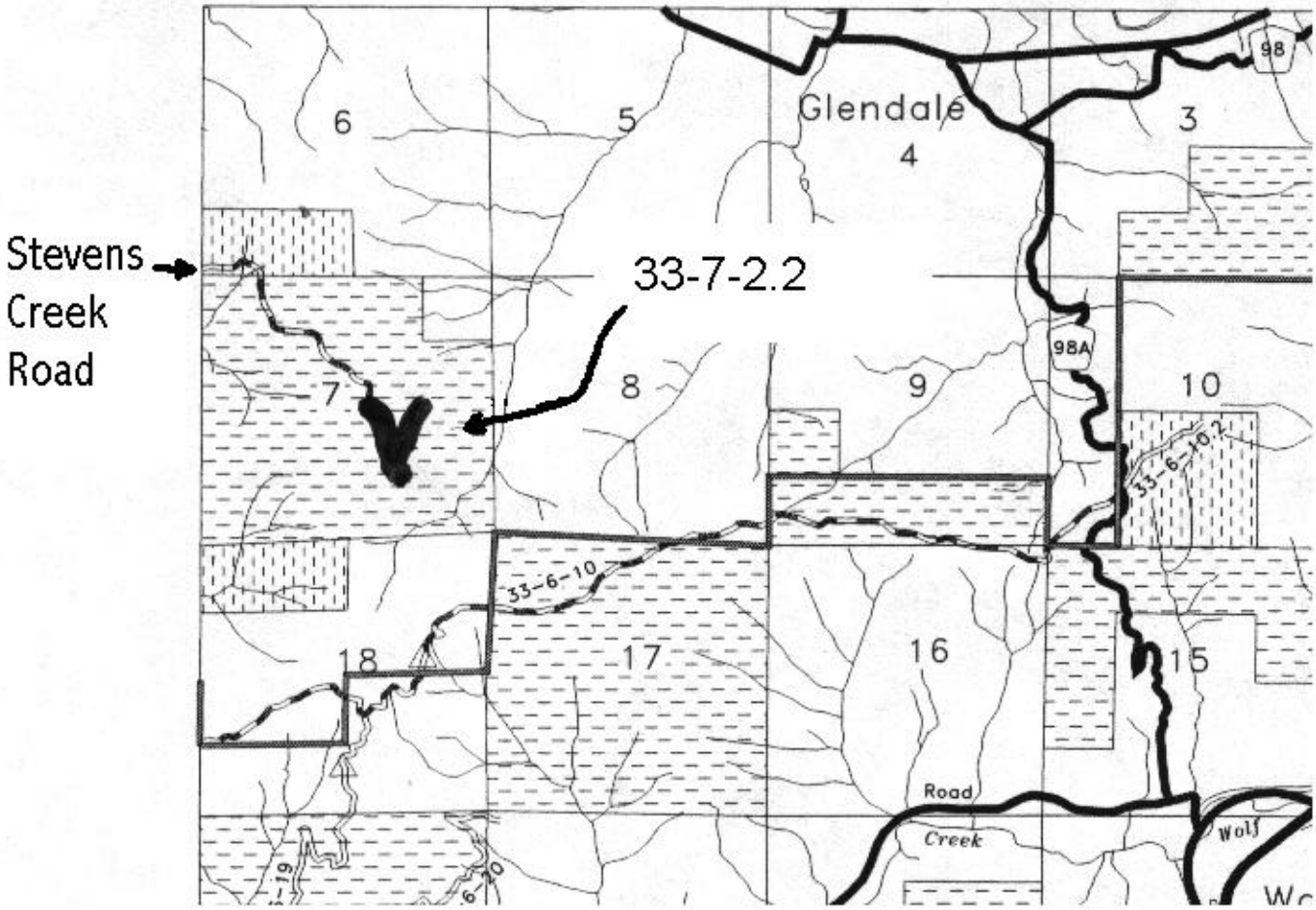
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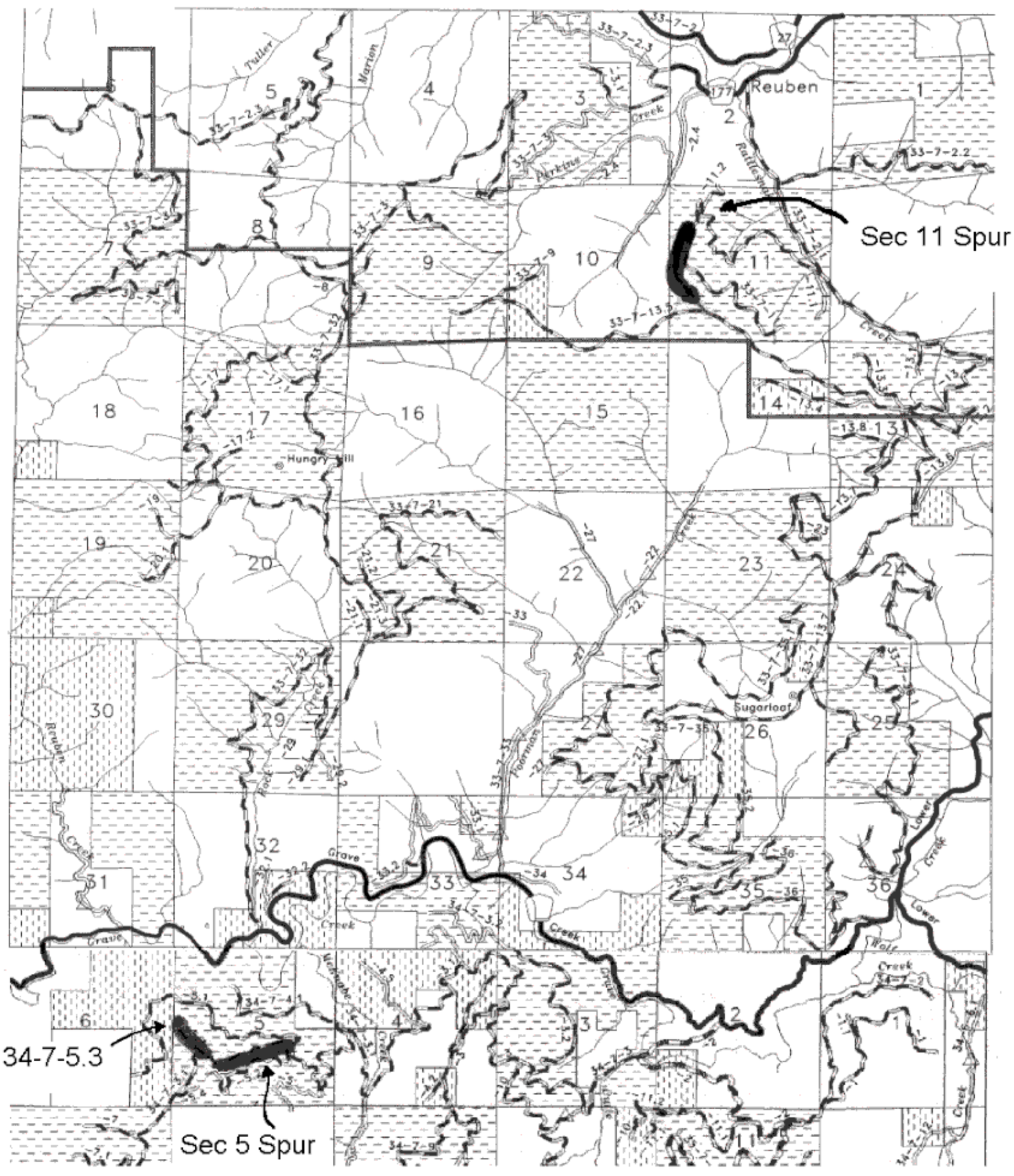
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