

# **Roads Analysis Report**

## **Horse Creek Timber Sale EA**

Mancos-Dolores Ranger District  
San Juan National Forest

December, 2002

### Introduction

This report documents the roads analysis process and results for the Horse Creek Timber Sale on the Mancos-Dolores District of the San Juan National Forest. One of the purposes of the proposed action cited in Horse Creek Environmental Assessment (EA) is to obliterate, rehabilitate, and close roads in Horse Creek analysis area that were neither designed nor built for public travel. The current road system is at a density that exceeds Forest Plan standards. Management objectives for the area are being compromised by the current road system. Resource damage from repeated use and lack of recurrent maintenance is occurring.

### Objective

The objective of this analysis is to analyze the current road system and identify a road network that is better suited to the long-term management needs of the area. The resulting road system will be more in tune with the variety of San Juan Forest Plan management prescriptions for the area and more closely meet Forest Plan road standards and guidelines.

### Interdisciplinary Process

Roads analysis of the Horse Creek area will be conducted through an interdisciplinary approach. Resource management consultants involved included:

Tom Rennick – Timber/Silviculture  
Gary Ferdinando – Engineering/Transportation Planning  
Shauna Jensen – Hydrology  
Kristin Philbrook – Wildlife  
Cliff Stewart – Range  
Penny Wu – Recreation  
Leslie Stewart – Ecology  
Phil Kemp – Process Leader

### Analysis Area

See the attached map for the geographic scale of this analysis and an illustration of the current road system.

## Current Situation

The analysis area includes a variety of management area prescription designations, each with a different primary management emphasis. Forest Plan prescriptions provide general direction and standards and guidelines for a road system that is considered compatible with the highlighted resource goal. Road standards for the Horse Creek management area are summarized in the following table.

Table 1: Management Area Prescriptions and Road Standards

<b>Management Prescription</b>	<b>Management Emphasis</b>	<b>Percent of Analysis Area</b>	<b>Constant Road Density Standard (miles/sq. mile)</b>
2A	Semi-primitive motorized recreation opportunities	17%	0 - 1 mile
4B	Wildlife habitat for Management Indicator Species	51%	One-half - 1 mile
5B	Big game winter range	5%	0 – One-half
6B	Livestock Grazing	27%	One-half - 1 mile
9A	Riparian	<1%	Locate outside unless alternatives more damaging

Current open road densities compared to standards are shown in Table 2 below. Current open road densities for the analysis area and for each management prescription area in particular are far in excess of Forest Plan standards.

Table 2: Current Open Road Densities

<b>Management Prescription</b>	<b>Current Length of Open Roads (miles)</b>	<b>Current Length of Closed Roads (miles)</b>	<b>Forest Plan Standard Road Density (miles/sq. mile)</b>	<b>Current Open Road Density (miles/sq. mile)</b>	<b>Current Total Road Density (miles/sq. mile)</b>
2A	2.5	3.9	0-1	2.69	6.88
4B	3.8	11.4	½ - 1	1.36	5.45
5B	1.1	0.0	0 – 1/2	4.07	4.07
6B	3.7	5.6	½ - 1	2.50	6.28
9A	--	--	--	--	--
<b>Totals</b>	11.1	16.0	0 - 1	2.03	5.85

## Issues

The key issues affecting roads related management in this area include:

### *Environmental*

- Road densities exceed Forest Plan standards resulting in negative impacts to a variety of resource values.

- Erosion is occurring. This results in reductions in soil productivity and sediment deposition in the watershed.
- Minimum access is necessary for fire suppression and prevention activities.
- Long-term timber management requires a basic road system.
- Big game security is compromised by an extensive open road system. Disturbance to wildlife occurs from human activity.
- Noxious weeds are introduced and spread along open roads and in areas of ground disturbance.

#### *Sociocultural*

- Travel on roads not designed for public use presents public safety risks.
- There is a segment of the recreating public that likes motorized travel on virtually every open road.
- There is a segment of the public that is opposed to motorized travel in general.

#### *Economic*

- There is inadequate funding for regular and recurrent road maintenance. Damage is occurring to the road infrastructure; repairs require additional funding.
- There is a cost to closing roads and a cost to reopening roads when future access is needed.
- Noxious weed control is expensive and requires regular monitoring and suppression efforts along open travel routes.

#### Assessment

Addressing the 71 standard questions for roads analysis will assess the various benefits, problems, and risks of the current road system. In this particular case, the issue of new roaded entries into roadless areas is not relevant.

#### *Ecosystem Functions and Processes (EF)*

EF(1): What ecological attributes, particularly those unique to the region, would be affected by roading of current unroaded areas? ***Not applicable.***

EF(2): To what degree do the presence, type, and location of roads increase the introduction and spread of exotic plant and animal species, insects, diseases, and parasites? ***The current road system increases the likelihood of the introduction and spread of noxious weeds. No other diseases, insects, parasites or exotic animal species are known to benefit from the current road system.*** What are the potential effects of such introductions to plant and animal species and ecosystem function in the area? ***At present levels effects would be negligible.***

EF(3): To what degree do the presence, type, and location of roads contribute to the control of insects, diseases, and parasites? ***Not applicable.***

EF(4): How does the road system affect ecological disturbance regimes in the area? ***No effect. Ecological disturbances are very infrequent in the habitat types of this area.***

EF(5): What are the adverse effects of noise caused by developing, using, and maintaining roads? *Noise from the use and maintenance of the road system could lead to some short-term and infrequent disturbance to certain wildlife species. The roads in this area are seldom traveled on and maintained.*

*Aquatic, Riparian Zone, and Water Quality (AQ)*

AQ(1): How and where does the road system modify the surface and subsurface hydrology of the area? *The road system modifies the surface and subsurface hydrology of the area by intercepting and concentrating ground and surface water and diverting flows from their natural flowpaths. Water, which previously moved downhill as diffuse flow, is captured by the road ditch and routed to culverts. This mechanism of erosion is exacerbated when road drainage is not properly designed and maintained. These changes in routing can result in increases in peak flows by both a volumetric increase and changes in the timing of storm runoff to streams. During large precipitation and snowmelt events, concentrated volumes of water may become routed to unstable fillslopes below the road and trigger landslides or gullies.*

*The position of a road on a hillside can be an indicator of the potential impacts roads can have on surface and subsurface hydrology. In general, the lower on the valley slope a road is located, the greater the chance roads may negatively impact streams and floodplains. Some of these effects are discussed in the streamside roads section (AQ (9)). Roads located at the upper position of valley hillsides and ridge tops are often the most stable, since they are located the furthest from perennial streams, tend to have convex, well drained slopes, and have the lowest potential for direct impacts.*

AQ(2): How and where does the road system generate surface erosion? *Surface erosion occurs on most wildland roads because their surfaces, cutslopes, fillslopes and associated drainage structures are usually composed of erodible material and are exposed to rainfall and concentrated surface runoff. Surface erosion differs greatly depending on many factors, the most influential of which are usually: the erodibility of the exposed surface; the slope of the exposed surface; and the area of exposed surface that generates and concentrates runoff. Surface erosion and associated sedimentation are highly sensitive to road maintenance practices. Small changes in road drainage configuration can result in large changes in erosion and the routing of eroded sediments. Driving on unsurfaced roads when wet also increases surface erosion.*

*FDR 325 to the private land boundary and FDR 326 have general erosion and drainage problems.*

AQ(3): How and where does the road system affect mass wasting? *Not applicable.*

AQ(4): How and where do road-stream crossings influence local stream channels and water quality? *Road-stream crossings are areas where direct interaction between the road and stream occurs. The proximity of the road fill to the stream channel means that essentially any sediment eroded off the road fill will be delivered directly to the stream. Culverts typically constrict the channel, concentrating high flows that can erode stream channels and cause gullying, down cutting, or create barriers to the passage of fish and other aquatic life. Inadequate culvert size, improper construction, or inadequate maintenance can cause plugged culverts and dammed floodwaters that can result in road failures and stream diversions. Road blading and resurfacing can push sediment directly into streams, especially as the road approaches and crosses the stream. Sediment is also commonly produced when roads are*

*poorly drained and rutted, when unrestricted travel occurs on saturated roadbeds, or when road drainage ditches flow directly into streams. Sediment can also be introduced to streams at fords by vehicles.*

*At the point where FDR 326 crosses Horse Creek, the semi-hardened crossing is leading to some sedimentation.*

AQ(5): How and where does the road system create potential for pollutants, such as chemical spills, oils, de-icing salts, or herbicides, to enter surface waters? *There is very low potential for this road system leading to pollution of surface waters unless there is the unlikely event of a fuel spill near a riparian area.*

AQ(6): How and where is the road system “hydrologically connected” to the stream system? *Road surfaces and cutslopes intercept and concentrate surface and groundwater. A road is considered hydrologically connected to a stream where these surface flows are continuous between roads and streams, such as where inboard ditches, ditch relief culverts, or cross drains convey road runoff directly to stream channels. Wherever a hydrologic connection exists, rapid runoff, sediment, and road-associated chemicals (for example, spills, oils) generated on the road surface and cutslope are provided an efficient route into the natural channel network.*

*The crossings of FDR 326 at Horse Creek and the road spur at Silver Creek in Section 3 are leading to an increased width/depth ratio and adding sediment to water flow.*

How do the connections affect water quality and quantity (such as, the delivery of sediments and chemicals, thermal increases, elevated peak flows)? *Overland flow concentrated on sections of road surfaces augments water quantity within the channel at certain points in time.*

AQ(7): What downstream beneficial uses of water exist in the area? *All tributaries to the mainstem of the Mancos River above it's intersection with CO Highway 160 have the beneficial use classification: Aquatic Life Cold 1, Water Supply, Agriculture, Recreation 2 (Nov. 1 to April 30), and Recreation 1a (May 1 to October 31). The particular segment description within the analysis area boundary is not an outstanding water, nor is it use protected. It is to be maintained according to antidegradation guidelines.* What changes in uses and demand are expected over time? *No changes are anticipated.* How are they affected or put at risk by road-derived pollutants? *Short-term risks may occur during timber sale activity, but associated road decommissioning will reduce risk over the long term.*

AQ(8): How and where does the road system affect wetlands? *Roads can affect wetlands by direct encroachment or through changes in hydrology. Roads can modify both surface and subsurface drainage in wetlands, causing changes in wetland moisture regimes. Where roads cross or are near wetlands, the effect on wetland form, process, and function is evaluated by examining the degree to which the local hydrology is modified, in terms of flow quantity, timing, routing, and water quality.*

*The current road system is affecting natural seep flows along FDR 325 and the wet meadows in Sections 3 and 9.*

AQ(9): How does the road system alter physical channel dynamics, including isolation of floodplains: constraints on channel migration; and the movement of large wood, fine organic matter, and sediment? *Stream channels are dynamic. They migrate within historic floodplains, eroding the bed and banks in one place while aggrading the bed and building new banks in*

*other places. Streams also transport and deposit large pieces of woody debris and fine organic matter, providing physical structure and diverse aquatic habitat to the channel. When roads encroach directly on stream channels, these processes can be modified. Wood and sediment can be trapped behind stream crossings, reducing downstream transport and increasing the risk of crossing failure. Road alignment and road fills can isolate floodplains, constrict the channel, constrain channel migration, and simplify riparian and aquatic habitat. In some places, road encroachment can divert streamflows to the opposite bank, thereby destabilizing the hillslope and resulting in increased landsliding.*

*Roads constructed along streams often directly change the way channels and floodplains function. During frequent to moderate flood events, roads can confine streams by restricting access to floodplains. Roads constructed near streams tend to straighten streams by limiting sinuosity and increasing channel steepness. Changes in the physical characteristics of a stream often lead to undesirable channel adjustments.*

AQ(10): How and where does the road system restrict the migration and movement of aquatic organisms? *No effect.* What aquatic species are affected and to what extent? *Aquatic species typical of the area are not affected because the road crossings are so high in the headwaters.*

AQ(11): How does the road system affect shading, litterfall, and riparian plant communities? *No effect.*

AQ(12): How and where does the road system contribute to fishing, poaching, or direct habitat loss for at-risk aquatic species? *Not applicable.*

AQ(13): How and where does the road facilitate the introduction of non-native aquatic species? *Not applicable.*

AQ(14): To what extent does the road system overlap with areas of exceptionally high aquatic diversity or productivity, or areas containing rare or unique aquatic species or species of interest? *Not applicable.*

#### *Terrestrial Wildlife (TW)*

TW(1): What are the direct affects of the road system on terrestrial species habitat?

TW(2): How does the road system facilitate human activities that affect habitat? *The road system permits vehicular traffic and more human use of the area than otherwise would be expected. It facilitates timber harvest activity, firewood cutting, and travel which may result in altered habitat, fragmentation, and other impacts. Habitat quality will improve for some species and be diminished for others. There is not a great deal of human activity in the area despite a fairly extensive road system in places.*

TW(3): How does the road system affect legal and illegal human activities (including trapping, hunting, poaching, harassment, road kill, or illegal kill levels)? What are the affects on wildlife species?

TW(4): How does the road system directly affect unique communities or special features in the area? *Not applicable.*

### *Economics (EC)*

EC(1): How does the road system affect the agency's direct costs and revenues? ***Existing road systems generally lower reentry costs. This should lead to greater government returns.*** What, if any, changes in the road system will increase net revenue to the agency by reducing cost, increasing revenue, or both? ***Road decommissioning should reduce recurrent maintenance and law enforcement costs. Reconstruction of open roads should also lower future maintenance costs.***

EC(2): How does the road system affect the priced and non-priced consequences included in economic efficiency analysis used to assess net benefits to society? ***Costs of road work and quality of the road system are used to complete the economic analysis of the alternatives. Comparing one alternative to the other in terms of present net value is one factor the decision maker looks at when selecting the preferred alternative. Road and haul related costs can vary substantially from one alternative to another, but they are only one factor of many in the economic efficiency analysis and preferred alternative selection process.***

EC(3): How does the road system affect the distribution of benefits and costs among affected people? ***It depends on the user. For example, recreational users of the road system benefit from road maintenance expenditures required of timber purchasers. In general, commodity interests fund road cost; amenity users do not have direct costs but may receive benefits.***

***A social impact analysis that might consider this question was not conducted for this project since no related issues were raised.***

### *Timber Management (TM)*

TM(1): How does road spacing and location affect logging system feasibility? ***The current road system is adequate to meet the timber management needs of this entry. No new roads (other than short temporary spurs )should be needed for the activities related to this project.***

TM(2): How does the road system affect managing the suitable timber base and other lands? ***The current road system makes managing the suitable base much more economically feasible. It allows entry into all stands identified for treatment by this project.***

TM(3): How does the road system affect access to timber stands needing silvicultural treatment? ***It allows entry into all stands identified by this project as needing silvicultural treatment.***

### *Minerals Management (MM)*

MM(1): How does the road system affect access to locatable, leasable, and salable minerals? ***The roads into this analysis are were first built for access to minerals. They still provide that function.***

### *Range Management (RM)*

RM(1): How does the road system affect access to range allotments? ***The road system minimizes the time necessary for permittees to salt and maintain fences on their allotments.***

*Water Production (WP)*

WP(1): How does the road system affect access, constructing, maintaining, monitoring, and operating water diversions, impoundments, and distribution canals or pipes? ***Water uses on the national forests may include diversions, impoundments, and distribution systems. Road access is usually needed to move in the equipment used to build and maintain these structures. Road access also facilitates the monitoring and operation of these water systems.***

WP(2): How does road development and use affect water quality in municipal watersheds? ***Essentially, municipal water treatment facilities must assure water quality standards are met regardless of road development and use. In this case, any short term increases in sediment or turbidity from a Horse Creek sale will be diluted before municipal water intakes. In the long term, road decommissioning should lead to less sediment and turbidity throughout the watershed.***

WP(3) How does the road system affect access to hydroelectric power generation? ***Not applicable.***

*Special Forest Products (SP)*

SP(1): How does the road system affect access for collecting special forest products? ***No known special forest products are collected in this area.***

*Special-Use Permits (SU)*

SU(1): How does the road system affect managing special-use permit sites (concessionaires, communications sites, utility corridors, and so on)? ***The Horse Creek road system provides two access points (about a mile apart) to a two mile stretch of a utility corridor.***

*General Public Transportation (GT)*

GT(1): How does the road system connect to public roads and provide primary access to communities? ***The Horse Creek road system takes off from the local public roads connected to County Road 44. It does not provide primary access to any communities.***

GT(2): How does the road system connect large blocks of land in other ownership to public roads (ad hoc communities, subdivisions, inholdings and so on)? ***The road system connects two large inholdings to County Road 44. These private lands are currently uninhabited. One is managed for grazing pasture; the other contains old mining activity and accesses private land timber harvest.***

GT(3): How does the road system affect managing roads with shared ownership or with limited jurisdiction? (RS 2477, cost-share, prescriptive rights, FLPMA easements, FRTA easements, DOT easements) ***Not applicable.***

GT(4): How does the road system address the safety of road users? ***Much of the current road system was not designed for public travel and in some places could represent a safety risk.***

*Administrative Use (AU)*

AU(1): How does the road system affect access needed for research, inventory, and monitoring? ***The road system facilitates winter snowmobile travel to monitor an overwintering bat colony.***

AU(2): How does the road system affect investigative or enforcement activities? ***The existing road system makes enforcement of hunting regulations easier for the Colorado Division of Wildlife.***

*Protection (PT)*

PT(1): How does the road system affect fuels management? ***No fuels management activities are currently planned other than post-harvest slash pile burning. Fuels management needs accessed by the Horse Creek road system would be considered low priority for the District.***

PT(2): How does the road system affect the capacity of the Forest Service and cooperators to suppress wildfires? ***The road system improves the capacity, speed, and options for fire suppression, but this area does not have a history of wildfire starts. The area lacks significant acreage of fire-dependent habitat types.***

PT(3): How does the road system affect risk to firefighters and to public safety? ***Road access lowers risk.***

PT(4): How does the road system contribute to airborne dust emissions resulting in reduced visibility and human health concerns? ***Does not contribute.***

*Unroaded Recreation (RR)*

UR(1): Is there now or will there be in the future excess supply or excess demand for unroaded recreation opportunities? ***Not applicable.***

UR(2): Is developing new roads into unroaded areas, decommissioning of existing roads, or changing the maintenance of existing roads causing substantial changes in the quantity, quality, or type of unroaded recreation opportunities? ***Not applicable.***

UR(3): What are the adverse effects of noise and other disturbances caused by developing, using, and maintaining roads, on the quantity, quality, and type of unroaded recreation opportunities? ***Not applicable.***

UR(4): Who participates in unroaded recreation in the areas affected by constructing, maintaining, and decommissioning roads? ***Hunters and a rare horseback rider.***

UR(5): What are these participants' attachments to the area, how strong are their feelings, and are alternative opportunities and locations available? ***All hunters have attachments and strong feelings about the areas they traditionally hunt in. Alternative opportunities and locations are available.***

UR(6): How is developing new roads into unroaded areas affecting the Scenic Integrity Objective, SIO(s)? Note: Some forests are still using the Visual Management System (VMS). If

that is the case, substitute Visual Quality Objective (VQO) for SIO. (Region 2 added this question. There is no corresponding National direction). **Not applicable.**

#### *Road-Related Recreation (RR)*

RR(1): Is there now or will there be in the future excess supply or excess demand for roaded recreation opportunities? ***At the present time, there is an excess supply for existing roaded recreation opportunity demand. It is projected that keeping all current system roads open will be adequate for future supply and demand.***

RR(2): Is developing new roads into unroaded areas, decommissioning of existing roads, or changing maintenance of existing roads causing substantial changes in the quantity, quality, or type of roaded recreation opportunities? ***In order to get more in line with current Forest Plan road density standards, it will be necessary to decommission some existing roads. This will result in substantial changes to quantity of roaded recreation opportunity, but these actions are not projected to impact quality or type.***

RR(3): What are the adverse effects of noise and other disturbances caused by constructing, using, and maintaining roads on the quantity, quality, or type of roaded recreation opportunities? ***Maintaining roads will cause some short-term, occasional, and temporary adverse effects. Road construction will be limited to temporary spurs, which is a one-time and short-term effect. Projected use of roads would have negligible adverse effects on quantity, quality, or type of roaded recreation opportunities.***

RR(4): Who participates in roaded recreation in the areas affected by road constructing, changes in road maintenance, or road decommissioning? ***Hunters, snowmobilers, and 4-wheel drive enthusiasts.***

RR(5): What are these participants' attachments to the area, how strong are their feelings, and are alternative opportunities and locations available? ***All hunters and 4-wheel drive enthusiasts have attachments and strong feelings about the areas they traditionally hunt and recreate in. Alternative opportunities and locations are available.***

RR(6): How does the road system affect the Scenic Integrity Objective, SIO(s)? Note: Some forests are still using the Visual Management System (VMS). If that is the case, substitute Visual Quality Objective (VQO) for SIO. (Region 2 added this question. There is no corresponding National direction). ***The road system within the Horse Creek analysis area fits within the VMS standards for roaded recreation.***

#### *Passive-Use Value (PV)*

PV(1): Do areas planned for road constructing, closure, or decommissioning have unique physical or biological characteristics, such as unique features and threatened or endangered species? ***Not applicable.***

PV(2): Do areas planned for road construction, closure, or decommissioning have unique cultural, traditional, symbolic, sacred, spiritual, or religious significance? ***Not applicable.***

PV(3): What, if any, groups of people (ethnic groups, subcultures, and so on) hold cultural, symbolic, spiritual, sacred, traditional, or religious values for areas planned for road entry or road

closure? ***The Agency knows of nothing specifically designated. If the Hopi or Utes have such values they have not informed the Forest Service.***

PV(4): Will constructing, closing, or decommissioning roads substantially affect passive-use value? ***The existence of this road system is unlikely to have substantial value to people who have no intention, hope, or expectation of using it.***

*Social Issues (SI)*

SI(1): What are people's perceived needs and values for roads? ***Roads meet the public's desire for access for recreation use and for commodity extraction (firewood, timber harvest, hunting, etc.)*** How does road management affect people's dependence on, need for, and desire for roads? ***A minimum amount of road management (maintenance, signing, law enforcement) will meet the public's needs and desires.***

SI(2): What are people's perceived needs and values for access? ***Roads meet the public's desire for access for recreation use and for commodity extraction (firewood, timber harvest, hunting, etc.)*** How does road management affect people's dependence on, need for, and desire for access? ***A minimum amount of road management (maintenance, signing, law enforcement) will meet the public's needs and desires.***

SI(3): How does the road system affect access to paleontological, archaeological, and historical sites? ***Not applicable.***

SI(4): How does the road system affect cultural and traditional uses (such as plant gathering, and access to traditional and cultural sites) and American Indian treaty rights? ***There is no effect other than the road system allows easier access within the Horse Creek area.***

SI(5): How are roads that constitute historic sites affected by road management? ***Not applicable.***

SI(6): How is community social and economic health affected by road management (for example, lifestyles, businesses, tourism industry, infrastructure maintenance)? ***Negligible.***

SI(7): What is the perceived social and economic dependency of a community on an unroaded area versus the value of that unroaded area for its intrinsic existence and symbolic values? ***Not applicable.***

SI(8): How does road management affect wilderness attributes, including natural integrity, natural appearance, opportunities for solitude, and opportunities for primitive recreation? ***The Horse Creek area would not be considered high quality for these kinds of attributes.***

SI(9): What are traditional issues of animal and plant species in the area of analysis? ***There are no known special or traditional social issues relative to the plant and animal species in the area.***

SI(10): How does road management affect people's sense of place? ***Negligible.***

## *Civil Rights and Environmental Justice (CR)*

CR(1): How does the road system, or its management, affect certain groups of people (minority, ethnic, cultural, racial, disabled, and low-income groups)? ***It improves the access to the area for these user groups.***

### Opportunities

The desirable road system for this area is one that meets Forest Plan standards, can be maintained on a regular basis, has a minimum of erosion problems, and is free of noxious weeds. Considering the current design, layout, and condition of the existing system, it is not feasible to reach the desired condition through actions solely proposed in the Horse Creek Timber Sale EA. One option to modify the road system that would result in a more acceptable infrastructure following the implementation of this timber sale and related activities is described below. See Map 2 also.

The sale is within an unrestricted motorized travel area and the flat terrain leads to some travel management problems. Roads in this area are difficult to effectively close and the recreating public is currently using most of the “closed roads” (local intermittent and unclassified). There is a total road density of 5.85 miles/sq. mile in the analysis area. If one considers only the designated open roads (local constant), the road density is 2.28 miles/sq. mile. Both scenarios far exceed Forest Plan guidelines within each management prescription area.

The Horse Creek Timber Sale can be harvested using existing system roads and existing non-system (temporary) roads with the addition of some new temporary roads. Both existing system (classified) roads and existing non-system (unclassified) roads will need pre-use maintenance or reconstruction prior to their use for timber removal. Forest Service Roads (FSRs) #322, #325, and #326 will need to be reconstructed by blading and shaping, and by installing drainage structures. FSR #567 is the only classified road that will need to have pre-use maintenance done on it prior to use. No surface rock replacement deposits will be collected on this sale because there are no gravel surfaced roads under Forest Service jurisdiction to be used.

FSR #567 is the main access route to the sale area. The first 2.3 miles of FSR #567 is gravel surfaced but is under Montezuma County jurisdiction. This portion of the road is outside of the analysis area. All other roads affected by sale activity within the analysis area are under Forest Service jurisdiction.

FSR #567 within the analysis area is grid-rolled surfaced. All of the remaining roads within the analysis area are native soil surfaced. There are 11.1 miles of local constant roads existing which are currently open to public motorized traffic. There are 4.9 miles of local intermittent roads existing which are “closed” to public motorized traffic. Most of these local intermittent roads have existing road closure gates on them. They would remain closed to public use during and following the sale. There are 16.0 miles of existing unclassified roads within the analysis area that would be planned to be decommissioned (obliterated) by the purchaser or by other funding sources such as roads and trails money, timber sale derived KV money, and/or soil and water funds. These unclassified roads are currently “closed” to public motorized traffic. Decommissioning work would take place during and/or after the sale. Any new temporary roads constructed by the purchaser during the sale would be decommissioned by the purchaser.

Decommissioning of unclassified roads will be accomplished by: outsloping (if possible), constructing nondrivable waterbars, scarification of the road surface to a depth of approximately one foot, seeding of the roadbed for the entire length and width, and removal of culverts.

Deposits shall be collected for maintenance on FDR #567 since this road is under Schedule "A" agreement with Montezuma County for maintenance. Still, FSR #567 shall have purchaser pre-haul maintenance and post haul maintenance. All other roads used by the contractor shall be purchaser maintained.

Local constant roads ( # 322, #325, # 326, # 567, and # 567-D) shall remain open to the public during and after the sale. They will be maintained to a Level 3. Local intermittent roads # 322-A, # 324, #324-A, #326-A, and 567-F) shall be closed to public vehicular use and will be maintained to a Level 2 during the sale. After the sale, maintenance will drop to a Level 1. All of the 16.0 miles of unclassified roads would be planned for decommissioning. To comply with the Forest Plan guidelines for area management prescriptions, all of the 4.9 miles of local intermittent roads should be permanently closed, and a portion of the 11.1 miles of open roads (local constant) need to be closed eventually.

(Analysis Area and Proposed Actions Maps)