

CHAPTER 2. ALTERNATIVES, INCLUDING THE PROPOSED ACTION

Introduction

This chapter describes and compares the alternatives considered in detail for this project. It includes a description and mileage for each alternative considered. This section also presents the alternatives in comparative form, defining the differences between each alternative and providing a clear basis for choice among options by the decision maker and the public. Some of the information used to compare the alternatives is based upon the design of the alternative, and some of the information is based upon the environmental, social, and economic effects of implementing each alternative.

Alternative Development

The ENF undertook an extensive effort to spatially locate all of the NFS roads and trails along with the unauthorized routes which showed current or past motor vehicle use and which could be interpreted as travel ways for motor vehicles. Data collection for this inventory began in 1999 and was finalized in February 2006. The No Action Alternative (Alternative A) was developed based on this inventory, although, as stated previously, roads or trails that have been closed to motor vehicle use or for which there is a pre-existing decision to close or restrict use were excluded from this alternative. Also routes that have revegetated from non-use were also excluded.

Before the action alternatives were developed, all existing routes identified in the route inventory were checked for compliance with the ENF LRMP and the SNFPA standards and guidelines. Each standard and guideline related to travel management was identified, and criteria for interpreting each standard and guideline were developed. A list of these standards and guidelines can be found in the project record, and has been posted on the ENF Travel Management website.

To be consistent with the February 15, 2005, District Court Order, a GIS exercise was developed to run all routes through the criteria, including NFS ML-1 and ML-2 roads and NFS trails managed for OHV use and open for public use. Any route (authorized or unauthorized) identified as non-compliant with the standards and guidelines was initially proposed to be closed for motor vehicle use in any of the action alternatives.

Then, alternatives were developed in response to the significant issues identified from scoping of the proposed action released on October 26, 2005. In addition, specific route segments important to the development of an action alternative found to be non-compliant with ENF LRMP standards and guidelines were identified and recommended for non-significant Forest Plan amendments. These are identified in the description of the alternatives in the next section.

Development of the action alternatives also included the review and evaluation of the current assignment of maintenance levels of NFS roads. Changes were made if it was appropriate for the development of an alternative.

Preliminary alternatives were presented at public meetings on June 5th and 6th, 2006, and released on the Forest website following these meetings. Following the public meetings, individuals or groups from the public were invited to meet with Forest Service staff from June 15 to June 20, 2006, to review the preliminary alternatives, answer questions, and provide comments. Field trips

were also conducted, to provide an opportunity for the public to visit specific areas and to provide comments and concerns. The purpose of this effort was to acquire additional public input on the range of alternatives being considered, before the DEIS was released. Based on these meetings, adjustments were made to the alternatives before the environmental analysis was conducted. These adjustments were identified and posted on the Forest website in Fall 2006, along with updated maps and descriptions of the preliminary alternatives.

Alternative B was modified following the release of the DEIS, based on the review of the comments received during the 90 day comment period. This alternative is referred to as Modified B.

Alternatives Considered in Detail

The alternatives considered in detail are described below. Alternatives A through E are ordered below from most mileage available for public wheeled motor vehicle use to least mileage¹.

Alternative A – No Action

Description

In this, the No Action alternative, the existing condition, as reflected in the forest route inventory completed on February 1, 2006, would continue². These existing routes on the Forest would primarily be used for public wheeled motor vehicle use. Cross-country travel and route proliferation would still occur in isolated areas on the Forest since it is not currently prohibited. Areas for dispersed activities would continue to be used by public wheeled motor vehicles primarily for the purpose of dispersed camping and parking. No changes would be made to the current National Forest transportation system and no cross country travel prohibition would be put into place. The Travel Management Rule would not be implemented, and no MVUM would be produced. Wheeled motor vehicle travel by the public would not be limited to designated routes. Unauthorized routes would continue to have no status or authorization as NFS roads or trails.

Mileage

The No Action alternative provides a baseline for comparing the other alternatives. Under this alternative the agency will take no affirmative action, such that there will be no change from current management or direction. This alternative is not a proposal to add all of the unauthorized routes to the NFS. It is a proposal to 'do nothing' and 'maintain the 'status quo'.

The No Action alternative led to misunderstandings in the release of the DEIS, particularly in regards to ML-1 roads and unauthorized routes. As described in Chapter 1, ML-1 roads are NFS roads, but were constructed as intermittent service roads and were not intended to be open to motor vehicle use. On the ENF, 482 miles of ML-1 roads have received public wheeled motor vehicle use, and in this No Action alternative, this use will not be prohibited. However, these roads remain closed to motor vehicle use by national policy and ENF LRMP direction

¹ In addition to the miles of NFS and unauthorized roads and trails shown in the tables for each alternative, there are an additional 334 miles of State, county and private roads on the ENF and 311 miles of roads and trails within the Rock Creek Recreational Trails area.

² Additional information regarding the existing situation can be found in Chapter 1 of this FEIS.

(Management Practice 104, page 4-108). An analysis of the environmental effects associated with motor vehicle use of these roads had not previously been completed and no agency decision has been made in regards to allowing motor vehicle use on these roads. Motor vehicle travel on approximately 526 miles of unauthorized routes will also not be prohibited under this alternative, but again, these routes will not be added to the transportation system.

The following table compares these different aspects of the No Action alternative. The column titled “Routes with Existing Use” shows the number of miles of roads and trails where use is currently occurring. This includes roads and trails that are part of the National Forest transportation system (including ML-1 roads) and approximately 526 miles of unauthorized routes across the 502,000 acres within the ENF where cross country travel is not prohibited by regulation or forest order. The column titled “Routes Open by Policy” shows the number of miles of roads and trails where use is allowed by management direction and policy. This includes the NFS roads and trails that are managed for public wheeled motor vehicle use under the current management direction. This column does not include the ML-1 roads or unauthorized routes, which are not managed as open to motor vehicle use.

Table 2-1. Alternative A mileage summary

Existing Classification of Routes	Miles	
	Routes with Existing Use	Routes Open by Policy
NFS ML-1 Road: Intermittent Road Not Physically Closed	482	0
NFS ML-2 Road: Open to All Highway and Non-Highway Legal Vehicles	1,022	1,022
NFS ML-2 Road: Open to Highway Legal Vehicles Only	8	8
NFS 4WD Trail: Open to High Clearance Vehicles	10	10
NFS Trail: Open to ATVs and Motorcycles Only	24	24
NFS Trail: Open to Motorcycles Only	116	116
Miles of unauthorized routes across the 502,000 acres where cross country travel is not prohibited	526	0
TOTAL Miles	2,188	1,180
Number of acres of continued cross country travel 502,000 acres		
NFS ML-3+ Road: Open to Highway and Non-Highway Legal Vehicles	5	5
NFS ML-3+ Road: Open to Highway Legal Vehicles Only	675	675
Total Available for Public Motorized Use	2,868	1,860
NFS ML -1 Road: Intermittent Road - Closed to Motor Vehicles	240	

Route-specific Forest Plan Amendments

Since no-action is being taken, no route-specific Forest Plan amendments would be undertaken.

Seasonal Closure

There is no seasonal prohibition on public wheeled motor vehicle use during wet weather periods.

Over-the-Snow Travel

There are no specific prohibitions on OST by public wheeled motor vehicles.

Parking/Dispersed Camping

There are no specific prohibitions on the use of public wheeled motor vehicles for parking and dispersed camping.

Alternative B

Description

This alternative provides a high level of motorized recreation opportunities and access across the Forest, maximizing opportunities for OHV use. In addition to allowing public wheeled motor vehicle use on NFS motorized trails and ML-2 roads (including converting ML-3 native surface roads to ML-2) this alternative proposes to change some ML-1 roads to ML-2, thereby allowing public motorized use on these roads. Generally, these are roads which are now physically open and which enhance the recreation experience by connecting routes or areas, provide access to an area of interest, or allow access to dispersed camping. In addition, this alternative includes non-significant Forest Plan amendments and proposes to designate a number of unauthorized routes, which serve to improve the motorized transportation system by accessing dispersed camping locations, specific features or destinations, creating connector/loop routes, or providing unique motorized recreation experiences. This design primarily addresses Significant Issue Statement 1 by providing: easy access to general areas and dispersed camping; camping opportunities; OHV opportunities and public access; destination travel and driving for pleasure; access for fishing, biking, equestrian use, camping and other recreational activities; and limiting displacement of use to private property.

This alternative proposes the following designations, while prohibiting cross-country travel off of designated routes, as directed in the 1989 ENF LRMP, as amended, as well as the National Travel Management Rule of 2005.

Mileage

This alternative, along with Modified B, proposes the highest mileage of routes available for public wheeled motor vehicle use of the action alternatives. Alternative B offers the following miles of roads and trails for public wheeled motor vehicle use. A break-out of the following summary can be found in Appendix F.

Table 2-2. Alternative B mileage summary

Proposed Classification	Miles
NFS ML-2 Road: Open to All Street-Legal and Off Highway Vehicles	807
NFS ML-2 Road: Open to Street-Legal Vehicles Only	313
NFS 4WD Trail: Open to All Street-Legal and Off Highway Vehicles	60
NFS Trail: Open to ATVs and Motorcycles Only	49
NFS Trail: Open to Motorcycles Only	133
Acres allowing Cross-Country travel	0
TOTAL Miles	1,362
NFS ML-3+ Road: Existing Mixed Use	5
NFS ML-3+ Road: Open to Street-Legal Vehicles Only	480
Total Available for Public Motorized Use	1,847
NFS ML -1 Road: Intermittent Road - Closed to Motor Vehicles	558

This alternative proposes to add 46 miles of unauthorized routes to the National Forest transportation system. The following table shows the number of miles by proposed classification for these unauthorized routes. The miles of road or trail are included within the mileages shown in the above table

Table 2-3. Alternative B mileage summary

Unauthorized Route Proposed Classification	Miles
Unauthorized route to be added as NFS ML-2 Road	27
Unauthorized route to be added as NFS 4WD Trail	4
Unauthorized route to be added as NFS Trail open to ATVs and Motorcycles	11
Unauthorized route to be added as NFS Trail open to Motorcycles	4
TOTAL Miles	46

Route-specific Forest Plan Amendments

The following route segments would require non-significant Forest Plan amendments to be designated open for public wheeled motor vehicle use. These routes are proposed for non-significant Forest Plan Amendments because they provide a unique recreation opportunity (such as a high elevation trail experience), enhance the recreation experience by connecting routes or areas, provide access to an area of interest, or allow access to dispersed camping.

Table 2-4. Route segments in Alternative B requiring non-significant Forest Plan amendments

Existing ENF LRMP S&G	Proposed Amendments	Route Number	Segment Length (miles)
Forest-wide S&G –Management Practice 46 – Meadow Vegetation Management (pg.4-90): Consider closing and obliterating existing roads.		NFS Roads	
		08N05L	0.1
		09N01	0.1
		09N03	0.3
		09N04	0.2
		09N12	0.1
		09N82	0.5
		09N83	0.3
		10N01	0.1
		10N13	0.1
		10N14	0.1
		10N14B	0.2
		10N21	0.2
		10NY06	0.1
		11N23F	0.1
		11N23P	0.1
		11N26F	0.3
		11N63	0.1
		11N64	0.1
		Management Area 28 – Meadow Management – Management Practice 28 – Closed OHV Management (pg 4-278): Prohibit motor vehicle use on meadows.	Prohibit motor vehicle use on meadows, except for the route segments identified in this table
13N72A	0.1		
14N05	0.1		
14N39	0.6		
NFS Trails			
Management Area 28 – Meadow Management – Management Practice 104 – Transportation Management – Roads Closed (pg 4-282): Close roads to and across meadows.	Close roads to and across meadows, except for the route segments identified in this table	17E12	0.1
		17E17	0.2
		17E19	0.3
		17E21	0.1
		17E24	0.7
		17E28	0.3
		17E51	0.4
		Unauthorized Routes	
		NSR1013-A	0.1
		NSR1014-AB	0.1
NSR1439-CA	0.2		
Unnamed Route	0.2		
		Total	6.7

These non-significant Forest Plan amendments are applicable forest-wide and in Management Area 28 within the ENF boundary.

As per FSH 1909.12, the four criteria used to determine significance of the proposed amendment are responded to directly.

Timing

When the change in the Forest Plan would take place relative to the planning period and scheduled revisions of the Plan.

- The ENF is not currently undertaking a formal Forest Plan revision process. The latest schedule for Forest Plan revision to begin is 2011. Therefore, because the

completion of the Forest Plan revision process is not imminent, these non significant Forest Plan amendments are being proposed at an appropriate time.

Location and Size

Location and size of the area affected compared to the size of the overall planning area.

- The ENF includes approximately 596,724 acres in the central Sierra Nevada. These proposed amendments would pertain to 6.7 miles of linear route segments compared to approximately 2,870 miles of routes currently existing on the Forest.

Goals, Objectives, and Outputs

How, or to what degree, the amendment would affect the long-term relationship between levels of goods and services projected by the Forest Plan.

- These proposed amendments are not anticipated to negatively impact the long-term relationship between levels of goods and services on the ENF in any way.

Management Prescription

Whether the change would apply only to a specific situation or to future situations across the planning area.

- These are site-specific amendments that would apply only to the route segments identified, and would not apply to the remainder of the Forest or Meadow Management Area 28.

Seasonal Closure

A seasonal closure would be instituted on all native surface roads and trails from January 1 to March 31. The basis for the dates proposed for the seasonal closure and the explanation of the need for the seasonal closure is described in Appendix D. If it is determined by the Forest Supervisor outside of those dates, based on soil moisture evaluations, rainfall, road or trail conditions, and weather forecasts, that areas are not suitable for use, the Forest Supervisor has the authority to close those areas for a specified amount of time using Forest Orders. The public will be notified when areas are closed.

Over-the-Snow Travel

Public wheeled OHV OST would be allowed on ML-3, -4, and -5 surfaced roads only with 12 inches of snow or more and no ground contact. Public wheeled highway-licensed motor vehicle OST would be allowed on ML-3, -4, and -5 surfaced roads only, regardless of snow depth. Public wheeled OST would be prohibited on the following:

- all designated snowmobile routes and cross-country ski trails on the ENF.
- the section of Mormon Emigrant Trail (MET) from the junction of Silver Fork road (11N40) to Iron Mountain SnoPark.
- Robbs Peak road (13N31).
- the section of Schneider Camp 4WD road (10N13) from the Placerville/Amador District boundary line heading southeast to county road ALP-164.

Public Wheeled Motor Vehicle Parking and Dispersed Camping

A designation for a road or trail includes all terminal facilities, trailheads, parking lots, and turnouts associated with the designated road or trail.

Parking a motor vehicle so that all parts of the vehicle are within one vehicle length from the edge of the route surface when it is safe to do so and without causing damage to NFS resources or facilities (FSM 7716.1 (Proposed)) shall be included with the designations. There are no restrictions on general dispersed camping by non-motorized means.

Modified B – Preferred Alternative

Description

This alternative provides a high level of motorized recreation opportunities and access across the Forest, while still complying with ENF LRMP standards and guidelines. This alternative provides a balanced response to public comments received on the DEIS. In particular, this alternative provides a greater diversity of access for all classes of vehicles, complies with LRMP Standards and Guidelines, displays rationale for eliminating use on ML-2 routes, minimizes impacts to meadows, reduces impacts to stream courses and riparian habitat, and provides for areas of quiet recreation. The design of this alternative addresses Significant Issue Statements 1 and 2 by providing easy access to general areas and dispersed camping and providing OHV opportunities and public access while reducing route proliferation, impacts to non-motorized users, and impacts to forest resources.

Modified B was developed using Alternative B as the starting point because it provided the highest level of public access of the action alternatives in the DEIS. The focus of the modifications to Alternative B were to allow a diversity of highway and non-highway classes of public wheeled motor vehicle use on ML-2 roads which are generally constructed and maintained to be open to the public for high clearance vehicle use (rather than passenger car use), while still reducing environmental impacts. Some routes from other alternatives that were analyzed in the DEIS were added that were consistent with the LRMP and provided a diversity of use and recreation opportunities except for two conditions:

- Routes within a ½ mile of a private residence allow use for highway license vehicles only (ENF LRMP Forestwide S&G 27), and
- Routes downgraded from ML-3 to ML-2 that have a surface other than native material (i.e. chipseal, bituminous) are open for highway license vehicles only.

These changes to Alternative B were limited so as to not result in any new significant effects that were not previously analyzed in the DEIS. It is recognized that some ML-2 roads leading off paved roads (which are generally restricted to highway vehicles only) are fairly short and so to legally operate an OHV on these routes, these vehicles will need to be transported to these roads.

Routes that were inconsistent with the LRMP will be closed to public motor vehicle use along with:

- Routes with a high potential for impacts to riparian conservation areas. These are routes located such that 1/3 of a stream length is within 200 feet of a road and where there were known sensitive aquatic resources or MIS species (amphibians or trout),
- Unauthorized routes within California spotted owl or Northern goshawk protected activity centers (PAC) or within 200 feet of California spotted owl or Northern goshawk activity centers (nest sites), except for three routes that have been managed in the past for public use and that provide significant recreational benefits³.

³ The three unauthorized routes are NSR 1046-A, NSR 1046-C, and NSR1109A-A.

- Portions of ML-1 or unauthorized roads within meadows. Only select ML-2 roads and NFS motorized trails are proposed for non-significant Forest Plan amendments where these specific routes provide a unique recreation opportunity (such as a high elevation trail experience), enhance the recreation experience by connecting routes or areas, provide access to an area of interest, or allow access to dispersed camping, and
- Motorcycle trails within the recommended Caples Creek Wilderness area because the trails are within meadows and the intent of the LRMP decision is to manage the area for those wilderness values, such as high quality meadow habitats. This alternative will allow motorcycle and other public motor vehicle use of other high country routes, such as in the Squaw Ridge area.

In contrast to the NFSML-2 roads which were generally constructed to be open to motor vehicle use, ML-1 roads were intended to be intermittent service roads and were to be closed to motor vehicle use (including public motor vehicle use)(FSH 7709.58.10.12.3). Specific ML-1 roads are proposed open to public wheeled motor vehicle use if they enhanced the recreation experience by connecting routes or areas, provided access to an area of interest, or allowed access to dispersed camping. In addition, these specific ML-1 roads must be consistent with ENF LRMP standards and guidelines, provide a balance between the recreation opportunity and resource concerns, and otherwise meet the criteria for designating roads included in the Travel Management regulations.

Additionally, NFS routes that have been managed as open to motor vehicle use but which are proposed to be closed to public motor vehicle use in Modified B have a clear rationale for closing. Appendix G lists the specific standard and guideline/rationale for each ML-2 road closed to public motor vehicle use.

This alternative proposes the following designations, while prohibiting cross-country travel off of designated routes, as directed in the 1989 ENF LRMP, as amended, as well as the National Travel Management Rule of 2005.

Mileage

This alternative, along with Alternative B, proposes the highest mileage of routes available for public wheeled motor vehicle use of the action alternatives. Modified B offers the following miles of roads and trails for public wheeled motor vehicle use. A break-out of the following summary can be found in Appendix F. For this alternative, Appendix G lists the specific standard and guideline that each ML-2 route not proposed for motor vehicle use is not consistent with.

Table 2-5. Modified B mileage summary

Proposed Classification	Miles
NFS ML-2 Road: Open to All Street-Legal and Off Highway Vehicles	913
NFS ML-2 Road: Open to Street-Legal Vehicles Only	89
NFS 4WD Trail: Open to All Street-Legal and Off Highway Vehicles	58
NFS Trail: Open to ATVs and Motorcycles Only	37
NFS Trail: Open to Motorcycles Only	115
Acres allowing Cross-Country travel	0
TOTAL Miles	1,212
NFS ML-3+ Road: Existing Mixed Use	5
NFS ML-3+ Road: Open to Street-Legal Vehicles Only	630
Total Available for Public Motorized Use	1,847
NFS ML -1 Road: Intermittent Road - Closed to Motor Vehicles	611

This alternative proposes to add 23 miles of unauthorized routes to the National Forest transportation system. The following table shows the number of miles by proposed classification for these unauthorized routes. The miles of road or trail are included within the mileages shown in the above table

Table 2-6. Modified B mileage summary

Unauthorized Route Proposed Classification	Miles
Unauthorized route to be added as NFS ML-2 Road	17
Unauthorized route to be added as NFS 4WD Trail	2
Unauthorized route to be added as NFS Trail open to ATVs and Motorcycles	4
Unauthorized route to be added as NFS Trail open to Motorcycles	0
TOTAL Miles	23

Route-specific Forest Plan Amendments

The following route segments would require non-significant Forest Plan amendments to be designated open for public wheeled motor vehicle use. These routes are proposed for non-significant Forest Plan amendments for the same reasons described for Alternative B.

Table 2-7. Route segments in Modified B requiring non-significant Forest Plan amendments

Existing ENF LRMP S&G	Proposed Amendments	Route Number	Segment Length (miles)
Forest-wide S&G –Management Practice 46 – Meadow Vegetation Management (pg.4-90): Consider closing and obliterating existing roads.	Consider closing and obliterating existing roads, except for the route segments identified in this table	NFS Roads	
		09N01	0.1
		09N04	0.2
		09N82	0.5
		09N83	0.3
		10N01	0.1
		10N13	0.1
		10N14	0.1
		10N21	0.2
		10NY06	0.1
Management Area 28 – Meadow Management – Management Practice 28 – Closed OHV Management (pg 4-278): Prohibit motor vehicle use on meadows.	Prohibit motor vehicle use on meadows, except for the route segments identified in this table	11N23F	0.1
		11N26F	0.3
		12NY15	0.1
		14N05	0.2
		14N39	0.6
		NFS Trails	
		17E12	0.1
Management Area 28 – Meadow Management – Management Practice 104 – Transportation Management – Roads Closed (pg 4-282): Close roads to and across meadows.	Close roads to and across meadows, except for the route segments identified in this table	17E17	0.2
		17E19	0.1
		17E21	0.7
		17E24	0.3
		17E51	0.4
		Total	4.8

The responses to the four criteria for determining significance of the proposed amendment, as set in FSH 1909.12, are the same as those presented in Alternative B.

Seasonal Closure

See the discussion under Alternative B.

Over-the-Snow Travel

Public wheeled OST would be prohibited on the following:

- all designated snowmobile routes and cross-country ski trails on the ENF.
- Mormon Emigrant Trail (10N50/Forest Route 5) from the junction of Silver Fork Road (11N40) southeast to the Iron Mountain SnoPark at Highway 88
- Loon Lake Campground Road (13N17)
- Chipmunk Bluff Road (13N19)
- Robbs Peak Road (13N31)

Public Wheeled Motor Vehicle Parking and Dispersed Camping

See the discussion under Alternative B.

Alternative C

Description

This alternative focuses on balancing maximum public wheeled motor vehicle access with implementation of the ENF LRMP. In doing so, this alternative minimally directs OHV use onto routes where there is available mileage and connections to other routes designated for OHV use. This design provides a balance between Significant Issue Statement 1 and Significant Issue Statement 2 by providing easy access to general areas and dispersed camping and providing OHV opportunities and public access while reducing route proliferation, impacts to non-motorized users, and forest resources.

This alternative began as the Proposed Action in the NOI released on October 25, 2005. It was designed using ML-3 native surface roads, ML-2 roads, ML-1 roads, and NFS motorized trails as a base, similar to the design of the court order and subsequent interim forest order which allowed public wheeled motor vehicle use on existing NFS routes only. A small number of historically popular unauthorized routes were added to this base that created connections to NFS routes or access to dispersed camping sites. Several changes have been made to this proposed action since release of the NOI as a result of further analysis and public input. The public was informed of these changes as they occurred (some were made over a year prior to the release of the DEIS). Any additional public comments as a result of this new information were added to the scoping record and screened by the route designation IDT.

This alternative proposes the following designations, while prohibiting cross-country travel off of designated routes, as directed in the 1989 ENF LRMP, as amended, as well as the National Travel Management Rule of 2005.

Mileage

This alternative has the third highest mileage of routes available for public wheeled motor vehicle use of the five action alternatives. Alternative C offers the following miles of roads and trails for public wheeled motor vehicle use. A break-out of the following summary can be found in Appendix F.

Table 2-8. Alternative C mileage summary

Proposed Classification	Miles
NFS ML-2 Road: Open to All Street-Legal and Off Highway Vehicles	580
NFS ML-2 Road: Open to Street-Legal Vehicles Only	488
NFS 4WD Trail: Open to All Street-Legal and Off Highway Vehicles	57
NFS Trail: Open to ATVs and Motorcycles Only	31
NFS Trail: Open to Motorcycles Only	89
Acres allowing Cross-Country travel	0
TOTAL Miles	1,245
NFS ML-3+ Road: Existing Mixed Use	5
NFS ML-3+ Road: Open to Street-Legal Vehicles Only	480
Total Available for Public Motorized Use	1,730
NFS ML -1 Road: Intermittent Road - Closed to Motor Vehicles	581

This alternative proposes to add 20 miles of unauthorized routes to the National Forest transportation system. The following table shows the number of miles by proposed classification for these unauthorized routes. The miles of road or trail are included within the mileages shown in the above table

Table 2-9. Alternative C mileage summary

Unauthorized Route Proposed Classification	Miles
Unauthorized route to be added as NFS ML-2 Road	15
Unauthorized route to be added as NFS 4WD Trail	2
Unauthorized route to be added as NFS Trail open to ATVs and Motorcycles	3
Unauthorized route to be added as NFS Trail open to Motorcycles	0
TOTAL Miles	20

Route-specific Forest Plan Amendments

The following route segments would require the following non-significant Forest Plan amendments to be designated open for public wheeled motor vehicle use. These routes are proposed for non-significant Forest Plan amendments for the same reasons described for Alternative B. Some of the routes differ from Alternative B, consistent with the theme of the alternative.

Table 2-10. Route segments in Alternative C requiring non-significant Forest Plan amendments

Existing ENF LRMP S&G	Proposed Amendments	Route Number	Segment Length (miles)
Forest-wide S&G –Management Practice 46 – Meadow Vegetation Management (pg.4-90): Consider closing and obliterating existing roads.	Consider closing and obliterating existing roads, except for the route segments identified in this table	NFS Roads	
		08N05L	0.1
Management Area 28 – Meadow Management – Management Practice 28 – Closed OHV Management (pg 4-278): Prohibit motor vehicle use on meadows.	Prohibit motor vehicle use on meadows, except for the route segments identified in this table	09N01	0.1
		09N03	0.3
		09N04	0.2
		09N12	0.1
		09N82	0.5
		09N83	0.3
		10N01	0.1
		10N13	0.1
		10N14	0.1
		10N14B	0.2
		10N21	0.2
		10NY06	0.1
		11N23F	0.1
		11N23P	0.1
		11N26F	0.3
Management Area 28 – Meadow Management – Management Practice 104 – Transportation Management – Roads Closed (pg 4-282): Close roads to and across meadows.	Close roads to and across meadows, except for the route segments identified in this table	11N63	0.1
		11N64	0.1
		12NY15	0.1
		13N72A	0.1
		14N05	0.1
		14N39	0.6
		NFS Trails	
		17E17	0.2
		17E24	0.7

		Total	4.9
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The responses to the four criteria for determining significance of the proposed amendment, as set in FSH 1909.12, are the same as those presented in Alternative B.

Seasonal Closure

A seasonal closure will be instituted on all native surface roads and trails each year from November 1 to April 30 to protect routes from wet weather damage. The basis for the dates proposed for the seasonal closure and the explanation of the need for the seasonal closure is described in Appendix D. If it is determined by the Forest Supervisor during the months of November, December, or April, based on soil moisture evaluations, rainfall, road or trail conditions, and weather forecasts, that during this period areas are suitable for use, the Forest Supervisor has the authority to open those areas for a specified amount of time. The public will be notified when areas are open and, also, when the seasonal closure is reinstated.

Over-the-Snow Travel

See the discussion under Alternative B.

Parking/Dispersed Camping

See the discussion under Alternative B.

Alternative D

Description

This alternative was designed to take into account past patterns of OHV use on the Forest as well as other public motor vehicle use. It allows for a higher density of roads and trails available for public wheeled OHV and highway-licensed motor vehicle use in popular areas that have had such use in the past, including the areas known as Poho on the Georgetown Ranger District; Elkins Flat on the Placerville Ranger District; Goldnote, Papi, and Bear River on the Amador Ranger District; and the Rubicon Trail area on the Pacific Ranger District. When possible, routes creating connections between these popular use areas were included so that OHV and highway-licensed motor vehicles could ride from one popular area to another. These popular areas and connections primarily address Significant Issue Statement 1 by providing OHV opportunities and public access and limiting displacement of use to private property.

Outside these areas, the alternative focuses on providing general motorized access with lower route density. These routes provide all-purpose access for destination travel, driving for pleasure, hunting, fishing, horse-back riding, hiking, and other recreational activities, such as, travel to dispersed camping locations, specific features or destinations, or unique motorized recreation experiences, while directing OHV use onto routes where there is available mileage and connections to other routes open to OHVs. This design provides a balance between Significant Issue Statement 1 and Significant Issue Statement 2. In particular it addresses Significant Issue Statement 2 by reducing route proliferation, improving enforcement ability, reducing user conflicts and impacts to non-motorized recreation, and reducing impacts to forest resources.

This alternative was shown as the preferred alternative by the Forest Supervisor in the DEIS.

This alternative proposes the following designations, while prohibiting cross-country travel off of designated routes, as directed in the 1989 ENF LRMP, as amended, as well as the National Travel Management Rule of 2005.

Mileage

This alternative has the second lowest mileage of routes available for public wheeled motor vehicle use of the five action alternatives. Alternative D offers the following miles of roads and trails for public wheeled motor vehicle use. A break-out of the following summary can be found in Appendix F.

Table 2-11. Alternative D Mileage Summary

Proposed Classification	Miles
NFS ML-2 Road: Open to All Street-Legal and Off Highway Vehicles	426
NFS ML-2 Road: Open to Street-Legal Vehicles Only	421
NFS 4WD Trail: Open to All Street-Legal and Off Highway Vehicles	56
NFS Trail: Open to ATVs and Motorcycles Only	47
NFS Trail: Open to Motorcycles Only	113
Acres allowing Cross-Country travel	0
TOTAL Miles	1,063
NFS ML-3+ Road: Existing Mixed Use	5
NFS ML-3+ Road: Open to Street-Legal Vehicles Only	480
Total Available for Public Motorized Use	1,548
NFS ML -1 Road: Intermittent Road - <i>Closed to Motor Vehicles</i>	643

This alternative proposes to add 34 miles of unauthorized routes to the National Forest transportation system. The following table shows the number of miles by proposed classification for these unauthorized routes. The miles of road or trail are included within the mileages shown in the above table

Table 2-12. Alternative D Mileage Summary

Unauthorized Route Proposed Classification	Miles
Unauthorized route to be added as NFS ML-2 Road	19
Unauthorized route to be added as NFS 4WD Trail	4
Unauthorized route to be added as NFS Trail open to ATVs and Motorcycles	10
Unauthorized route to be added as NFS Trail open to Motorcycles	1
TOTAL Miles	34

Route-specific Forest Plan Amendments

The following route segments would require the following non-significant Forest Plan amendments to be designated open for public motor vehicle use. These routes are proposed for non-significant Forest Plan amendments for the same reasons described for Alternative B. Some of the routes differ from Alternative B, consistent with the theme of the alternative.

Table 2-13. Route segments in Alternative D requiring non-significant Forest Plan amendments

Existing ENF LRMP S&G	Proposed Amendments	Route Number	Segment Length (miles)		
Forest-wide S&G –Management Practice 46 – Meadow Vegetation Management (pg.4-90): Consider closing and obliterating existing roads.		NFS Roads			
		08N05L	0.1		
		09N01	0.1		
		09N03	0.3		
		09N04	0.2		
		09N12	0.1		
		09N82	0.5		
		09N83	0.3		
		10N01	0.1		
		10N13	0.1		
		10N14	0.1		
		10N14B	0.2		
		10N21	0.2		
		10N50	0.1		
		Management Area 28 – Meadow Management – Management Practice 28 – Closed OHV Management (pg 4-278): Prohibit motor vehicle use on meadows.	Consider closing and obliterating existing roads, except for the route segments identified in this table	10NY06	0.1
11N23F	0.1				
11N26F	0.3				
11N63	0.1				
11N64	0.1				
13N72A	0.1				
14N05	0.1				
14N39	0.6				
Management Area 28 – Meadow Management – Management Practice 104 – Transportation Management – Roads Closed (pg 4-282): Close roads to and across meadows.	Prohibit motor vehicle use on meadows, except for the route segments identified in this table			NFS Trails	
				17E12	0.1
		17E17	0.2		
		17E19	0.3		
		17E21	0.1		
		17E28	0.3		
		19E04	0.8		
		Unauthorized Routes			
		NSR1013-A	0.1		
		Unnamed route	0.2		
Total					
	6.6				

The responses to the four criteria for determining significance of the proposed amendment, as set in FSH 1909.12, are the same as those presented in Alternative B.

Seasonal Closure

A seasonal closure will be instituted on all native surface roads and trails each year from December 1 to April 30 to protect routes from wet weather damage. The basis for the dates proposed for the seasonal closure and the explanation of the need for the seasonal closure is described in Appendix D. If it is determined by the Forest Supervisor during the months of December or April, based on soil moisture evaluations, rainfall, road or trail conditions, and weather forecasts, that during this period areas are suitable for use, the Forest Supervisor has the authority to open those areas for a specified amount of time. The public will be notified when areas are open and, also, when the seasonal closure is reinstated.

Over-the-Snow Travel

Public wheeled OHV OST would be allowed on all designated routes with 24 inches of snow or more and no ground contact. Wheeled highway-licensed motor vehicle OST would be allowed on designated system trails and ML-2 roads with 24 inches of snow or more and no ground contact, and on NFS ML-3, -4, and -5 roads, regardless of snow depth. The same specific prohibitions would exist as identified in Alternative B.

Parking/Dispersed Camping

See the discussion under Alternative B.

Alternative E

Description

This alternative focuses on providing greater protection for forest resources and increasing opportunities for non-motorized recreational activities. Its primary intent was to meet Significant Issue Statement 2 by reducing route proliferation, improving enforcement ability, reducing user conflicts and impacts to non-motorized recreation, and reducing impacts to forest resources.

Using the routes included in Alternative D as a base, motorized use was eliminated from inventoried roadless areas (IRAs) and the Caples Creek Proposed Wilderness area, as well as routes with greater erosion or sedimentation potential, damage to sensitive plants, spreading noxious weeds, or threatening deer herds or other wildlife. NFS ML-1 roads were also removed from this alternative.

This alternative proposes the following designations, while prohibiting cross-country travel off of designated routes, as directed in the 1989 ENF LRMP, as amended, as well as the National Travel Management Rule of 2005.

Mileage

This alternative has the lowest mileage of routes available for public motor vehicle use of the six alternatives. Alternative E offers the following miles of roads and trails for public motor vehicle use. A break-out of the following summary can be found in Appendix F.

Table 2-14. Alternative E mileage summary

Proposed Classification	Miles
NFS ML-2 Road: Open to All Street-Legal and Off Highway Vehicles	356
NFS ML-2 Road: Open to Street-Legal Vehicles Only	358
NFS 4WD Trail: Open to All Street-Legal and Off Highway Vehicles	14
NFS Trail: Open to ATVs and Motorcycles Only	34
NFS Trail: Open to Motorcycles Only	83
Acres allowing Cross-Country travel	0
TOTAL Miles	845
NFS ML-3+ Road: Existing Mixed Use	5
NFS ML-3+ Road: Open to Street-Legal Vehicles Only	480
Total Available for Public Motorized Use	1,330
NFS ML -1 Road: Intermittent Road - <i>Closed to Motor Vehicles</i>	723

This alternative proposes to add 21 miles of unauthorized routes to the National Forest transportation system. The following table shows the number of miles by proposed classification for these unauthorized routes. The miles of road or trail are included within the mileages shown in the above table

Table 2-15. Alternative E Mileage Summary

Unauthorized Route Proposed Classification	Miles
Unauthorized route to be added as NFS ML-2 Road	13
Unauthorized route to be added as NFS 4WD Trail	3
Unauthorized route to be added as NFS Trail open to ATVs and Motorcycles	5
Unauthorized route to be added as NFS Trail open to Motorcycles	0
TOTAL Miles	21

Route-specific Forest Plan Amendments

No Forest Plan amendments would be needed for this alternative.

Seasonal Closure

See the discussion under Alternative B.

Over-the-Snow Travel

See the discussion under Alternative B.

Parking/Dispersed Camping

See the discussion under Alternative B.

Monitoring Strategy

Monitoring is critical for evaluating the effectiveness of management decisions and the accuracy of analysis assumptions and conclusions. Monitoring of road and trail conditions is required, and must meet regional and/or national standards. If monitoring determines unacceptable resource damage is occurring, steps to prevent such damage must be taken. If the mitigations are not effective or are not possible, road or trail closure may be required (may require additional NEPA analysis).

It is also important to develop a monitoring strategy that is: (1) helpful in making effective management decisions in the future, and (2) feasible to implement. Once implementation begins, more effective monitoring elements may be identified and implemented. The Implementation Strategy described below calls for a number of measures that may lead to future monitoring or that may incorporate assessments that are now occurring.

Implementation Monitoring

Stream survey monitoring: Within three years of implementation, conduct field monitoring of all streams that have been determined to be at a high risk of adverse effects to aquatic habitat from the continued use of public wheeled motor vehicles on unpaved roads. A list of these streams and affected routes can be found in the Riparian Conservation Objectives analysis within the project record. This monitoring will determine where, and to what degree, additional measures may be needed to minimize adverse impacts to streams.

Meadow monitoring: Within two years of implementation, commence field monitoring of meadows greater than one acre in size that have a road or trail within the meadow or that bisects the meadow. Public wheeled motor vehicle use through meadows can impair hydrologic function. If adverse impacts to hydrologic function are detected, appropriate measures (including closure) will be employed to restore proper functioning condition.

Plant monitoring: Monitoring will occur in areas of the Forest where concentrated numbers of sensitive plant sites have been identified along open routes (see Biological Evaluation in the Project Record). These areas have the greatest potential for adverse effects from the continued use of public wheeled motor vehicles. Sites monitored may vary year to year. If impacts to a sensitive plant site are documented, the site will be signed to indicate the presence of a sensitive resource. This signage, accompanied by an increase in surveillance, may eliminate the inappropriate motorized vehicle use. If impacts continue, further actions to dissuade motorists from driving off-road will be implemented including installation of barriers along the boundary of the habitat being impacted.

Heritage Monitoring: The Motorized Recreation Programmatic Agreement with the State Historic Preservation Office (SHPO) outlines future work in support of the selected alternative that will include the development of a monitoring plan for at-risk historic sites in order to measure effects. This plan will also include monitoring in areas within the route system with high concentrated use and high site density or high value sites, such as the Meiss and Caples Creek areas located on the Placerville Ranger District.

Road and Trail Condition Monitoring: Monitor the condition of recreation roads and trails utilizing the OHV Trail Monitoring form referred to as the GYR Form, following the guidance in the Training Guide developed by soil scientist Roger Poff (Poff, 2004). Roads may be monitored

using the deferred maintenance condition survey protocol. A sampling of the routes should be completed each year; roads will be monitored on a 5 year cycle. Both ENF employees and the public will use this monitoring form to document road and trail conditions, based on field observations and measurements. Information derived from this monitoring is used to update the maintenance schedule and assist in prioritizing maintenance needs. Initially, the monitoring will focus on the unauthorized routes that have been added to the National Forest transportation system.

Implementation Strategy

The Forest Service also developed the following management strategies to be used as part of all of the action alternatives to improve implementation of the designated route system:

- Produce a primary motor vehicle use map (MVUM) following national Forest Service standards that indicates which routes are designated open to the public by type of vehicle per route and season open for use. This map will be made available to the public free-of-charge. There may be some changes as implementation occurs on the ground. Designations, use restrictions, and operating conditions will be revised in future decisions as needed to meet changing conditions or management strategies.
- Produce a subsequent local travel map following production of the primary MVUM that indicates which routes are designated open to the public by type of vehicle per route and season open for use, and identifies other important features on the Forest that will help the public navigate the system.
- Provide a Forest brochure in conjunction with the public MVUM with clear and simple explanation of the rules and restrictions, and examples of signs on the ground.
- Provide clear, consistent, and adequate signage that identifies routes designated open by type of vehicle per route and season open for use corresponding to the public MVUM and local travel map. Signing of dead-end routes leading to/stopping at rivers, streams, meadows, and other sensitive resources will be a priority to help protect resources from public wheeled motor vehicle damage.
- Begin working with a collaborative group of public stakeholders within six months of the final decision. This group would work together with the Forest Service to implement the designated system, including:
 - Development of a public education strategy that includes public meetings, workshops, and other forums to educate forest users about the designated route system, to assist the public with reading the public MVUM and local travel map, to educate forest users about the potentially negative effects of their activities, and to discuss how the public can help with implementation of the designated system by volunteering for maintenance activities, enforcement of the rules, and education of other forest users. This strategy would be completed within one year after the collaborative group is established.
 - Development of a public volunteer strategy to identify opportunities for the public to help implement, enforce, maintain, and fund the designated route system. This strategy would be completed within one year after the collaborative group is established.
 - Development of a process for considering the addition of routes or changes in management of the designated system. This strategy would be completed within one year after the collaborative group is established.

- Development of a process for considering restoring, blocking, or decommissioning routes not designated for public motor vehicle use. This strategy would be completed within one year after the collaborative group is established.
- Development of a strategy for designating areas for public motor vehicle use of dispersed camping areas. This strategy would be completed within one year after the collaborative group is established.

Create record forms that can be used to document observed use or signs of use on routes not designated for public wheeled motor vehicle use. ENF personnel will use these forms to document the elements described, based on field observations. These forms will also be made available to the public at administrative offices and on the internet so that the public can document the elements described, based on field observations. This information can be combined with law enforcement information (e.g. location of warnings and citations) to develop a more effective law enforcement and restoration strategy that will help better implement the designated system.

Alternatives Considered but Eliminated from Detailed Study

Federal agencies are required by NEPA to rigorously explore and objectively evaluate all reasonable alternatives and to briefly discuss the reasons for eliminating any alternatives that were not developed in detail (40 CFR 1502.14). Public comments received in response to the Proposed Action provided suggestions for alternative methods for achieving the purpose and need. Some of these alternatives may have been outside the scope of the purpose and need, duplicative of the alternatives considered in detail, or determined to be components that would cause unnecessary environmental harm. Therefore, a number of alternatives were considered, but dismissed from detailed consideration for reasons summarized below.

Many comments and suggestions were received during the scoping process and throughout the travel management process. All suggestions were considered and discussed during the development of alternatives to the agency proposed action. Alternatives not considered in detail include:

1. Prohibit OHV use on the Forest. Only public highway-licensed wheeled motor vehicles would be permitted on existing NFS roads.

This alternative was proposed by the public during scoping to eliminate the environmental and social impacts from off highway vehicles. Part of the purpose and need is to "...provide a diversity of road and trail opportunities for experiencing a variety of environments and modes of travel consistent with the National Forest recreation role and land capability" pursuant to FSM 2353.03(2). Another part of the purpose and need is to "provide a diversity of public wheeled motor vehicle recreation opportunities."

Prohibiting OHV use on the Forest fails to meet the purpose and need for this project and was therefore eliminated from detailed study.

2. Prohibit over-the-snow travel for public wheeled motor vehicles.

This alternative was proposed by the public during scoping to reduce conflicts with winter nonmotorized recreation uses and to eliminate impacts to roads and trails in instances where there is incomplete snow cover. The Forest Plan allows for over-the-snow travel on designated routes for public wheeled motor vehicles when there are 12 inches of snow or more with no ground contact. This decision has already been made in a past NEPA decision.

In addition to this direction, there is limited wheeled motor vehicle over-the-snow travel on the Forest, resulting in relatively little resource damage. Eliminating this use is unnecessary and would fail to meet the purpose and need of the project to "...provide a diversity of road and trail opportunities for experiencing a variety of environments and modes of travel consistent with the National Forest recreation role and land capability" pursuant to FSM 2353.03(2).

Prohibiting over-the-snow travel for public wheeled motor vehicles fails to meet the purpose and need for this project and was therefore eliminated from detailed study.

3. Do not designate unauthorized routes.

Some members of the public felt that unauthorized routes were generally created without the benefit of engineering design or erosion control measures and feel that these routes should not be incorporated into the NFTS. Additionally, individuals felt that the NFTS is sufficient and that there is national direction to minimize the transportation system thus unauthorized routes should not be added. Part of the purpose and need is to "...provide a diversity of road and trail opportunities for experiencing a variety of environments and modes of travel consistent with the National Forest recreation role and land capability" pursuant to FSM 2353.03(2). Another part of the purpose and need is to "provide a diversity of public wheeled motor vehicle recreation opportunities." Not designating unauthorized routes would fail to meet this purpose and need.

There are some unauthorized routes that provide unique, historical motor vehicle experiences and routes built to access Forest Service facilities that were not added to the forest transportation system. In both cases, it may be appropriate to designate such routes as long as they are consistent with ENF LRMP standards and guidelines and are not causing unnecessary environmental harm.

Not designating any unauthorized routes to public wheeled motor vehicles fails to meet the purpose and need for this project and was therefore eliminated from detailed study.

4. Limit ATV, truck, and automobile use to NFS roads. Do not allow these vehicles on trails or going cross-country.

This alternative was proposed by the public during scoping to restrict where larger motor vehicles travel. Some individuals felt that these larger vehicles widen the trails designed and managed for Motorcycles, thereby degrading the recreation experience. Others felt that these larger vehicles cause damage to trails and should be restricted to roads which are able to sustain the impacts from their use. Part of the purpose and need is to "...provide a diversity of road and trail opportunities for experiencing a variety of environments and modes of travel consistent with the National Forest recreation role and land capability" pursuant to FSM 2353.03(2). Another part of the purpose and need is to "provide a diversity of public wheeled motor vehicle recreation opportunities."

Motorized trails serve a diversity of opportunities for different types of wheeled motor vehicles. Some trails are single-track only, and it is appropriate to designate such routes for motorcycle use only. However, other trails have been designed for, or have been historically used by, various other wheeled motor vehicles such as 4WDs and ATVs. Limiting wheeled motor vehicles other than motorcycles to NFS roads only, would fail to provide a diversity of road/trail opportunities, or a balance of experiences for the various wheeled motor vehicle classes, as well as inconsistencies with current trail designs and historical uses.

Limiting ATV, truck, and automobile use to NFS roads would fail to meet the purpose and need for this project and was therefore considered but eliminated from detailed study.

5. Designate all NFS and unauthorized routes that are not determined to be non-compliant with ENF LRMP standards and guidelines.

Alternative A allows use on all motorized NFS and does not prohibit use of the unauthorized routes on the ENF identified in the forest-wide route inventory, which was finalized on February 1, 2006. Developing another alternative that includes all NFS and unauthorized routes that are not determined to be non-compliant with ENF LRMP standards and guidelines would be duplicative, since these routes were identified and analyzed in Alternative A and can be considered for designation by the Forest Supervisor.

Although routes may be consistent with ENF LRMP standards and guidelines, there are still additional concerns (e.g. poor route conditions causing sedimentation, unauthorized routes that are user created hill-climbs on steep slopes, routes in areas where there has been substantial route proliferation) that need to be considered, as well as other laws, regulations, and policies. Designating all NFS and unauthorized routes determined not to be non-compliant with ENF LRMP standards and guidelines would fail to address these concerns, as well as fail to meet the purpose and need for this project to better manage public wheeled motor vehicle travel (Item 1 in the Purpose and Need Section) and address the National Travel Management Rule of 2005 (Item 4 in the Purpose and Need Section) and its associated criteria (see Purpose and Need section in Chapter 1).

Designating all NFS and unauthorized routes determined not to be non-compliant with ENF LRMP standards and guidelines would fail to address the concerns identified above, and meet the purpose and need for this project. Therefore, this alternative was considered but eliminated from detailed study.

6. Designate all routes included in the 1977 and 1990 OHV Plan.

This alternative was proposed by the public during scoping, because they wanted to see the routes included in these documents carried forward into this project. There are some routes in the 1977 and 1990 OHV Plans that no longer exist as a result of decommissioning or revegetation, that are inconsistent with ENF LRMP standards and guidelines, or for which there are resource concerns. The scope of this project is to consider the designation of existing routes identified in the forest route inventory for public wheeled motor vehicle use, as well as routes consistent with the federal laws, regulations, and policies.

Designating all routes included in the 1977 and 1990 OHV would fail to meet the criteria described above, as well as the purpose and need for this project. Therefore, this alternative was eliminated from detailed study.

7. Designate all NFS roads and trails equivalent to the recent court order.

The recent court order allowed public wheeled motor vehicle use on all NFS roads and trails currently existing on the Forest. This order is interim direction until the Forest completes a forest-wide EIS to designate a system of routes for public wheeled motor vehicle use.

This alternative was considered but eliminated from detailed study because: (1) there are many NFS roads that are currently blocked year-round by gates, barriers, or NEPA closures that were included on the map corresponding to the order; (2) there are approximately 730 miles of NFS ML-1 roads included in the order that were generally intended to be closed to public wheeled motor vehicle use, although a majority of them are not physically closed; (3) there are some NFS roads and trails on the Forest that have been determined to be non-compliant with ENF LRMP standards and guidelines. Designating these routes would require several significant Forest Plan amendments. The Forest believes these standards and guidelines serve an important role for protecting resources on the Forest and its adjacent lands, and believe that amending these standards and guidelines would jeopardize the health of such resources and cause unnecessary

environmental harm; and (4) designating all NFS routes existing on the Forest fails to meet the purpose and need of complying with the National Travel Management Rule and its associated criteria (see the Purpose and Need section in Chapter 1).

8. Designate routes not included on the current route inventory.

The scope of this project is to consider the designation of existing routes identified in the forest route inventory for public wheeled motor vehicle use. The route inventory was completed on February 1, 2006, and is considered to be complete. The Forest held a 120-day public comment period and subsequent reviews to ensure that the inventory was as complete as possible. Temporary logging roads built after that time and routes possibly created by users since that time will not be considered. Designating routes not included on the current route inventory would fail to meet this objective. Therefore, this alternative was eliminated from detailed study.

9. Designate areas, including OHV use areas and dispersed campsites.

Designating areas for OHV use and motor vehicle use of dispersed campsites was not identified as part of the purpose and need for this project. Part of the purpose and need for this project is to “provide public wheeled motor vehicle route access to dispersed recreation opportunities,” whereas the designation of areas for future dispersed camping is beyond the scope of the project. Therefore, this alternative was eliminated from detailed study.

10. Designate event only trails.

Event only trails are specific routes that are authorized for a specific use under a separate special use authorization, and are not open for public motor vehicle use, except during the event and for specific activities authorized as a part of the event. Current regulations allow for use of routes when authorized under a separate special use permit. As such, designating event only trails was not identified as part of the purpose and need for this project and is outside the scope of the project. Therefore, this alternative was eliminated from detailed study.

11. Trigger seasonal closure on and off throughout the wet season.

In the NOI released on October 26, 2005, for this project, the proposed action included a wet weather closure for motor vehicles on all NFS trails and ML-2 roads from November 1 to May 1 each year (see Proposed Action in Chapter 1). During public scoping, it was apparent that an on/off seasonal closure method, or some other method, was preferred by the riding community. This method would provide more flexibility during the wet season when conditions are dry enough to warrant motor vehicle use. The Forest did not disagree that such a method would provide the flexibility described.

The Forest set four general criteria for a forest-wide seasonal closure, outside the Rock Creek area, during the wet season – a closure that is implementable, enforceable, affordable, and consistent.

On a forest-wide scale, there are hundreds of variables that could be incorporated to develop a seasonal closure that accounts for micro-climates and other factors in specific locations across the Forest. A few examples include slope-aspect, elevation, soil type, and precipitation, as well as dozens of sub-variables within these categories. A seasonal closure for wheeled motor vehicle use will be more flexible and site-specific the more these variables are used.

In developing seasonal closures for the alternatives in this project, all of the variables described above, as well as many others, were considered. After several IDT meetings, however, it was soon realized that the more variables used, the less likely it would be that the Forest could successfully implement the closure on a forest-wide scale. On a smaller land-base, such as the Rock Creek area on the ENF, this would be much less of a problem.

An on/off seasonal closure method throughout the wet season across the Forest, for example, would require various methods of precipitation measures and soil moisture determinations in various locations, the use of limited personnel resources to close gates and post signs on hundreds of miles of roads and trails, the use of limited personnel resources to produce and distribute information to the public, and the production and signing of forest orders to close and open the routes. It would require more funding for signs, gates, supplies, personnel, and law enforcement to overcome these complexities and limitations. It would also cause there to be changing conditions on the ground, eliminating the ability to provide consistent and constant messages when communicating to the public. This would likely result in more violations of the closure.

These more flexible methods of wet weather seasonal closures have been found to be difficult even in areas significantly smaller than the ENF. Based on these factors, it was determined that this seasonal closure method would not be implementable, enforceable, affordable, or consistent.

12. Designate areas for cross-country travel for big game retrieval.

Designating areas for cross-country travel for big game retrieval was not identified as part of the purpose and need for this project and is outside the scope of the project. Therefore, this alternative was considered but eliminated from detail study.

13. Blue Ribbon Coalition Alternative R

The Blue Ribbon Coalition (BRC) submitted comments in response to scoping of the proposed action released in the Notice of Intent on October 26, 2005. In their comments, BRC expressed that they believe “an additional alternative should be created and submitted for full analysis and public input during this planning process.” BRC commented that “We do not herein attempt an exhaustive outline of this alternative, but a checklist of key concepts that our proposed alternative would include. Obviously the agency would need to exercise discretion to refine these core concepts, while adding additional decision elements.” This proposal was referred to as the “Balanced Recreation and Access Alternative (Alternative R)”

The BRC did not list any specific routes or changes to the Eldorado National Forest Transportation System (NFTS) and left it to the ENF to develop an alternative that maximizes OHV opportunities. The ENF developed Alternative B, in order to maximize motorized recreation opportunities while still meeting the purpose and need for the project. Alternative B was later modified based on public comments and attempted to provide a high level of public motorized access. While Alternatives B and Modified B do not achieve all of the goals suggested by the BRC, many of their suggestions were incorporated into these alternatives. Specifically, the BRC suggested the following:

- Designate at minimum all of the 2,830 miles of roads and trails receiving current OHV use unless the individual route(s) are causing a “considerable adverse affect.” If a considerable adverse affect is found, review for mitigation (reroute, maintenance, closure, etc.).
- It would not be feasible, nor advisable to add many unauthorized routes to the current NFTS. The alternatives considered in detail explore a reasonable range of alternatives given current and expected limitations on funding and management capability. In Chapter 3, Facilities, it is apparent that the ENF already suffers from a backlog of maintenance needs on its current NFTS and is already stretched to accomplish basic maintenance needs, even without adding more roads or trails to the NFTS. The BRC is suggesting that most of the 526 miles of inventoried unauthorized routes be added to the NFTS. It would simply not be feasible to manage and maintain this large of a NFTS. Further, the ENF is limited in time and funding available to study and analyze the environmental impacts of unauthorized

routes and prescribe needed mitigation as suggested. Considering the availability of resources for maintenance and administration, this suggestion is not feasible.

- Designate historic routes for OHV use where needed for public access from resorts and cabins.
- No “historic” routes were specifically identified for consideration. Valid existing rights of access were considered in the development of all alternatives.
- Designate historic access routes for OHV recreation use when public input demonstrates that USFS made a mistake in the current (“court ordered”) OHV travel map.
- No “historic” routes were identified for consideration or specific “mistakes” described.
- Designate all historic access routes which USFS has spent CA OHV Division (“Green Sticker Grant Funds”) funding on for OHV recreation use or where NEPA decisions approved OHV use.
- Some routes where “green sticker grant funds” were expended are included in the alternatives.
- Designate certain small areas (OHV destination areas, major ridge line fuel breaks, etc.) as open areas to better allow for active trail management and fuel management (reroutes, special event routes for enduros, etc.).
- Designating “areas” for OHV use was not identified as a need for action in this proposal. This action is limited to the current NFTS and consideration of a limited number or unauthorized routes for addition to the NFTS.
- Designate historic or trail-side day-use or overnight campsites/areas for motorized access based on site-specific analysis.
- This proposal is focused strictly on travel management and implementation of the national Travel Management regulations. Designating campsites, day use facilities, or other recreation opportunities are outside the scope of this proposal.
- Identify and designate some routes as “event only” routes to be used for permitted events.
- Event-only activities are authorized through special use permit and are subject to separate NEPA analysis that considers the scope, magnitude and environmental impact of the event. Permitted uses are outside the scope of this proposal. See paragraph ‘10’ above in this section.
- Develop and implement a rainfall-based wet weather closure plan similar to other rainfall-based closure plans on other Forests.
- Rainfall based closure plans were determined to not be implementable, enforceable, affordable, or consistent. See paragraph 11, above in this section.
- Designate zones and/or seasons in which regulated off-route travel for downed big game retrieval will be authorized, based on site-specific analysis.
- Big game retrieval is outside the scope of this proposal. See paragraph 12, above in this section.

The environmental impacts of implementing this alternative would be greater than those of Alternative A since this proposal would include additional mileage based on elements 2, 3, and 4.

This proposal does not recommend allowing cross-country travel, which is allowed in Alternative A. However, the effects analysis in Chapter 3 clearly describes the effects of this activity in the description of effects for Alternative A, so that those impacts can be considered separately by the deciding officer.

14. Alternative E with Alternative C Seasonal Closure

During the public comment period following the release of the DEIS, a number of groups and individuals recommended that Alternative E be revised to include the seasonal closure period included in Alternative C. The Alternative C seasonal closure would apply to all native surface roads and trails each year from November 1 to April 30. This alternative also allowed the Forest Supervisor to determine during the months of November, December, or April, based on soil moisture evaluations, rainfall, road or trail conditions, and weather forecasts, that if areas are suitable for use, the Forest Supervisor has the authority to open those areas for a specified amount of time. Alternative E proposes a seasonal closure period from January 1 through March 31. Commenters said they felt that since the intent of Alternative E is to provide greater protection for forest resources and increasing opportunities for non-motorized recreation activities, the more protective seasonal closure in Alternative C should be included.

The shorter seasonal closure period in Alternative E was proposed in recognition that this alternative had the smallest number of miles of roads and trails that would allow public wheeled motor vehicle use. The Interdisciplinary Team felt that with the limited number of miles of native surface roads open in this alternative, the shorter seasonal closure would provide additional motorized travel opportunities while still protecting forest resources. The ID Team also considered the fact that the Forest Supervisor still has the authority to implement Forest orders to close roads and trails if conditions warrant. Based on these factors, it was determined that it was not necessary to adjust Alternative E in this way, or to include a separate alternative.

Comparison of Alternatives

This section provides a comparison of the alternatives, based on the proposed activities in each alternative, how each alternative meets the Purpose and Need, how the alternatives respond to the significant issues, and the effects of implementing each alternative as represented by the different resources.

Comparison Table

Table 2-16 displays the proposed activities by alternative.

Table 2-16. Alternatives summary

Alternative A (No-Action)	<ul style="list-style-type: none"> • No prohibition on cross-country travel. Use of existing routes would continue. • No change to NFTS • No seasonal closure. • No regulation for over-the-snow travel with public wheeled motor vehicles. • Areas for parking/dispersed camping will continue to be used by public wheeled motor vehicles.
Alternative B	<ul style="list-style-type: none"> • Allow use on 1,120 miles of ML-2 roads and 242 miles of trails for public wheeled motor vehicles. This total includes the addition of 46 miles of unauthorized routes to the NF transportation system. • Public wheeled motor vehicle cross-country travel prohibited. • Limited non-significant Forest Plan amendments for specific route segments. • Seasonal closure on designated system trails and ML-2 roads from Jan. 1 through March 31. • Wheeled motor vehicle over-the-snow travel allowed on ML-3, -4, and -5 roads only with 12 inches of snow or more and no ground contact. Additional prohibitions on wheeled over-the-snow travel on specific route segments. • Wheeled motor vehicles limited to one vehicle length from the edge of the route surface for parking and dispersed camping.
Modified B (Preferred Alternative)	<ul style="list-style-type: none"> • Allow use on 1,002 miles of ML-2 roads and 210 miles of trails for public wheeled motor vehicles. This total includes the addition of 23 miles of unauthorized routes to the NF transportation system. • Public wheeled motor vehicle cross-country travel prohibited. • Limited non-significant Forest Plan amendments for specific route segments. • Seasonal closure on designated system trails and ML-2 roads from Jan. 1 through March 31. • Prohibitions on wheeled over-the-snow travel on specific route segments. • Wheeled motor vehicles limited to one vehicle length from the edge of the route surface for parking and dispersed camping.
Alternative C (Original Proposed Action)	<ul style="list-style-type: none"> • Allow use on 1,068 miles of ML-2 roads and 177 miles of trails for public wheeled motor vehicles. This total includes the addition of 20 miles of unauthorized routes to the NF transportation system. • Public wheeled motor vehicle cross-country travel prohibited. • Limited non-significant Forest Plan amendments for specific route segments. • Seasonal closure on designated system trails and ML-2 roads from Nov. 1 through April 30. • Wheeled motor vehicle over-the-snow travel allowed on ML-3, -4, and -5 roads only with 12 inches of snow or more and no ground contact. Additional prohibitions on wheeled over-the-snow travel on specific route segments. • Wheeled motor vehicles limited to one vehicle length from the edge of the route surface for parking and dispersed camping.

Alternative D	<ul style="list-style-type: none"> • Allow use on 847 miles of ML-2 roads and 216 miles of trails for public wheeled motor vehicles. This total includes the addition of 34 miles of unauthorized routes to the NF transportation system. • Public wheeled motor vehicle cross-country travel prohibited. • Limited non-significant Forest Plan amendments for specific route segments. • Seasonal closure on designated system trails and ML-2 roads from Dec. 1 through April 30. • Wheeled motor vehicle over-the-snow travel allowed on all designated routes with 24 inches of snow or more and no ground contact. Additional prohibitions on wheeled over-the-snow travel on specific route segments. • Wheeled motor vehicles limited to one vehicle length from the edge of the route surface for parking and dispersed camping.
Alternative E	<ul style="list-style-type: none"> • Allow use on 714 miles of ML-2 roads and 131 miles of trails for public wheeled motor vehicles. This total includes the addition of 21 miles of unauthorized routes to the NF transportation system. • Public wheeled motor vehicle cross-country travel prohibited. • No Forest Plan amendments. • Seasonal closure on designated system trails and ML-2 roads from Jan. 1 through March 31. • Wheeled motor vehicle over-the-snow travel allowed on ML-3, -4, and -5 roads only with 12 inches of snow or more and no ground contact. Additional prohibitions on wheeled over-the-snow travel on specific route segments. • Wheeled motor vehicles limited to one vehicle length from the edge of the route surface for parking and dispersed camping.

Mileage by Alternative

Table 2-17 compares the alternatives based on the number of miles open for public wheeled motor vehicle use, as measured by the classification of roads or trails. In the action alternatives, existing NFS ML-1 roads proposed to be open to public motor vehicle use would be converted to ML-2 roads or NFS trails, and those miles are included in those classifications. Similarly, the miles of unauthorized routes proposed to be open for public motor vehicle use in the action alternatives will be managed as NFS roads or trails and are shown in those classifications. Some existing ML-1 or ML-2 roads are proposed to be managed as NFS trails, and the miles are shown as such.

Table 2-17. Mileage open for public wheeled motor vehicle use by Alternative and route classification

Designation	Alternatives						
	Alternative A		Alternative B	Modified B	Alternative C	Alternative D	Alternative E
	Routes with Existing Use	Routes Open by Policy					
NFS ML-1 Road: Intermittent Road Not Physically Closed - <i>Use to Continue</i>	482	0	0	0	0	0	0
NFS ML-2 Road: Open to All Highway and Non-Highway Legal Vehicles	1,022	1,022	807	913	580	426	356
NFS ML-2 Road: Open to Highway Legal Vehicles Only	8	8	313	89	488	421	358
NFS 4WD Trail: Open to High Clearance Vehicles	10	10	60	58	57	56	14
NFS Trail: Open to ATVs and Motorcycles Only	24	24	49	37	31	47	34
NFS Trail: Open to Motorcycles Only	116	116	133	115	89	113	83
Miles of unauthorized routes where use may continue	526	0	0	0	0	0	0
Total Miles	2,188	1,180	1,362	1,212	1,245	1,063	845
NFS ML-3+ Road: Existing Mixed Use	5	5	5	5	5	5	5
NFS ML-3+ Road: Open to Highway Legal Vehicles Only	675	675	480	630	480	480	480
Total Available for Public Motorized Use	2,868	1,860	1,847	1,847	1,730	1,548	1,330
NFS ML -1 Road: Intermittent Road <i>Closed to Motor Vehicles</i>	240		558	611	581	643	723

This table differs in format from Table 2-10 in the DEIS in order to simplify the presentation, to correct errors in the DEIS, and to clearly display the decision to be made. This table displays the ML-1 roads which are physically closed by barriers for Alternative A. The miles of ML-3+ roads shown in this table do not include State or County roads, which were inadvertently included in the miles of ML-3+ roads shown in Alternative A in the DEIS. The miles of ML-3+ roads are shown separately from the other routes to emphasize they are not part of the decision to be made within this project (as explained in Chapter 1), but do contribute to the public access to the ENF.

The total number of acres where cross country motor vehicle travel may continue is shown in Table 2-18, and so displays the prohibition on cross country travel in each of the action alternatives.

Table 2-18. Acres open for cross country travel by public wheeled motor vehicle use by Alternative

Designation	Alternatives					
	Alternative A	Alternative B	Modified B	Alternative C	Alternative D	Alternative E
Acres of continued cross country travel	502,000	0	0	0	0	0

Table 2-19 compares the changes in classification of roads and unauthorized routes by showing the number of miles where use continues, the number of miles for each classification where use is not allowed, the number of miles of unauthorized routes added to the NF transportation system as roads or trails, and the number of miles of NFS ML-1 roads converted to ML-2 roads or trails where public wheeled motor vehicle use will be allowed.

Table 2-19. Changes in classification of NFS roads, NFS trails, and unauthorized routes by miles for each Alternative

Existing Classification	Proposed Classification	Alternatives					
		A	B	Mod B	C	D	E
Unauthorized Routes	NFS ML-2 Road	0	27	17	15	19	13
	NFS Trail open to High Clearance Vehicles	0	4	3	2	4	3
	NFS Trail open to ATVs and MCs	0	11	4	3	10	5
	NFS Trail open to MCs only	0	4	0	0	1	0
	Total Added to System	0	46	23	20	34	21
NFS ML-1 Road	NFS ML-2 Road	0	150	99	133	66	1
	NFS Trail open to High Clearance Vehicles	0	1	1	0	0	0
	NFS Trail open to ATVs and MCs	0	6	4	1	6	0
	NFS Trail open to MCs only	0	10	7	9	10	3
	Total Changed	0	167	125	143	82	4
	Closed to Use	240	558	603	581	641	725
NFS ML-2 Road	Highway and Non-Highway Vehicles	1,022	568	800	412	301	268
	Highway Vehicles Only	8	191	36	324	285	267
	NFS Trail open to High Clearance Vehicles	0	47	47	47	45	11
	NFS Trail open to ATVs and MCs	0	5	4	4	7	5
	NFS Trail open to MCs only	0	1	1	1	1	0
	Closed to Use	154	371	279	397	547	634
NFS Trail	NFS Trail open to High Clearance Vehicles		8	8	8	7	0
	NFS Trail open to ATVs and MCs		27	25	24	25	24
	NFS Trail open to MCs only		118	108	79	102	83

Seasonal Restrictions

Table 2-20 compares how the seasonal closure and over-the-snow travel vary between the six alternatives.

Table 2-20. Seasonal restriction variations by Alternative

Alternative	Seasonal Closure	Over-the-snow Travel
A	There is no seasonal prohibition on public wheeled motor vehicle use during wet weather periods.	There are no specific prohibitions on over-the-snow travel (OST) by public wheeled motor vehicles.
B	Instituted on all designated system trails and ML-2 roads. Designated routes would be closed each year from January 1 to March 31.	Wheeled off highway vehicle over-the-snow travel would be allowed on ML-3, -4, and -5 roads only with 12" of snow or more. Street-legal motor vehicle over-the-snow travel would be allowed on ML-3, -4 and -5 roads only, regardless of snow level.
Modified B	Instituted on all designated system trails and ML-2 roads. Designated routes would be closed each year from January 1 to March 31.	Prohibitions on over-the-snow travel by public wheeled motor vehicles on specific routes.
C	Instituted on all designated system trails and ML-2 roads. Designated routes would be closed each year from November 1 to April 30.	Wheeled off highway vehicle over-the-snow travel would be allowed on ML-3, -4, and -5 roads only with 12" of snow or more. Street-legal motor vehicle over-the-snow travel would be allowed on ML-3, -4, and -5 roads only, regardless of snow level.
D	Instituted on all designated system trails and ML-2 roads. Designated routes would be closed each year from December 1 to April 30.	Wheeled off highway vehicle over-the-snow travel would be allowed on designated ML-2 roads with 24" of snow or more. Wheeled street-legal motor vehicle over-the-snow travel would be allowed on designated ML-2 roads with 24" of snow or more, and on NFS ML-3, -4, and -5 roads, regardless of snow depth.
E	Instituted on all designated system trails and ML-2 roads. Designated routes would be closed each year from January 1 to March 31.	Wheeled off highway vehicle over-the-snow travel would be allowed on ML-3, 4, and 5 roads only with 12" of snow or more. Street-legal motor vehicle over-the-snow travel would be allowed on ML-3, -4, and -5 roads only, regardless of snow level.

Route-specific Forest Plan Amendments

Alternatives B, Modified B, C, and D include route-specific non-significant Forest Plan amendments to resolve inconsistencies with ENF LRMP standards and guidelines. Specific route segments that were found to be important to the development of an action alternative but are non-compliant with ENF LRMP standards and guidelines were identified and recommended for non-significant Forest Plan amendments. The standards and guidelines that these routes are inconsistent with relate to the use of motor vehicles within meadows. Table 2-21 displays the mileage and number of routes for which a non significant Forest Plan amendment is needed in order to designate these individual roads and trails. Most of the portions of the routes proposed for non-significant Forest Plan amendments are very short NFS road segments, commonly less than 0.2 miles in length.

Table 2-21. Mileage and number of routes included in Non-significant Forest Plan Amendments

	Alternative					
	A	B	Modified B	C	D	E
Miles of Routes included in Non-significant Forest Plan Amendments	0	6.7	4.8	4.9	6.6	0
Number of Routes included in Non-significant Forest Plan Amendments	0	33	21	24	29	0

Comparison of Alternatives: Elements of the Purpose and Need and Issues

This section provides a summary of how the alternatives respond to the purpose and need, and issues, discussed in Chapter 1 of the FEIS.

The key elements of the Purpose and Need are:

- regulate unmanaged public wheeled motor vehicle travel;
- comply with the United States District Court for the Eastern District of California final order;
- provide public wheeled motor vehicle route access to dispersed recreation opportunities;
- provide a diversity of public wheeled motor vehicle recreation opportunities;
- comply with the ENF LRMP and the National Travel Management Rule of 2005.

By maintaining the existing condition, **Alternative A**, the no action alternative, does not regulate unmanaged public wheeled motor vehicle travel or comply with the court's final order. Judge Karlton ordered the ENF to be consistent with regional guidelines for OHV route designation, but Alternative A is neither based on NEPA analysis nor does it minimize conflict between motorized and non-motorized uses. This alternative provides public wheeled motor vehicle route access to dispersed recreation opportunities and provides a diversity of public wheeled motor vehicle recreation opportunities with 2,868 miles of roads and trails open for public motorized vehicle use. In addition, the abundance of mileage in Alternative A provides routes that create loops and thru routes. This alternative does not prohibit cross-country travel and unauthorized route proliferation would most likely continue, both in violation of the National Travel Management Rule.

Alternatives B, Modified B, C, D, and E regulate unmanaged travel, comply with the court order, provide access to dispersed recreation opportunities, provide diversity of recreation opportunities, provide loops and thru routes to enhance recreational opportunities, and comply with the National Travel Management Rule. Each of the Action Alternatives was developed in consideration of the criteria for designating roads and trails established in the national Travel Management regulations (36 CFR 212.55). The Action Alternatives reduce impacts to natural and cultural resources in comparison to the No Action alternative by restricting cross country travel and by allowing public wheeled motor vehicle use on routes appropriate for that use; provides for public safety by specifying where mixed use of highway and non-highway legal vehicles may travel and by providing public maps and information to inform Forest visitors of the types of vehicles that may be using the roads and trails; provides for a broad spectrum of recreation opportunities and access

needs; reduces conflicts among uses of the Forest by specifying where different classes of motor vehicles are allowed to travel and by providing public maps and other information so that Forest visitors will be informed of the types of uses occurring on the National Forest; and are consistent with the need for maintenance and administration of the roads and trails, including the availability of resources such as funding, staff, grants, volunteers, etc. Each of these alternatives recognizes that owners of private land within or adjacent to NFS lands shall be permitted ingress and egress over those NFS lands and use of existing NFS roads and trails to reach their homes and to utilize their property, consistent with rules and regulations governing the protection and administration of the lands and the roads or trails to be used (36 CFR 212.6(b)). None of the Action Alternatives propose to allow motor vehicle use within the congressionally designated Mokelumne Wilderness or the Desolation Wilderness.

In **Alternative B**, motorized vehicle use is authorized on 1,847 miles of NFS roads and trails, the highest of the five action alternatives, along with Modified B. Alternative B was designed to maximize the diversity of public wheeled motor vehicle recreation opportunities and provide access to dispersed recreation opportunities by allowing use on many existing NFS native surface roads, along with a number of unauthorized routes. This will enhance access to routes that create loops and thru routes more so than in Alternatives C through E. The three month seasonal closure on NFS ML-2 roads and trails negatively affects public wheeled motor vehicle opportunities and access to dispersed recreation for part of the year, yet the closure from January 1 to March 31 is the shortest seasonal closure proposed in the action alternatives.

Alternative B was modified to provide a balanced response to public comments received on the DEIS. **Modified B** provides a balance a high level of motorized recreation opportunities and access across the Forest, while still complying with ENF LRMP standards and guidelines. This alternative also reduces or minimizes the environmental impacts to certain resources and provides quiet recreation opportunities. In particular, this alternative provides greater access for all classes of vehicles, displays the rationale for eliminating use on ML-2 routes, minimizes impacts to meadows, reduces impacts to stream courses and riparian habitat and provides for additional opportunities for quiet recreation activities. In Modified B, motorized vehicle use is authorized on 1,847 miles of NFS roads and trails, the highest of the five action alternatives, along with Alternative B. Modified B provides access to dispersed recreation opportunities by allowing use on many existing NFS native surface roads, along with a number of previously unauthorized routes. This alternative will also allow access to routes that create loops and thru routes more so than in Alternatives C through E. The three month seasonal closure on NFS ML-2 roads and trails restricts public wheeled motor vehicle opportunities and access to dispersed recreation for part of the year, yet the closure from January 1 to March 31 is the shortest seasonal closure proposed in the action alternatives.

Alternative C allows public wheeled motorized vehicle use on 1,730 miles of existing NFS native surface roads. A small number of unauthorized routes that provide connections to NFS routes or dispersed recreation sites were added to Alternative C. This alternative was designed to balance maximum public wheeled motor vehicle use with implementation of the ENF LRMP, by minimally directing OHV use onto routes where there is available mileage and connections to other routes. Access to dispersed recreation and routes that create loops and thru routes is decreased, compared with Alternatives A and B. The seasonal closure on NFS ML-2 roads and trails proposed in Alternative C runs from November 1 to April 30, the longest closure proposed in Alternatives B through E. The Forest Supervisor has the authority to open portions of the forest to wheeled motor vehicles during November, December, and April, yet the three month closure will still have an adverse impact on wheeled motor vehicle recreation and access to dispersed camping and recreation.

Alternative D, with 1,548 miles available for wheeled motor vehicle use, was designed to take into account past patterns of OHV use on the Forest as well as other public motor vehicle use. It allows for a higher density of roads and trails open for public wheeled OHV and highway-licensed motor vehicle use in popular areas that have had historic use. When possible, routes creating connections between these popular use areas were included so that OHV and highway-licensed motor vehicles could ride from one popular area to another.

Conversely, outside of these areas, wheeled motor vehicle route density was reduced. The focus outside of the popular areas is to provide access for scenic driving routes, access to dispersed recreation and access to areas of interest. The four month seasonal closure on NFS ML-2 roads and trails, from December 1 to April 30, negatively impacts wheeled motor vehicle recreation during that time. The Forest Supervisor has the authority to open portions of the forest during December and April, creating the opportunity to reduce the seasonal closure's effect on wheeled motor vehicle recreation.

In **Alternative E**, the focus is to provide greater protection for forest resources and increasing opportunities for non-motorized recreation. The 1,330 miles open for wheeled motor vehicle use was based on the routes proposed in Alternative D, then motorized use was eliminated from inventoried roadless areas (IRAs) and the Caples Creek Proposed Wilderness, as well as routes with greater potential for erosion, spreading noxious weeds, damaging sensitive plants, or threatening wildlife. NFS ML-1 roads were generally not included in Alternative E. As a result Alternative E provides the least mileage open for wheeled motor vehicle use, adversely impacting users as well as access to dispersed recreation areas. Conversely, the January 1 to March 31 seasonal closure on NFS ML2 roads and trails maximizes the time that wheeled motorized recreationists have access in Alternative E.

As described in Chapter 1, the significant issues were identified based on public input received. The significant issues were grouped into two Significant Issue Statements, and indicator measures were identified for each significant issue. Table 2-22 compares the indicator measures for each significant issue by the six alternatives.

Table 2-22. Comparison of Alternatives by Significant Issues and Indicator Measures

General Issue	Measure	Alternative A	Alternative B	Modified B	Alternative C	Alternative D	Alternative E
Significant Issue Statement 1: A reduction in motorized routes, prohibition on cross-country travel, and seasonal closure during wet weather periods, will adversely affect forest visitors and adjacent landowners.							
Access for visitors with Disabilities	Indicator Measure 1: Miles of road and trail allowing public wheeled motor vehicle use (including ML-3 to ML-5 roads).	2,868	1,847	1,847	1,730	1,548	1,330
	Indicator Measure 2: Number of dispersed sites accessed within 50' of authorized routes.	All proposed routes: 180	All proposed routes: 120	All proposed routes: 102	All proposed routes: 108	All proposed routes: 100	All proposed routes: 18
Routes adjoining other national forests	Indicator Measure 1: Number of access points adjacent to NFs.	26	14	13	14	13	11
Displacement of motorized use to adjacent lands	Indicator Measure 1: Miles of road and trail allowing public wheeled motor vehicle use, not including ML-3 to ML-5 roads.	2,188	1,362	1,212	1,245	1,063	845
Limits on dispersed camping opportunities	Indicator Measure 1: Number of dispersed sites accessed.	974	711	779	682	662	584
Limits on OHV recreation opportunities	Indicator Measure 1: Miles of road and trail allowing OHV use by class.	Motorcycle: 2,180 ATV: 1,969 4WD: 1,945	Motorcycle: 1,049 ATV: 916 4WD: 867	Motorcycle: 1,123 ATV: 1,009 4WD: 971	Motorcycle: 757 ATV: 668 4WD: 637	Motorcycle: 642 ATV: 529 4WD: 482	Motorcycle: 487 ATV: 404 4WD: 370

	Indicator Measure 2: Miles of road and trail allowing street-legal motor vehicle use by class (not including Maintenance Level 3 to 5 roads).	Dual Sport MC: 2,188 High Clearance: 1,953 Passenger Car: 1,030	Dual Sport MC: 1,362 High Clearance: 1,180 Passenger Car: 1,120	Dual Sport MC: 1,212 High Clearance: 1,060 Passenger Car: 728	Dual Sport MC: 1,245 High Clearance: 1,125 Passenger Car: 974	Dual Sport MC: 1,063 High Clearance: 903 Passenger Car: 847	Dual Sport MC: 845 High Clearance: 728 Passenger Car: 714
	Indicator Measure 3: Miles of 4WD trail.	10	60	58	57	56	14
	Indicator Measure 4: Miles of ATV trail.	24	49	37	31	47	34
	Indicator Measure 5: Miles of motorcycle only trail.	116	133	115	89	113	83
Limits on parking for recreational opportunities	Indicator Measure 1: Distance off open route for parking.	No specific prohibitions on the use of public wheeled motor vehicles for parking	Parking a motor vehicle so that all parts of the vehicle are within one vehicle length from the edge of the route surface when it is safe to do so and without causing damage to NFS resources or facilities (FSM 7716.1 (Proposed)) shall be included with the designations.				
Seasonal closure effect on wheeled motor vehicle recreation opportunities	Indicator Measure 1: Length of seasonal closure.	None	January 1 to March 31	January 1 to March 31	November 1 to April 30	December 1 to April 30	January 1 to March 31
	Indicator Measure 2: Miles of routes closed by seasonal closure.	0	1,362	1,212	1,245	1,063	845

Significant Issue Statement 2: The proposed level of motorized use will adversely affect forest resources, adjacent landowners, and non-motorized recreation opportunities.							
Resource damage and route proliferation from dead-end routes	Indicator Measures: Number of Dead end routes allowing for public wheeled motor vehicle use	1,692	466	455	405	228	173
Inability to maintain and enforce designated route	Indicator Measures: See cost analysis in the Facilities and Law Enforcement sections of Chapter 3						

Impacts to non-motorized recreation opportunities	Indicator Measure 1: Miles of ML-1 roads open for motorized use.	482	167	111	144	82	4
	Indicator Measure 2: Miles of current NFS non-motorized trails open for motorized use.	0	10.3	1.7	0	1.7	1.2
Impacts on private-property	Indicator Measure 1: Miles of road and trail allowing public motor vehicle use across private property.	468	333	348	325	280	285
Impacts from designated public motor vehicle use on ML-1 roads	Indicator Measure 1: Miles of ML-1 roads allowing public motor vehicle use.	482	167	111	144	82	4
Impacts to forest resources	Indicator Measures: See each analysis section in Chapter 3.						
Increased wildland fire risks	Indicator Measure 1: Miles of roads and trails allowing public motor vehicle use.	2,868	1,847	1,847	1,730	1,548	1,330
Impacts to grazing allotment capabilities and livestock	Indicator Measure 1: Density of roads and trails allowing public motor vehicle use within active grazing allotments (miles per square mile).	3.36	2.35	2.34	2.22	1.99	1.71

Comparison of Alternatives: Environmental Impacts by Resource Area

Direct, indirect, and cumulative effects were analyzed for each resource area potentially affected by the project. The following is a summary of the effects for these resource areas. This summary is not meant to capture all of the effects analyses for different resources, but does present a comparison of the environmental impacts in order to sharply define the issues and provide a basis for choice among the options by the Forest Supervisor. The complete description of effects to resources resulting from implementation of each of the alternatives is provided in Chapter 3.

Air Quality

The direct effects of fugitive dust are reduced visibility on and adjacent to roads and increased levels of small diameter particulates of concern for human health reasons (specifically those less than 25 microns and 10 microns in diameter). The direct effects of fugitive dust produced by public wheeled motor vehicles operating on open routes and cross-country are directly related to the level of use the project area (Forest) receives. Indirect effects are limited to air quality degradation from smaller diameter particulates. Alternative A would not produce fugitive dust beyond that produced by routine forest management or user activities. Under the action alternatives, with fewer miles of roads and trails open for motorized use as compared to Alternative A, the effects are the same or less than those described for Alternative A.

Direct and indirect effects of vehicle emissions on air quality under Alternative A do not result in measurable variations from current conditions, since emissions from public wheeled motor vehicles are spread over much of the project area with generally good emission dispersion. Recreational travel within the project area will not cause or significantly contribute to violations of National Ambient Air Quality standards or contribute to visibility impairment beyond the existing condition. The effects from vehicle emissions under the various action alternatives are the same or less than those described for Alternative A since there are fewer miles of roads and trails open for motorized use, but vehicle use is not projected to decrease in the action alternatives.

Geology

Geologic hazards will continue under normal conditions with or without the presence of roads and trails. Large landslide stability will be influenced by the ground water rise with little or no influence from road and trail management. The modification of road or trail prisms, as well as realignment of these corridors, has the potential to influence shallow landslides. However, even these are few, and the GIS analysis indicates an effect on less than 5% of the area for all alternatives, even under the worst-case conditions.

Soil Resources

Alternative A has the greatest potential to adversely affect soils. It has no wet season closure, allows use on the most routes susceptible to gully erosion and the largest number of ML-1 and ML-2 roads in poor condition, has the most miles open for use, has no conversion of ML-1 to ML-2 roads, and designates no unauthorized routes.

Alternatives C and D have the lowest potential for adverse impacts to soils because their six and five month seasonal closures, respectively, provide the most protection during the rainy season, and because designation of routes on soils susceptible to gully erosion and on roads in poor condition is moderate to low. The number of miles of ML-1 roads converted to ML-2 roads is low (66) for Alternative D, and moderate (133) for C.

Alternatives B, E, and Modified B have a slightly higher potential for adverse impacts to soils than Alternatives C and D. Seasonal closures provide less protection; routes on soils susceptible to gully erosion is moderately high for Alternative B and Modified B (but moderately low for E); designation of roads in poor condition is moderate for Alternative B and Modified B, and slightly less for Alternative E. The number of miles of ML-1 roads converted to ML-2 roads is moderate for Modified B and slightly higher for Alternative B. Alternative E has almost no conversion of ML-1 to ML-2 roads.

Hydrology and Aquatic Habitat

Alternative A (no action) does not benefit water quality, protect beneficial uses of water, and meet all of the Riparian Conservation Objectives (RCOs) contained in the Sierra Nevada Forest Plan Amendment (SNFPA) of 2004. All of the action alternatives (Alternatives B, Modified B, C, D, and E) would benefit water quality and protect beneficial uses of water to some degree; the greatest benefit would occur under Alternative E, followed by Modified B. In addition, Alternatives E and Modified B are expected to meet all of the RCOs. These conclusions are based on the consideration of all of the following: 1) the number and miles of streams at a high risk of being adversely affected by unpaved roads and trails, 2) the miles of routes through meadows, 3) the length of time period of seasonal route closures, and 4) the restriction of motorized public vehicle use to designated routes (prohibition of cross-country travel).

The four stream systems that are likely to show the greatest benefit in terms of water quality and aquatic habitat as a result of the action alternatives are the Silver Fork American River, Alder Creek, Camp Creek, and the North Fork Cosumnes River. Alternative E would likely provide the greatest benefit, followed by Modified B.

The risk of cumulative effects at the 7th field watershed scale is not affected by any of the alternatives in this EIS. However, all of the action alternatives may slightly reduce the risk of cumulative effects to aquatic habitat in four stream systems after re-vegetation of closed roads (more than 20 years in the future). Those streams systems are the Silver Fork American River, Alder Creek, Camp Creek, and North Fork Cosumnes River.

Range

Impacts to range resources are associated with the density of the road and trail system and the human uses associated with the OHV opportunities in these areas. Road and trail use, and associated dispersed recreation activities, lead to spooking and stress to livestock along with shifting use patterns. All of the Action Alternatives reduce motorized routes from Alternative A, which would have a beneficial effect on range resources and grazing capabilities.

Alternative A has the highest potential for gates to be left open or damaged, allowing livestock to move off the allotment onto adjacent range allotments, other national forest areas too wet for grazing or highway corridors. Alternatives Modified B, B, C, D, and E result in progressively lower numbers of motorized routes that cross allotment boundaries and the corresponding number of gates. The lowest impact to the grazing resource would occur under Alternative E.

The available primary forage in meadows within grazing allotments is reduced by the area comprised of roadbeds. Alternative A has the highest density of routes through meadows in active and vacant allotments. Alternatives B, D, C, Modified B and E result in progressively lower miles of routes in meadows on active allotments.

Endangered, Threatened, and Sensitive Plant Species

Implementation of Alternative A would not improve conditions for sensitive plants and their habitats because of continued public wheeled motor vehicle use on the many existing routes.

Impacts to sensitive plant occurrences and habitat from cross-country travel have occurred in the past, are currently taking place, and are expected to increase in the foreseeable future due to the widespread increase in this recreational activity. Without factoring in cross-country travel, Alternative A has the greatest impact on sensitive plant species and habitats, potentially impacting 30 percent of sensitive plant occurrences documented on NFS lands within the ENF, meadow habitat along 14.9 miles of trail, ML-1, and ML-2 routes, and lava cap habitat along 23 native surface routes (12 routes with documented sensitive plant occurrences).

A dramatic decrease in potential impacts to sensitive plants occurs when comparing the Action Alternatives to Alternative A. By prohibiting cross-country travel off of designated routes, the action alternatives will provide the greatest protection to sensitive plant occurrences and their habitat. The seasonal closure included in each of the action alternatives will reduce off-road impacts to sensitive plants and habitats located along these routes during the season when soils are most vulnerable to impacts from rutting, compaction and erosion.

When compared to the other Alternatives, Alternative E would have the least impact to sensitive plant communities. The potential for direct and indirect effects would be reduced to approximately 10 percent of known ENF sensitive plant occurrences. Alternative E also provides the greatest protection of meadow habitat since no trail, ML-1, or ML-2 routes are designated through meadows and of lava cap habitat since the fewest native surface routes (13 routes, 3 with sensitive plants) are designated through lava cap in this alternative.

Modified B provides the next highest level of protection for meadow habitat (4.1 miles of trail, ML-1, and ML-2 routes within meadows) followed by Alternatives C, D, and B in that order. Modified B and Alternative C provide the second highest level of protection for lava cap (16 native surface routes in lava cap, 5 with sensitive plants), almost tying with Alternatives D and B. For overall potential direct and indirect effects to sensitive plant occurrences, Modified B is similar to Alternatives B, C and D.

Alternative E has the fewest miles of road infested by invasive species, a potential indirect effect to native and sensitive plants. Alternatives B, C, and D rank next for the fewest miles of infested roads while Modified B has slightly more miles of infested road.

Noxious Weeds Risk Assessment

Noxious weeds are plants that are generally nonnative and aggressive, difficult to manage, poisonous, toxic, parasitic, or a carrier or host of serious insects or disease. Road shoulders are particularly susceptible to weed invasion, and is the site of many of the noxious weed occurrences on the ENF. Within the ENF a total of documented road weed infestations is 9.6 miles, with 5.1 miles occurring along ML-1, -2, and native surface -3 roads. Alternative A has the greatest number of miles of infested roadside, with 5.1 miles of infested roadside. Alternatives B, Modified B, C, D, and E have fewer miles of infested roadside with Alternatives B, C, and D having virtually the same number of infested miles. Modified B has the most miles of weeded roadside of the Action Alternatives and Alternative E has the fewest miles of weeded roadside. Infested mileage differs by 0.8 mile from Alternative E to Modified B.

Terrestrial Wildlife Species and Habitat

Wildlife species have been categorized into five groups based upon a combination of their biology and interactions with road- and motorized trail-associated factors. These groups are (1) old forest associated species; (2) wide-ranging carnivores; (3) ungulates; (4) riparian- associated species; and (5) cavity dependent species.

Old Forest Associated Species: Effects of project Alternatives contribute to past reductions in the quantity and quality of old forest habitat on the Eldorado National Forest. In particular, the

density of routes open to motorized use in the alternatives influences old forest habitat quality through fragmentation of habitat patches, increased amounts of edge and increased potential for disturbance and displacement of species. Higher amounts of edge habitat has been shown to increase nest predation rates and to result in lower productivity and survival for a number of interior forest birds. Forest fragmentation is suspected of altering habitat suitability for fisher and marten. Old forest habitat connectivity, as measured by the average size of undissected old forest habitat patches, declines by about 55 percent in Alternative A and to an incrementally lesser extent in Alternatives B and Modified B, C, D, and E.

Alternative A influences a substantial portion of the habitat available to old forest-associated species. More than a quarter of key spotted owl habitat (the PAC land allocation) occurs within 60 meters of an open motorized route, and over 60 percent of marten habitat is within a zone where marten activity may decline in response to motorized routes. The effect of project alternatives upon old forest habitats and species declines incrementally under the remaining alternatives, with Alternatives B and Modified B and Alternatives C and D being very similar in the degree to which they influence species habitats. Alternative E influences the least amount of old forest habitat with motorized routes and for marten is likely to provide greater habitat effectiveness by eliminating open routes within meadows and in high elevation areas identified as IRAs. Alternative E is least likely to result in adverse cumulative effects to old forest habitat and species, followed by Alternatives D, C or Modified B, B and A.

Wide-Ranging Carnivores: Areas with low human presence are likely to provide the most effective habitats for wide-ranging carnivores such as fisher, wolverines, Sierra Nevada red foxes, black bears, and mountain lions. Areas with concentrated human presence may be lost as habitat (or become population sinks) for these species. Given these factors, the direct and indirect effects of project alternatives combined with additional human activities may result in adverse cumulative effects to wide-ranging carnivores.

In Alternative A, nine percent of the project area has a route density of zero (based upon a 0.9 km moving window area); this increases to 18 percent of the project area in Alternative E. In Alternative A, more than 30 percent of black bear cover and denning habitat occurs within a zone where black bear are likely to be influenced by motorized routes. Adverse effects are greatest under Alternative A, where route densities exceed four miles per square mile over 40 percent of the project area, and decrease in the Action Alternatives, where route densities exceed four mile per square mile on 12 to 20 percent of the project area (Alternatives E and B or Modified B, respectively). Of the action alternatives, Alternative E contributes the most toward improved conditions for wide ranging carnivores and Alternatives B and Modified B contribute the least based upon route densities. Since high elevation habitat connectivity and function is improved by not designating routes in IRAs and providing undisturbed meadow habitats, Alternative E, in particular, improves conditions for the wolverine and Sierra Nevada red fox.

Ungulates: Where disturbance from motorized road or trail use causes deer to avoid areas within preferred habitats, animals may be forced into less preferred or lower quality habitats. Such shifts, particularly if repeated, can result in adverse impacts to the energy balance of individual deer and ultimately can decrease population productivity, especially on winter ranges. Variables such as the amount and frequency of traffic, and the spatial distribution of roads in relation to deer use, influence the degree of negative effects that roads have on deer use in forested habitats.

Road densities in Alternative A exceed 2.5 miles per square mile and do not meet ENF LRMP Standard and Guideline limits for road densities for the Pacific and Grizzly Flat deer winter ranges. Summer range and fawning habitats are also substantially influenced by roads in this alternative. A substantial portion (greater than 50%) of deer critical winter range and critical summer range/fawning habitats are subject to the influence of motorized routes in Alternative A.

The density of routes in critical winter ranges, critical fawning habitats, and meadows in Alternative A, may adversely affect deer populations and contribute to other factors that are hindering achievement of deer herd population goals.

Alternatives B, Modified B, C, D and E each comply with ENF LRMP Standards and Guideline limits for road and trail densities. These alternatives are progressively less likely to result in adverse effects since route densities in important deer habitats are lower. Nonetheless, a substantial portion (greater than 50%) of Grizzly Flat deer herd's critical winter range and critical summer range/fawning habitats are subject to the influence of motorized routes in Alternatives B and Modified B. Alternative E is least likely to hinder reaching herd population goals since it has the lowest route densities and does not designate motorized routes within meadow habitats which often serve as key fawning areas and population centers during the summer months (CDFG 1998).

Riparian Associated Species: Riparian and meadow areas are particularly important habitats for birds and other wildlife in the Sierra Nevada (RHJV 2004, Graber 1996). The limited geographic extent of meadows and riparian habitats increases their importance and the implications of habitat loss or degradation to species. In most watersheds the influence of open routes within RCAs declines substantially between Alternative A and Alternative E, with a relative reduction by half. The exceptions are the RCAs in the Upper Cosumnes River watershed and the North Fork Cosumnes watershed, which remain substantially influenced by routes even in Alternative E (22 percent and 15 percent of the area within these RCAs occurs within 60 meters of a route). Alternatives B, Modified B, C, and D influence progressively less habitat in RCAs, falling between Alternatives A and E in their degree of influence. For these reasons, adverse effects associated with habitat alteration, riparian habitat fragmentation, breeding disturbance, edge effects and increased predation, particularly upon the many migratory birds using these habitats, are expected to be greatest under Alternative A and decrease incrementally (though to a lesser degree) between Alternatives B, Modified B, C, D and E.

The number of meadows affected by motorized routes declines progressively between Alternatives A, B, D, C and Modified B. Alternative E does not open routes within meadows and therefore contributes the most toward improved conditions for meadow-associated species, such as the willow flycatcher and great gray owl.

Cavity Dependent Species: Road and motorized trail-associated factors likely to affect these species are: edge effects and the reduction of snags and down logs. Snag and down log reduction occurs as an indirect effect of managing roads or trails for public use and from fuelwood collection within a zone of about 60 meters from a road's edge.

Alternative A results in 17 percent of cavity dependent species habitat occurring within a motorized route's zone of influence. Alternatives B and Modified B, C, D, and E result in progressively lower proportions habitat that would be influenced by motorized routes, but all have a relatively low level of influence on the total amount of this type of habitat.

Aquatic Wildlife

Alternative A would be expected to have the greatest potential to adversely affect aquatic habitats, aquatic-species and aquatic-dependent species because Alternative A proposes the greatest overall length of motorized route, the greatest amount of continued use on of unauthorized routes, and has the most route length within Riparian Conservation Areas.

The Action Alternatives have less potential to adversely affect aquatic habitats and aquatic species. Of the action alternatives, Alternative B would be expected to have the greatest potential to adversely affect aquatic habitats, aquatic species and aquatic-dependent species because this alternative proposes to add the greatest number of miles of unauthorized routes, converts the

greatest length of NFS non-motorized trails for motorized use, and would allow motor vehicle use on the greatest length of ML 2 roads within meadows.

The greatest reduction in risk of adverse aquatic habitat alteration would occur with implementation of Modified B followed by Alternative E, based on the length of motorized route within Riparian Conservation Areas of perennial streams, intermittent streams, and meadows⁴.

Facilities

The estimated annual costs of maintaining roads allowing for public wheeled motor vehicle use (not including ML-3 through ML-5 roads) would range from a high of \$889,000 for Alternative B to a low of \$758,000 for Alternative E. Alternative C has the second highest cost at \$870,000, followed by Modified B (\$798,000), Alternative D (\$796,000) and Alternative A (\$793,000). All of the Action Alternatives except Alternative E exceed cost for maintenance in Alternative A due to the addition of unauthorized routes to the transportation system and increased maintenance costs for ML-1 roads that will allow public motor vehicle use. The funds available for annual road maintenance fall short of the estimated costs calculated for any of the alternatives. To meet the shortfall and to better provide for needed maintenance, the ENF will reduce road maintenance levels in the future, concentrating on the ML 3-5 roads since these are so much more expensive to maintain, work with cooperators and hydroelectric licensees to assure they pay their fair share of the maintenance on the roads that they use, look for opportunities to apply for grant funding and build on the public's interest in volunteering.

The estimated costs of maintaining NFS motorized trails proposed for public motor vehicle use on a three year cycle ranges from \$104,000 for Alternative B to \$56,000 for Alternative E. Modified B has an estimated maintenance cost of \$90,000, the estimated annual maintenance for Alternatives A, C and D are \$64,000, \$76,000 and \$93,000 respectively. Similar to road maintenance the funds for trail maintenance are insufficient to maintain the NFS motorized trails open for public use in any alternative. However, there are various opportunities to accomplish the needed work through additional grants and volunteer work.

Mixed Use has been occurring on ML 2 roads on the ENF for a number of years. A review of the available accident information was done as part of the process of preparing this EIS, and no unusual risks or accidents attributed to mixed use were identified on the ML 2 routes that are being proposed in the Action Alternatives. A Mixed Use analysis, using the engineering judgment method, has been prepared for the ML 2 roads that are proposed for Mixed Use designation under Modified Alternative B, including the ML 1 roads and unauthorized routes that will be managed as ML 2 roads open to motor vehicle use. The Mixed Use analysis concluded that allowing continued mixed use on the ML-2 roads and roads to be added to the transportation system as ML-2 roads will not present an increased risk to public safety.

Mineral Resources

Miners, prospectors, and owners of unpatented mining claims have a statutory right of reasonable access under the mining laws. Surface uses under the mining laws, including motor vehicle access to and across NFS lands that are open to mineral entry are regulated under the provisions of the FS regulations at 36 CFR 228 Subpart A. Alternative A, with the highest number of miles of roads and trails open for public wheeled motor vehicle use would provide the greatest opportunity for prospecting and mineral exploration, which may lead to a higher likelihood of discovery of a significant mineral resource. The opportunity for prospecting and exploration decreases from Alternative A to Alternative E. Modified B is similar to Alternative B in effects. Seasonal

⁴ Excludes Riparian Conservation Areas of ephemeral streams.

closures will further reduce the opportunities for mineral prospecting, but to a lesser extent than restrictions to general access. In addition, there is a greater opportunity for prospecting and exploration in Alternative A since cross-country travel is not prohibited for public wheeled motor vehicles. The Action Alternatives (B-E, including Modified B) prohibit cross-country travel.

Special Uses

The Travel Management regulations (36 CFR 212) recognize that motor vehicle use may be authorized as part of a special use authorization, and as such, the permit holder may use routes that are otherwise not open for general public use. Therefore, the designation of motor vehicle routes for public use will not have any direct effects on these uses or activities. However, where these permit holders are using existing roads or trails, there may be an indirect effect, in that permit holders may have an increased responsibility for maintenance or protection of those roads or trails not otherwise open to the general public.

Adjacent Land Ownership

In Alternative A, the existing condition would continue, including: public wheeled motor vehicle use of routes across private property without a documented public right-of-way and their associated conflicts (e.g. trespass, vandalism, littering, noise, and dust); and use of routes by OHVs within ½ mile of privately owned property with existing residences and their associated conflicts (e.g. noise, dust, and route proliferation). Amongst the various action alternatives, public wheeled motor vehicle use would generally not be allowed on roads or trails across private property without a documented public right-of-way. In addition, the use of only highway licensed motor vehicles is allowed on specific ML-2 roads or NFS motorized trails within ½ mile of privately owned property with an existing residence unless that road or trail is critical to the design of the different action alternative, such as routes that serve as major connection points into the Forest, that create loop routes for OHV opportunities, that access a dispersed camping site, or that access unique features on the Forest. These routes should have limited impacts associated with having public wheeled motor vehicle use near privately owned property with existing residences and would allow quality motorized recreation opportunities to continue.

Inventoried Roadless Areas

Alternative A will have the greatest overall adverse impact to the IRAs on the Forest from the continued use of unauthorized motorized routes, particularly within Caples Creek, Dardanelles, Pyramid and Tragedy-Elephant's Back IRA. This alternative has the greatest potential for impacts to roadless characteristics, including impacts to water quality, continued fragmentation of mature forest habitat, and the potential for the spread of noxious weeds. This alternative would have the greatest opportunities for semi-primitive motorized recreation which is one of the roadless characteristics, and would provide the most access for dispersed camping and other associated recreation. However, conflicts between motorized and non-motorized recreationists would continue due to vehicle noise and presence, providing the least opportunities for undisturbed primitive (non-motorized) recreation.

The impacts associated with Alternatives B, Modified B, C, and D, are similar in that the miles of routes that are proposed for future motor vehicle use are similar but reduced from Alternative A. Alternative E proposes to eliminate all motor vehicle routes within any of the IRAs. This would have the greatest positive effect on the protection of the roadless characteristics, would reduce the fragmentation of mature forest habitat, would provide for semiprimitive nonmotorized recreation opportunities, but would have the greatest loss in semiprimitive motorized recreation opportunities.

Wild and Scenic Rivers

There are no designated Wild and Scenic Rivers on the ENF. A portion of the Rubicon River has been recommended for Wild and Scenic River designation through the ENF LRMP (one segment is classified as Wild and two segments are classified as Scenic), and a recommendation was made for designation of a segment of the Mokelumne River (classified as Recreation). There are several other river segments that have been found to be eligible for Wild and Scenic River designation. Alternative A would continue to allow motorized use on 1.5 miles of road within the portion of Rubicon River that is recommended for Wild classification, and would allow motorized use on 5.5 miles of trails adjacent to and across Caples Creek, which has been found eligible for Wild classification. The continued motorcycle use adjacent to and across Caples Creek has the potential to affect habitat capability for trout and could affect the natural reproduction of trout, thereby adversely affecting the fisheries resource, which is one of the Outstandingly Remarkable Values for this stream.

Alternative B would allow motorcycle use on 2.5 miles of trail adjacent to Caples Creek, but eliminates use on the trails crossing Caples Creek. The continued motorcycle use adjacent to Caples Creek has the potential to adversely effect the fisheries resource (one of the Outstandingly Remarkable Values for this stream), but to a lesser extent than Alternative A. The other alternatives do not allow motor vehicle use within the segments eligible or recommended for Wild Classification, and no adverse effects are anticipated to the Outstandingly Remarkable Values for the remaining reaches eligible or recommended for W&SR designation.

Wilderness

None of the alternatives, including the No Action Alternative propose to allow motor vehicle use within the congressionally designated Mokelumne Wilderness or the Desolation Wilderness. Alternatives A, and B would allow motorcycle use of several trails within the recommended Caples Creek Wilderness Area, consistent with the Record of Decision for the ENF LRMP. This area was recommended for Wilderness designation in the ENF LRMP, however, Congress has not yet designated this area as wilderness. Alternative A would continue to allow motorcycle use on 12 miles of trails within the Caples Creek Recommended Wilderness Area, and Alternative B proposes to allow motorcycle use on 7.3 miles of trails in this area. The other action alternatives do not propose to allow any motor vehicle use on trails within the Caples Creek Recommended Wilderness area. Motorcycle use on these trails will continue to degrade some of the trails within this area unless they are redesigned and reconstructed to accommodate this use, and will continue to degrade the wilderness character to a limited degree. The impacts to these trails, and adjacent resource damage, include riparian sedimentation, stream bank damage at trail crossings, localized damage to meadow habitat, and vegetation loss due to trail widening. Use of these trails by equestrians and hikers also contributes to the resource damage and will limit the benefits from restricting motorcycle use on these trails. Continued cross-country travel within Alternative A will further impact the wilderness character adjacent to the motorized trails.

Noise from motor vehicles operating outside of the wilderness affects solitude opportunities within wilderness areas. Motor vehicles operating on gravel and native surfaced roads also have the potential to create fugitive dust and negatively affect air quality within wilderness areas. Alternative A has the greatest number of miles of native surface roads and trails within one mile of the wilderness boundary, with an associated higher potential for reduced opportunities for solitude and reduced air quality locally. Alternative E has the least number of miles of native surface roads and trails, with an associated lesser potential for reduced opportunities for solitude and reduced air quality locally. Alternatives B, Modified B, C, and D, respectively, have fewer miles than Alternative A.

Socioeconomic Environment and Environmental Justice

It is anticipated that levels of use would be relatively static under all alternatives, although the use patterns may change. The ENF offers a variety of recreation opportunities and visitor use on the Forest is already distributed over a number of different recreation activities. The majority of Forest visitors is from the local area and surrounding counties, and will continue to use the Forest under each of the action alternatives. At some point, some users may no longer attain the experience they desire and may seek other areas off-forest, potentially impacting economies in the local area. The point at which this would occur is speculative. Information available regarding per-trip expenditures indicates that revenue generated from recreation visits to the ENF may be significant for individual businesses, but is only a small percentage of the overall local economy.

The seasonal closure associated with each of the Action Alternatives is likely to have some impact to the local economy, but it is nearly immeasurable in comparison to the overall local economy. The total change in use during the seasonal closure and the change in spending patterns is speculative, since surfaced roads will still be open to use, snow covers many routes making them impassable for much of the seasonal closure period, and the amount of use on native surface roads during this period is relatively small in relation to the total use on surfaced and native roads. The seasonal closure would likely impact gas stations, convenience stores, and other retail stores in local communities outside of the Rock Creek area.

None of the alternatives show any identifiable effects or issues specific to any minority or low-income population or community. Changes in road and trail management would have the same effect on all groups of people including minorities and different cultures. Alternatives with fewer miles of roads and trails open for public wheeled motor vehicle use will provide fewer opportunities for the general public, including visitors with disabilities, access to areas within the ENF. The effects to individuals with disabilities will depend in part on the activities those individuals participate in and their mode of transportation.

Heritage Resources

Alternative A has the greatest potential to directly and indirectly negatively affect at-risk historic properties due to the large number of at-risk historic properties located within route corridors, combined with no prohibitions on current existing routes for public wheeled motor vehicle use. Identified at-risk historic properties for this project are prehistoric archaeological sites that include buried deposits (e.g. lithic scatters and midden) and are bisected by, or immediately adjacent to, proposed unauthorized routes. Values associated with buried deposits can cause these sites to be susceptible to ground disturbance such as erosion, rutting, and down cutting of the soil on these routes. In addition, site boundaries of these sites are ill-defined as they have been based solely on surface observations. Sub-surface testing of these sites will only assure the true extent of these sites. Alternative A includes 132 sites with these features.

Alternatives B, Modified B, C, D and E have low potential to directly negatively affect at-risk historic properties due to the small percentage of at-risk historic properties located within route corridors (ranging from 9 sites in Alternative B to 4 sites in Modified B and 3 sites in Alternative E). These alternatives also have a moderate potential to indirectly negatively affect at-risk historic properties due to the number and location of routes and associated use areas. The Action Alternatives prohibit public wheeled motor vehicle cross-country travel and have a wet weather seasonal closure, further reducing the potential for adverse effects to cultural resources. Thus, these alternatives should have an overall beneficial effect to cultural resources. There is, however, a concern for cultural resource sites not discovered due to such factors as dense vegetation and those sites that are comprised of buried deposits (such as lithic scatters).

Law Enforcement

Under Alternative A there would be no prohibitions for public wheeled motor vehicle use on existing routes, nor on cross-country travel. Law enforcement patrols by FPOs and LEOs would focus on resource damage, route proliferation, compliance with vehicle code requirements, and other federal regulations. Available law enforcement to handle these problems would continue to be inadequate.

Under the Action Alternatives, FPOs and LEOs will be able to more strategically focus enforcement on the fewer number of open routes to prevent route proliferation and resource damage, while still providing for education, information, and public safety. There will continue to be a need to maintain a level of law enforcement effort associated with routes not open for public wheeled motor vehicle use to prevent resource damage on these routes and route proliferation off of these routes. The availability and readability of public maps that display the designated system, designated routes being clearly marked on the ground, effective public education about the route designation regulations, and ongoing efforts to install and maintain signs, barriers or other physical closures of routes not designated for use will allow Forest visitors to comply with the various restrictions. Future decisions for physical closure of routes not open to public wheeled motor vehicle use will reduce number of routes and miles that need to be patrolled.

In the Action Alternatives, enforcement of the seasonal closure would require adequate signing and public notification, patrols, primarily on surfaced roads within the forest, and an ongoing public education effort. There will be an initial period in which compliance may be low, as the public notification and education efforts are begun, but it is anticipated that compliance will improve as the forest policy is implemented. Due to fewer roads and trails allowing public wheeled motor vehicle use, the need for patrols during the seasonal closure period will decrease as the closed roads and trails become physically blocked or gated. There will still be a need for some patrols to assure compliance with the seasonal closure.

Recreation

Alternative A allows for public wheeled motor vehicle travel on 2,868 miles of routes and does not prohibit cross-country travel. This alternative has the least impact to motorized recreationists by providing the greatest number of miles open to motorized use of all alternatives and is the only alternative that includes ML-1 roads open for use. This alternative also provides the greatest number of miles of motorized recreation opportunities by class of vehicle. However, because this alternative essentially represents the existing condition it does not address changes needed to create a cohesive, designed, and well managed recreation system. This alternative provides the greatest amount of relatively easy access to dispersed camping areas and represents the least adverse impacts to dispersed recreationists. This alternative has the greatest potential to impact those participating in quiet recreation activities due to the noise of vehicles and the potential of encountering vehicles on more roads and trails, although the extent of access in this alternative allows visitors to reach more areas across the Forest by way of motorized means.

Alternative B allows for public wheeled motor vehicle travel on 1,847 miles of routes and prohibits cross-country travel. This alternative provides the most motorized public use of all of the action alternatives, along with Modified B. In addition, this alternative provides the greatest number of miles of trails for OHV use, including the greatest number of miles of trails open to ATVs. This alternative, along with Modified B, has the highest number of easily accessed dispersed use areas of the action alternatives, and represents the least adverse impact to dispersed recreationists of the action alternatives. However, because this alternative proposes to open 10.3 miles of previously non-motorized trails to motorized uses, and proposes to close only 7.1 miles of existing motorized trails, there is a net loss to non-motorized trail users. The opportunities for

quiet recreation would increase over those in Alternative A because the miles of roads and trails open to public wheeled motor vehicle use are reduced.

Modified B allows for public wheeled motor vehicle travel on 1,847 miles of routes, similar to Alternative B, and prohibits cross-country travel. This alternative provides the most motorized public use of all of the action alternatives, along with Alternative B. This alternative provides the highest total mileage (1,123 miles) and the greatest percent of total mileage (61 percent) open to OHV use of any of the action alternatives. This alternative provides the fourth highest number of miles of trails for OHV use. Of all the action alternatives, Modified B represents the least adverse impact to dispersed recreation, providing access to 65 percent of the sites inventoried. 18 percent of inventoried dispersed use sites are classified as very easily or easily accessible from a road in this alternative. Modified B has the second highest mileage of existing NFS non-motorized trail proposed for motor vehicle use (1.7 miles), along with Alternative D, yet this is well below the 10.3 miles proposed in Alternative B. The 10.3 miles of NFS motorized trail not proposed for motorized use is the third lowest of all alternatives. The opportunities for quiet recreation would increase over those in Alternative A because the miles of roads and trails open to public wheeled motor vehicle use are reduced.

Alternative C has the third highest mileage of the action alternatives available for public motor vehicle use (1,730 miles) and the third highest mileage available for OHV use. This alternative has the longest proposed seasonal closure, a 6-month closure. This alternative provides less access to dispersed use areas than Action Alternatives B and Modified B. This alternative does not propose to open any non-motorized trails to motorized use, and proposes to close 39.4 miles of motorized trail to future motorized use. Also, as a result of the reduced number of miles of routes proposed to be open to motorized use and the increased percentage of areas more than 0.25 miles from a road or trail proposed to be open to motor vehicle use, there are increased opportunities for quiet recreation.

Alternative D proposes the fourth lowest mileage (1,548 miles) of the action alternatives. This alternative proposes the second highest motorized trail mileage of the Action Alternatives (6 miles more than Modified B), reflecting the effort in this alternative to maintain the popular riding areas with higher trail densities. This alternative provides a slightly lower number of dispersed use sites than Alternative C. The seasonal closure is two months longer than Alternatives B, Modified B and E, and one month shorter than Alternative C. This alternative provides the greatest mileage open to wheeled over snow travel of any of the action alternatives. This alternative allows for over snow travel on ML-2 roads with a minimum snow cover requirement of 24 inches, rather than 12 inches in the other action alternatives. This alternative provides an increase in opportunities for quiet recreation, due to the decreased road and trail densities.

Alternative E allows for the least number of miles for public wheeled motor vehicle travel (1,330 miles) on the Forest and prohibits cross-country travel. This alternative also proposes the least mileage open to OHV use and the least motorized trail mileage of any of the alternatives. This alternative provides the least access to easily accessed dispersed use sites. This alternative would eliminate access for motorized users to many areas of the Forest, greatly impacting their recreation opportunities, especially in the upper elevations. It also does not propose a cohesive transportation system for motorized recreationists. Conversely, this alternative provides the greatest overall positive impact to non-motorized trail users and those seeking quiet forms of recreation.

Visual Resources

Alternative A has the highest degree of negative visual impact to the natural-appearing forested landscape as viewed from managed viewsheds because more routes will remain open and in use under this alternative. This alternative also has the highest number of unauthorized routes which is usually negative due to the associated ground and vegetative disturbance. A landscape or viewshed with less evidence of human activity in general is of a higher visual quality. Alternative A provides the highest opportunity for the most people to visit places with special meaning to people because of created memories, unique landscape features, or beautiful vistas that exist across the Forest. Alternative A also allows the most likelihood for the most people to view negative visual impacts resulting from management activities on more acres of land.

There is relatively little difference between the Action Alternatives with respect to the visual resources, when compared to the difference of open routes in Alternative A. The majority of routes affected under these alternatives are currently NFS ML-1 roads. Because many of these roads were constructed in concert with past timber sale projects and fuels management projects, their density within specific areas is relatively high. Over time, natural re-vegetation would occur within the route templates obscuring the constructed appearance and reducing contrast with the surrounding landscape. A more natural appearing landscape across the Forest would result with less evidence of human activity. The improved visual quality would be most evident in the foreground from NFS ML-3, -4, and -5 viewsheds which previously accessed timber management areas (e.g. 09N22 – Buckskin Joe Rd.). Many unauthorized routes would also not be designated, and over time, the intersections would be unnoticed in the foreground.

Under the Action Alternatives, there is less opportunity for the public to access ‘special places’ and to experience the variety of scenic beauty that the Forest has to offer than under Alternative A. Assuming miles of available easy access (motorized) can be directly correlated to acres of potential scenic opportunities (by the highest number of people), the alternatives with more available motorized routes would be preferable to the alternatives with lower available motorized routes. Under these alternatives there is less opportunity for the public to view landscapes altered by management activities than under Alternative A. Alternatives with fewer available motorized routes would be preferable to the alternatives with higher available motorized routes from a visual standpoint.