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## 2. The Alternatives

This chapter describes and compares the alternatives under consideration for the Stanislaus National Forest Motorized Travel Management Draft Environmental Impact Statement (DEIS). It describes both alternatives considered in detail and those considered but eliminated from detailed study.

Based on the issues identified through public comment on the proposed action, the Forest Service developed other action alternatives that achieve the purpose and need differently than the proposed action. In addition, the Forest Service is required to analyze a No Action alternative. The proposed action, no action and the other action alternatives are described in detail.

The chapter is divided into five parts:

- Part 1 describes how the alternatives were developed.
- Part 2 presents the alternatives considered in detail.
- Part 3 describes the mitigation measures that are common to all action alternatives.
- Part 4 presents the alternatives that were considered, but eliminated from detailed analysis, including the rationale for eliminating them.
- Part 5 compares the alternatives based on their environmental, social and economic consequences including a comparative display of the projected effects of the alternatives.

### **Definitions**

This chapter contains the following terminology and abbreviations.

ADM	administrative use only; closed to public motorized use
ALL	full width roads or trails open to all vehicles, but not maintained for conventional highway vehicles
ATV	narrow double track trails open only to vehicles less than 50 inches wide (Motorcycles and ATVs only)
CU	portions of high standard (passenger car) roads available for Combined Use by highway legal and non-highway legal vehicles
FR	Forest Road
MC	narrow single track trails open only to single track vehicles less than 24 inches wide (Motorcycles only)
ML	maintenance level
MU	high clearance roads available for Mixed Use by both highway legal and non-highway legal motor vehicles
NFTS	National Forest Transportation System
PER	routes available by permit only
S&G	Standard and Guideline
HLO	full width roads open to highway legal vehicles only
t-ALL	convert road to All Vehicle trail
t-ATV	convert road to ATV trail
t-MC	convert road to MC trail
t-4WD	convert road to 4WD trail
ROS	Recreation Opportunity Spectrum
WOS	routes identified as an exception to the normal season of use restrictions allowing for Wheeled Over Snow (WOS) travel by ATVs when 12 inches or more of snow is present; these routes are dual designated as Snow Trails

## 2.01 HOW THE ALTERNATIVES WERE DEVELOPED

The action alternatives represent a wide range of perspectives designed to address the issues identified through scoping and described in the purpose and need (Chapter 1).

### ***Refining Alternatives Submitted by the Public during Scoping***

During the 60-day public scoping process many different groups and individuals submitted alternatives for consideration. The Forest Service reviewed and considered each proposal. The alternatives considered in detail incorporate portions of those proposals. The alternatives considered but eliminated from detailed study address the remaining portions of those proposals. Also important in this process, the Forest Service gathered information in consultation and discussions with tribal representatives, local counties and Forest Service employees. State and Federal agencies advised the process through numerous informal contacts.

### ***Implementation Monitoring***

Implementation 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 additional resource damage is occurring, steps to prevent further damage may be taken. If the mitigations are not effective or are not possible, additional road or trail closures may be required, subject to additional NEPA analysis. The Forest Service will conduct implementation monitoring based on the Monitoring and Evaluation plan (see Table 2.01-1) included in the Stanislaus National Forest Motor Vehicle Travel Management (MVTM) Forest Plan Amendment (USDA 1998).

Table 2.01-1 Monitoring and Evaluation Plan

Indicator	Standard	Monitoring Method	Monitoring Personnel	Reporting Frequency
Conflicts with Private Property, other Motorized Users or Non-Motorized Users	No than one conflict presenting immediate threat to life or property per National Forest System Watershed. No conflicts in non-motorized areas.	Field observations and photos during patrols. Reports from property owners, motorized users and non-motorized users.	OHV Patrols	Annual
Designated Route Miles	No more than +/- 20% total miles difference between designated route goals and achievements.	20% annual sample of the motorized portions of the Forest.	OHV Patrols	5 years
Trail Condition Rating	No more than 20% of the total trail miles per National Forest System Watershed rated as Red	Annual sample of motorized routes in selected watersheds.	Trail Condition Rating Teams	Annual

## 2.02 ALTERNATIVES CONSIDERED IN DETAIL

The action alternatives (Alternatives 1, 3, 4 and 5) and the no action alternative (Alternative 2) are considered in detail. The no action alternative represents the continuation of cross-country travel including continued use of all unauthorized routes by motor vehicles. Alternative 2, required by the implementing regulations of the National Environmental Policy Act (NEPA), serves as a baseline for comparison among the alternatives (73 Federal Register 143, July 24, 2008; p. 43084-43099).

The planning area includes National Forest System lands, on the Stanislaus National Forest, outside of Wilderness. It does not include any private, state or other federal lands. Each alternative assumes that other adjacent federal lands, such as those administered by the Bureau of Land Management and Yosemite National Park will be managed according to existing management plans and applicable

federal laws. Each alternative also assumes that private lands will meet applicable state and federal land use regulations.

The following sections describe each of the alternatives considered in detail (see Map Package and project record for detailed maps of each alternative). The alternatives are described in four parts:

1. **Cross country travel:** All of the action alternatives prohibit cross-country travel.
2. **Additions to the NFTS:** Each action alternative includes unauthorized roads and trails (routes) proposed for addition to the NFTS as trails with each identified by a trail number. Resource specialists conducted their site specific review of each proposed route. Appendix H (Resource Analysis Summary) presents a summary of the resource analysis with additional details in the Route Analysis Database Summary Report (see project record). All proposed additions will receive the appropriate level of routine maintenance such as brushing, signing, cleaning and clearing debris. For some routes, no work beyond routine maintenance is needed. For others, additional mitigation is needed to bring the route up to a safe and environmentally sustainable condition. The specific mitigations must be completed prior to designation of the route for public motorized use. All proposed route additions have assigned trail management objectives. Appendix I (Route Data) shows the specified vehicle class, season of use and mitigations for all proposed route additions.
3. **Changes to the existing NFTS:** The alternatives vary in changes to the existing National Forest Transportation System (NFTS) in terms of vehicle class, season of use and wheeled over snow use. Appendix I (Route Data) shows the specified vehicle class, season of use and mitigations for all proposed changes to the existing NFTS.
4. **Forest Plan Amendments:** Some of the alternatives include non-significant Forest Plan Amendments.

## Alternative 1 (Proposed Action)

This is the Proposed Action, as described in the Notice of Intent (72 Federal Register 222, November 19, 2007; p. 64988-64991), with corrections based on updated data and map information and refinements responding to the administration, motorized recreation, private property, recreation and resource issues raised during scoping (Chapter 1). These corrections and refinements provide additional motorized recreation opportunities, reduce conflicts and provide additional resource protection.

Alternative 1 (Proposed Action) is the Forest Service preferred alternative.

1. **Cross Country Travel:** Motor vehicle travel off NFTS routes by the public would be prohibited except as allowed by permit or other authorization. Parking is allowed within one vehicle length off of NFTS routes unless otherwise prohibited.
2. **Additions to the NFTS:** 157.39 miles of unauthorized routes would be added to the NFTS as trails (see Table 2.05-2). Appendix I (Route Data) shows the specified vehicle class, season of use and required mitigations.
3. **Changes to the existing NFTS:** Vehicle class changes would occur on 623.28 miles of NFTS roads. Season of use on all routes based on elevation and wet weather closures on native surfaced routes replaces all existing closures. Appendix I (Route Data) shows the specified vehicle class, season of use and required mitigations.

### Vehicle Class

Table 2.02-1 shows vehicle class changes would occur on 623.28 miles of NFTS roads including: opening 67.96 miles of closed roads (12.7 miles changes from ML1 to ML2); converting 5.42 miles of closed roads to administrative use only; closing to public use 45.98 miles of open roads; converting 93.59 miles of roads from highway legal only to all vehicles (65.8 miles changes from ML3 to ML2); and, converting 400.49 miles of roads from all vehicles to highway legal only.

This alternative also converts 63.06 miles of the 623.28 miles of NFTS roads to trails (the mileage overlaps with the other changes described above and shown in Table 2.02-1 and Table 2.05-5).

Table 2.02-1 Vehicle Class Changes: Alternative 1

From↓	Vehicle Class Changes To↓ (miles)								Total
	ADM	ALL	ML1	HLO	t-ALL	t-ATV	t-MC	t-4WD	
<b>ALL</b>	27.37	0.00	15.94	400.49	0.30	0.00	1.98	7.56	453.65
<b>ML1</b>	5.42	12.57	0.00	2.17	26.43	1.94	1.58	23.27	73.38
<b>HLO</b>	2.66	93.59	0.00	0.00	0.00	0.00	0.00	0.00	96.26
<b>Total</b>	<b>35.46</b>	<b>106.16</b>	<b>15.94</b>	<b>402.66</b>	<b>26.73</b>	<b>1.94</b>	<b>3.56</b>	<b>30.83</b>	<b>623.28</b>

ADM and ML1 are closed to public motorized use

### Season of Use

Except as allowed by permit or other authorization (i.e. routes identified for wheeled over snow use), **native** surface and **non-native** (aggregate and paved) surfaced NFTS motorized routes are open to motorized use only during the season of use shown below, unless specifically prohibited (see Figure 2.02-1).

1. Lower Elevations           Open all year
2. Middle Elevations        Open April 1 – November 30
3. Upper Elevations         Open May 15 – November 30

Wet Weather Closures: During the season of use, all **native** surface routes are subject to wet weather closure when 1 inch of rainfall occurs in a 24 hour period and allowing for 72 hours of drying.

Wheeled Over Snow Use: Wheeled over snow (WOS) use would be prohibited except by ATVs when 12 inches or more of snow is present:

- a. on the routes listed in Table 2.02-2 (see Figure 2.02-1); or,
- b. where allowed by permit or other authorization.

Table 2.02-2 Wheeled Over Snow Routes

Route	District	Miles <sup>1</sup>
03N01	Mi-Wok	24.99
03N01	Groveland	20.60
04N12	Summit	19.37
04N34Y	Summit	0.02
05N17	Summit	1.01
05N40Y	Summit	3.87
07N05	Calaveras	4.62
07N09	Calaveras	25.05
07N17	Calaveras	2.79
07N23	Calaveras	5.98
08N02	Calaveras	1.82
08N12	Calaveras	0.56
18EV306	Summit	0.41
total		111.09

<sup>1</sup>National Forest System lands

4. **Forest Plan Amendments:** includes the non-significant amendments shown in Tables 2.02-3, 2.02-4, and 2.02-5.

Table 2.02-3 Forest Plan Amendments: Alternative 1

Practice	Existing S&G	Amendment
<b>Forestwide S&amp;Gs</b> Restricted Motor Vehicle Management [10-G-2, C1i2] (USDA 2005a, p. 55-56)	Permit motor vehicle travel up to 100 feet from roads, routes and established travel ways for direct access to campsites, parking, woodcutting, or gathering forest products provided that: <ol style="list-style-type: none"> <li>no resource damage occurs; and,</li> <li>such access is not otherwise prohibited.</li> </ol>	Prohibit public wheeled motor vehicle travel off NFTS routes except as allowed by permit or other authorization. Allow parking within one vehicle length off of NFTS routes unless otherwise prohibited.

Table 2.02-4 Forest Plan Amendments: Alternative 1

Practice	Existing S&G	Amendment	Route	Miles
<b>Forestwide S&amp;Gs</b> Restricted Motor Vehicle Management [10-G-2, B3a4c1] (USDA 2005a, p. 52)	In areas adjacent to waters with known populations of western pond turtle: Construct new roads or trails or use existing off-road routes for motorized vehicles only if at least ¼ mile from occupied habitat or where approved by a Wildlife Biologist.	In areas adjacent to waters with known populations of western pond turtle: Construct new roads or trails or use existing off-road routes for motorized vehicles only if at least ¼ mile from occupied habitat or where approved by a Wildlife Biologist except for the routes identified in this table.	17EV192	0.63
			17EV192A	0.06
			17EV192B	0.15
			17EV194	0.39
			17EV195	0.50
			17EV196	0.19
			17EV197	0.35
			17EV197	0.46
			17EV197A	0.05
			17EV901	0.37
			1S1727	0.87
			1S17E35B	0.34
			1S17M	1.13
			1S1902	0.24
			1S1929	0.15
			1S1929C	0.19
			2S1727	0.22
			FR8516	0.05
			FR8601	0.47
			FR10178	0.64
			FR98482	0.06
			FR98486	0.21
			FR98488	0.05
			FR98504	0.07
			FR98508	0.06
			FR98509	0.03
			FR98510	0.04
			FR98511	0.15
			FR98513	0.03
			FR98514	0.04
			FR98515	0.09
			FR98520	0.03
			FR98537	0.09
FR98539	0.10			
FR98541	0.07			
FR98548	0.04			
FR98554	0.04			
FR98560	0.06			
FR98566	0.05			
FR98575	0.13			
FR98599	0.04			
<b>total</b>	<b>8.93</b>			

Table 2.02-5 Forest Plan Amendments: Alternative 1

Practice	Existing S&G	Amendment	Route	Miles
<b>Forestwide S&amp;Gs</b>				
ROS Semi-primitive Non-motorized [10-B-2] (USDA 2005a, p. 51)	Motorized use is normally prohibited.	Motorized use is normally prohibited, except for the routes identified in this table.	4N80Y	0.20
Closed Motor Vehicle Travel Management [10-G-1a] (USDA 2005a, p. 51)	Closed to motorized use.	Closed to motorized use except for the routes identified in this table.	5N02R	1.50
Restricted Motor Vehicle Management [10-G-2, C1a] (USDA 2005a, p. 55)	Prohibit motorized use and close motorized routes in non-motorized areas.	Prohibit motorized use and close motorized routes in non-motorized areas, except for the routes identified in this table.	<b>total</b>	<b>1.70</b>
<b>Wild and Scenic River</b>				
ROS Semi-primitive Non-motorized [10-B-2] (USDA 2005a, p. 105)	Manage to the ROS Class of Semi-primitive Non-motorized.	Manage to the ROS Class of Semi-primitive Non-motorized, except for the routes identified in this table.		
Closed Motor Vehicle Travel Management [10-G-1] (USDA 2005a, p. 105)	Manage to Forestwide S&Gs for Closed Motor Vehicle Travel Management.	Manage to Forestwide S&Gs for Closed Motor Vehicle Travel Management, except for the routes identified in this table.		

### Alternative 2 (No Action)

The No Action Alternative provides a baseline for comparing the other alternatives. Under the No Action alternative, current management plans would continue to guide management of the project area. This alternative would **not** change the use of any NFTS roads and would **not** add any miles of NFTS motorized trails. Under this alternative the agency would take no affirmative action (no change from current management or direction) and cross country travel with continued use of unauthorized routes would occur. It would include only existing closures and would **not** include any restrictions on motorized dispersed recreation access.

No changes would be made to the current NFTS 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. Motor vehicle travel by the public would not be limited to NFTS routes. Unauthorized routes would continue to have no status or authorization as NFTS facilities.

1. **Cross Country Travel:** Motor vehicle travel off NFTS routes by the public would continue except where prohibited by existing Forest Orders.
2. **Additions to the NFTS:** No unauthorized routes would be added to the NFTS.
3. **Changes to the existing NFTS:** No changes are made to the NFTS (see Table 2.02-6) or existing closures and restrictions based on current Forest Orders (see Table 2.02-7).

Table 2.02-6 Existing NFTS Public Motorized Opportunities

Motorized Opportunity <sup>1</sup>		Miles
NFTS	Vehicle Class	
Road	All Vehicles (ALL)	1734.91
Road	Highway Legal Only (HLO)	429.17
Trail	All Vehicles (ALL)	61.35
Trail	All Terrain Vehicle (ATV)	21.00
Trail	Motorcycle (MC)	12.94
<b>total</b>		<b>2259.37</b>

<sup>1</sup> Baseline



Table 2.02-7 Existing NFTS Closures and Restrictions

Route	RD	MI	Order	Closure	Closure/Restriction
1N14	GR	5.50	82-22	Year round	Use by any motorized vehicle or other mechanical transport
1N14-A	GR	1.50	82-22	Year round	Use by any motorized vehicle or other mechanical transport
1N45Y	GR	2.50	82-22	Year round	Use by any motorized vehicle or other mechanical transport
1N97	GR	4.00	82-22	Year round	Use by any motorized vehicle or other mechanical transport
1S16A	GR	0.20	82-13	Year round	Use by any motorized vehicle or other mechanical transport
2N24	GR	0.10	82-08	Year round	Use by any motorized vehicle or other mechanical transport
2S13	GR	0.10	82-08	Year round	Use by any motorized vehicle or other mechanical transport
2S32	GR	3.00	82-08	Year round	Use by any motorized vehicle or other mechanical transport
3N08	MW	4.00	80-07	Year round	Use by any motorized vehicle or other mechanical transport
3N09	MW	0.05	80-07	Year round	Use by any motorized vehicle or other mechanical transport
3N56Y	MW	0.75	80-07	Year round	Use by any motorized vehicle or other mechanical transport
3N86	MW	0.50	80-07	Year round	Use by any motorized vehicle or other mechanical transport
4N12M	SU	0.20	81-17	Year round	Use by any motorized vehicle or other mechanical transport
4N50Y	MW	3.00	80-07	Year round	Use by any motorized vehicle or other mechanical transport
4N70	SU	1.00	84-14	Year round	Use by any motorized vehicle or other mechanical transport
4N85	SU	3.00	84-14	Year round	Use by any motorized vehicle or other mechanical transport
4N88	SU	3.50	84-14	Year round	Use by any motorized vehicle or other mechanical transport
5N01Y	SU	8.80	77-05	Year round	Use by any motorized vehicle or other mechanical transport
5N01YA	SU	0.50	77-05	Year round	Use by any motorized vehicle or other mechanical transport
5N02Y	SU	5.00	77-05	Year round	Use by any motorized vehicle or other mechanical transport
5N03Y	SU	2.40	77-05	Year round	Use by any motorized vehicle or other mechanical transport
5N03YA	SU	0.70	77-05	Year round	Use by any motorized vehicle or other mechanical transport
5N06	SU	2.80	80-10	Year round	Use by any motorized vehicle or other mechanical transport
5N06Y	SU	0.50	81-17	Year round	Use by any motorized vehicle or other mechanical transport
5N10Y	SU	0.20	81-17	Year round	Use by any motorized vehicle or other mechanical transport
5N59Y	SU	0.50	81-17	Year round	Use by any motorized vehicle or other mechanical transport
5N92C	SU	1.25	82-30	Year round	Use by any motorized vehicle or other mechanical transport
<b>total 55.55</b>					
Cedar Ridge	MW	NA	92-08	NA	OHVs must stay on designated OHV routes

4. **Forest Plan Amendments:** none.

**Alternative 3 (Cross Country Prohibited)**

Alternative 3 responds to the administration and resource issues by prohibiting cross country travel without adding any new facilities to the NFTS. This alternative also provides a baseline for comparing the impacts of other alternatives that propose changes to the NFTS in the form of new facilities (roads and trails). None of the currently unauthorized routes would be added to the National Forest System under this alternative.

Alternative 3 would not change the use of the NFTS and would not add any miles to the NFTS. Under this alternative the agency will prohibit cross country travel eliminating continued use of unauthorized routes. It would include seasonal closures on NFTS routes with existing closures and prohibit motorized access beyond existing NFTS routes.

1. **Cross Country Travel:** Motor vehicle travel off NFTS routes by the public would be prohibited except as allowed by permit or other authorization. Parking is allowed within one vehicle length off of NFTS routes unless otherwise prohibited.
2. **Additions to the NFTS:** No unauthorized routes would be added to the NFTS.
3. **Changes to the existing NFTS:** No changes are made to the NFTS (see Table 2.02-6) or existing closures and restrictions based on current Forest Orders (see Table 2.02-7).
4. **Forest Plan Amendments:** none.

## Alternative 4 (Recreation)

Alternative 4 responds to the motorized recreation opportunities issue by providing additional routes and reducing restrictions. This alternative would maximize motorized recreation opportunities (including those accessing dispersed recreation activities thereby partially replacing the need for travel corridors).

1. **Cross Country Travel:** Motor vehicle travel off NFTS routes by the public would be prohibited except as allowed by permit or other authorization. Parking is allowed within one vehicle length off of NFTS routes unless otherwise prohibited.
2. **Additions to the NFTS:** 181.72 miles of unauthorized routes would be added to the NFTS as trails (see Table 2.05-2). Appendix I (Route Data) shows the specified vehicle class, season of use and required mitigations.
3. **Changes to the existing NFTS:** Vehicle class changes would occur on 371.32 miles of NFTS roads. Season of use on native surfaced routes based on elevation and wet weather closures on native surfaced routes replaces all existing closures. Appendix I (Route Data) shows the specified vehicle class, season of use and required mitigations.

### Vehicle Class

Table 2.02-8 shows vehicle class changes would occur on 371.32 miles of NFTS roads including: opening 101.83 miles of closed roads (12.7 miles changes from ML1 to ML2); converting 2.47 miles of closed roads to administrative use only; closing to public use 10.66 miles of open roads; converting 99.76 miles of roads from highway legal only to all vehicles (65.8 miles changes from ML3 to ML2); and, converting 145.76 miles of roads from all vehicles to highway legal only. This alternative also converts 99.86 miles of the 371.32 miles of NFTS roads to trails (the mileage overlaps with the other changes described above and shown in Table 2.02-8 and Table 2.05-5).

Table 2.02-8 Vehicle Class Changes: Alternative 4

From↓	Vehicle Class Changes To↓ (miles)								Total
	ADM	ALL	ML1	HLO	t-ALL	t-ATV	t-MC	t-4WD	
<b>ALL</b>	5.18	0.00	2.81	145.76	2.21	0.00	1.98	6.65	164.59
<b>ML1</b>	2.47	12.08	0.00	0.73	74.60	2.09	2.34	10.00	104.30
<b>HLO</b>	2.66	99.76	0.00	0.00	0.00	0.00	0.00	0.00	102.43
<b>Total</b>	<b>10.32</b>	<b>111.84</b>	<b>2.81</b>	<b>146.49</b>	<b>76.81</b>	<b>2.09</b>	<b>4.32</b>	<b>16.65</b>	<b>371.32</b>

ADM and ML1 are closed to public motorized use

### Season of Use

Except as allowed by permit or other authorization (i.e. routes identified for wheeled over snow use), **native** surface and **non-native** (aggregate and paved) surfaced NFTS motorized routes are open to motorized use only during the season of use shown below, unless specifically prohibited (see Figure 2.02-1).

1. Lower Elevations           Open all year
2. Middle Elevations        Open April 1 – December 31
3. Upper Elevations         Open April 1 – December 31

Wet Weather Closures: During the season of use, all **native** surface routes are subject to wet weather closure when 1 inch of rainfall occurs in a 24 hour period and allowing for 72 hours of drying.

**Wheeled Over Snow Use:** Wheeled over snow (WOS) use would be prohibited except by ATVs when 12 inches or more of snow is present:

- a. on the routes listed in Table 2.02-2 (see Figure 2.02-1); or,
- b. where allowed by permit or other authorization.

4. **Forest Plan Amendments:** includes the non-significant amendments shown in Tables, 2.02-9, 2.02-10 and 2.02-11.

Table 2.02-9 Forest Plan Amendments: Alternative 4

Practice	Existing S&G	Amendment
<b>Forestwide S&amp;Gs</b> Restricted Motor Vehicle Management [10-G-2, C1i2] (USDA 2005a, p. 55-56)	Permit motor vehicle travel up to 100 feet from roads, routes and established travel ways for direct access to campsites, parking, woodcutting, or gathering forest products provided that: a. no resource damage occurs; and, b. such access is not otherwise prohibited.	Prohibit public wheeled motor vehicle travel off NFTS routes except as allowed by permit or other authorization. Allow parking within one vehicle length off of NFTS routes unless otherwise prohibited.

Table 2.02-10 Forest Plan Amendments: Alternative 4

Practice	Existing S&G	Amendment	Route	Miles
<b>Forestwide S&amp;G</b> ROS Semi-primitive Non-motorized [10-B-2] (USDA 2005a, p. 51)	Motorized use is normally prohibited.	Motorized use is normally prohibited, except for the routes identified in this table.	4N80Y 5N02R 1N09	0.20 1.50 3.50
Closed Motor Vehicle Travel Management [10-G-1a] (USDA 2005a, p. 51)	Closed to motorized use.	Closed to motorized use except for the routes identified in this table.	<b>total</b>	<b>5.20</b>
Restricted Motor Vehicle Management [10-G-2, C1a] (USDA 2005a, p. 55)	Prohibit motorized use and close motorized routes in non-motorized areas.	Prohibit motorized use and close motorized routes in non-motorized areas, except for the routes identified in this table.		
<b>Wild and Scenic River</b> ROS Semi-primitive Non-motorized [10-B-2] (USDA 2005a, p. 105)	Manage to the ROS Class of Semi-primitive Non-motorized.	Manage to the ROS Class of Semi-primitive Non-motorized, except for the routes identified in this table.		
Closed Motor Vehicle Travel Management [10-G-1] (USDA 2005a, p. 105)	Manage to Forestwide S&Gs for Closed Motor Vehicle Travel Management.	Manage to Forestwide S&Gs for Closed Motor Vehicle Travel Management, except for the routes identified in this table.		
<b>Near Natural</b> ROS Semi-primitive Non-motorized [10-B-2] (USDA 2005a, p. 110)	Manage to ROS Class of SPNM.	Manage to ROS Class of SPNM, except for the routes identified in this table.		
Closed Motor Vehicle Travel Management [10-G-1] (USDA 2005a, p. 110)	Manage to Forestwide S&Gs for Closed Motor Vehicle Travel Management.	Manage to Forestwide S&Gs for Closed Motor Vehicle Travel Management, except for the routes identified in this table.		

Table 2.02-11 Forest Plan Amendments: Alternative 4

Practice	Existing S&G	Amendment	Route	Miles
<b>Forestwide S&amp;Gs</b> Restricted Motor Vehicle Management [10-G-2, B3a4c1] (USDA 2005a, p. 52)	In areas adjacent to waters with known populations of western pond turtle: Construct new roads or trails or use existing off-road routes for motorized vehicles only if at least ¼ mile from occupied habitat or where approved by a Wildlife Biologist.	In areas adjacent to waters with known populations of western pond turtle: Construct new roads or trails or use existing off-road routes for motorized vehicles only if at least ¼ mile from occupied habitat or where approved by a Wildlife Biologist except for the routes identified in this table.	17EV192	0.63
			17EV192A	0.06
			17EV192B	0.15
			17EV194	0.39
			17EV195	0.50
			17EV196	0.19
			17EV197	0.35
			17EV197	0.46
			17EV197A	0.05
			17EV901	0.37
			1S1727	0.87
			1S17E35B	0.34
			1S17M	1.13
			1S1902	0.24
			1S1907A	0.39
			1S1929	0.15
			1S1929C	0.19
			2S1727	0.22
			FR8516	0.05
			FR8601	0.47
			FR10178	0.64
			FR98482	0.06
			FR98486	0.21
			FR98488	0.05
			FR98504	0.07
			FR98508	0.06
			FR98509	0.03
			FR98510	0.04
			FR98511	0.15
			FR98513	0.03
			FR98514	0.04
			FR98515	0.09
			FR98520	0.03
FR98537	0.09			
FR98539	0.10			
FR98541	0.07			
FR98548	0.04			
FR98554	0.04			
FR98560	0.06			
FR98566	0.05			
FR98575	0.13			
FR98599	0.04			
			<b>total</b>	<b>9.32</b>

## Alternative 5 (Resources)

Alternative 5 responds to the administration, private property, recreation and resource issues by limiting additions to the NFTS and increasing restrictions that would reduce conflicts and provide additional resource protection. This alternative would limit motorized recreation opportunities (including those accessing dispersed recreation activities) by providing greater protection for forest resources.

1. **Cross Country Travel:** Motor vehicle travel off NFTS roads and NFTS trails by the public would be prohibited except as allowed by permit or other authorization. Parking is allowed within one vehicle length off of NFTS routes unless otherwise prohibited.
2. **Additions to the NFTS:** 31.51 miles of unauthorized routes would be added to the NFTS as trails (see Table 2.05-2). Appendix I (Route Data) shows the specified vehicle class, season of use and required mitigations.
3. **Changes to the existing NFTS:** Vehicle class changes would occur on 531.39 miles of NFTS roads. Season of use on all routes based on elevation and wet weather closures on native surfaced routes replaces all existing closures. Appendix I (Route Data) shows the specified vehicle class, season of use and required mitigations.

### Vehicle Class

Table 2.02-12 shows vehicle class changes would occur on 531.39 miles of NFTS roads including: opening 11.66 miles of closed roads; converting 5.42 miles of closed roads to administrative use only; closing to public use 59.03 miles of open roads; and, converting 441.10 miles of roads from all vehicles to highway legal only. This alternative also converts 21.51 miles of the 531.39 miles of NFTS roads to trails (the mileage overlaps with the other changes described above and shown in Table 2.02-12 and Table 2.05-5).

Table 2.02-12 Vehicle Class Changes: Alternative 5

From↓	Vehicle Class Changes To↓ (miles)								Total
	ADM	ALL	ML1	HLO	t-ALL	t-ATV	t-MC	t-4WD	
ALL	27.37	0.00	28.99	441.10	5.77	0.00	1.69	6.71	511.64
ML1	5.42	2.88	0.00	1.44	5.52	1.82	0.00	0.00	17.08
HLO	2.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.66
<b>Total</b>	<b>35.46</b>	<b>2.88</b>	<b>28.99</b>	<b>442.55</b>	<b>11.29</b>	<b>1.82</b>	<b>1.69</b>	<b>6.71</b>	<b>531.39</b>

ADM and ML1 are closed to public motorized use

### Season of Use

Except as allowed by permit or other authorization, **native** surface and **non-native** (aggregate and paved) surfaced NFTS motorized routes are open to motorized use only during the season of use shown below, unless specifically prohibited (see Season of Use Map).

1. Lower Elevations      Open all year
2. Middle Elevations      Open April 15 – November 15
3. Upper Elevations      Open May 15 – November 15

Wet Weather Closures: During the season of use, all **native** surface routes are subject to wet weather closure when 1 inch of rainfall occurs in a 24 hour period and allowing for 72 hours of drying.

Wheeled Over Snow Use: Wheeled over snow use would be prohibited except where allowed by permit or other authorization.

4. **Forest Plan Amendments:** includes the non-significant amendments shown in Table 2.02-13.

Table 2.02-13 Forest Plan Amendments: Alternative 5

Practice	Existing S&G	Amendment
<b>Forestwide S&amp;Gs</b> Restricted Motor Vehicle Management [10-G-2, C1i2] (USDA 2005a, p. 55-56)	Permit motor vehicle travel up to 100 feet from roads, routes and established travel ways for direct access to campsites, parking, woodcutting, or gathering forest products provided that: <ol style="list-style-type: none"> <li>a. no resource damage occurs; and,</li> <li>b. such access is not otherwise prohibited.</li> </ol>	Prohibit public wheeled motor vehicle travel off NFTS routes except as allowed by permit or other authorization. Allow parking within one vehicle length off of NFTS routes unless otherwise prohibited.

## 2.03 MITIGATION AND OTHER REQUIREMENTS COMMON TO ALL ACTION ALTERNATIVES

Based on their site specific review of each proposed route, resource specialists identified mitigation measures and other requirements to reduce some of the potential impacts caused by the various alternatives (see Resource Analysis Database Summary Report in the project record). Appendix I (Route Data) lists routes with mitigations and other requirements by alternative, while the specific mitigations and requirements are further defined in Appendix F (Maintenance and Mitigation Definitions). Specific mitigations (see Table 2.05-7) must be completed prior to designation of the route for public motorized use.

### Mitigation Measures

Mitigation activities may use one or more of the following hand tools or mechanized equipment depending on route location and accessibility:

- Mechanized equipment: ATV, auger, chainsaw, compactor, pole saw, rock rake, tractor, trailer, etc.
- Hand tools: hand saw, McLeod, pick, posthole digger, pruning shear, rake, shovel, etc.

The following mitigation measures apply to the action alternatives:

1. **Annual Maintenance:** maintenance and repair of a route annually due to less favorable soil type, steeper tread gradient, and/or higher trail use.
2. **Boardwalk:** trail tread reinforcement structure resembling a low bridge and constructed over wet or otherwise unstable soil.
3. **Cattleguard:** motorcycle/ATV cattleguard (width 60 inches or less) installed along existing fence line, causing minimal ground disturbance as structure requires leveling of surface only.
4. **Combined Use Sign Plan:** prepare and implement sign plan for identified portions of high standard (passenger car) roads for Combined Use by highway legal and non-highway legal vehicles.
5. **Drain Dips:** Constructed erosion control technique which reverses the grade of a trail for a distance of 15-20 feet before returning to the prevailing grade. The change in grade forces water to run off the trail surface rather than gaining additional velocity and volume. Hardened drain dips include additional tread hardening.
6. **Fence Barrier:** wood fence constructed using 4 to 6 inch vertical posts with horizontal rails bolted through posts, 30 inches above ground surface. Requires digging up to 8 inch wide by 24 inch deep hole for installation of post.
7. **Full Bench:** trail resting entirely on an excavation into a steep side slope, no fill is used to support the trail.

8. **Log Barrier:** logs placed in a shallow trench along a travel way restricting vehicle traffic to desired locations.
9. **Low Impact Barrier:** low resource impact, vehicle barrier constructed by placing full-length railroad ties on top of 24 inch ties, held in place by driving rebar through ties into ground approximately 24 inches. Requires no digging of holes, but sometimes leveling of ground is required for placement.
10. **Mixed Use Sign Plan:** prepare and implement sign plan for identified portions of certain (high clearance) roads available for use by both highway legal and non-highway legal motor vehicles.
11. **No Vehicles Sign:** small standard traffic signs posted alongside routes to control and direct traffic.
12. **Padding:** fabric placed on native surface and covered with a layer of soil to protect sensitive resources.
13. **Rock Barrier:** large rock boulders, usually 36 to 48 inch diameter, placed in shallow holes along a travel way to restrict vehicle traffic to desired locations.
14. **Tread Harden:** tread or stream crossing treatment using concrete blocks, geosynthetics, logs, mechanical compaction, rock ballast, soil cement or timbers to protect the trail surface.
15. **Waterbars:** constructed log, rock or soil berm that diverts water from the trail tread.

## Other Requirements

The following requirements apply to the action alternatives:

1. **RLF Surveys:** conduct surveys to determine presence/absence of the California red-legged frog using the United States Fish and Wildlife Service (USFWS) protocol.
2. **RLF USFWS Consultation:** Forest Service consultation with the USFWS to comply with Section 7 of the Endangered Species Act.
3. **SHPO Consultation:** Forest Service consultation with the State Historic Preservation Officer (SHPO) to comply with Section 106 of the National Historic Preservation Act.

## 2.04 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

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NEPA requires that federal agencies rigorously explore and objectively evaluate all reasonable alternatives and briefly discuss the reasons for eliminating any alternatives that were not developed in detail (40 CFR 1502.14). Public comments and internal scoping suggested the alternatives briefly described below along with a brief response discussing the reasons for eliminating them from detailed study.

### a. **Prohibit OHV (non-highway legal) use**

This alternative would prohibit all non-highway legal use and allow only highway legal vehicles on the Stanislaus National Forest.

**Response:** Prohibiting all non-highway legal vehicles does not meet the purpose and need for this project to provide a diversity of motorized recreation. Also, it is not consistent with California Vehicle Code or Forest Service policy.

### b. **Add all unauthorized routes to the system**

This alternative would add all existing unauthorized routes to the NFTS. It would also include contingent motorized access based on acquiring right-of-way.

**Response:** Adding all unauthorized routes to the system does not meet the purpose and need for this project to make limited changes to the existing NFTS and identify existing routes for addition to the NFTS. Also, it is not consistent with the Forest Plan direction for Restricted Motor Vehicle

Travel Management (USDA 2005a, p. 51-56). Not all unauthorized routes are properly located to sustain motorized use and protect resources. The Forest Service does not have the authority to add routes to the system without a public right of way and current policy does not provide for adding routes contingent on future right-of-way acquisition.

**c. Authorize open (cross-country travel allowed) OHV play areas**

This alternative (developed through internal scoping based on public comments) would include several motor vehicle open play areas. A mapping exercise identified the following 12 quarries as potential open play areas:

- Mi-Wok Ranger District: Bourland Quarry; Clavey Quarry; Coffin Quarry
- Calaveras Ranger District: Candy Rock Quarry; Flat Quarry; Ganns Quarry; Shovel Grave Quarry
- Summit Ranger District: Donnell Quarry
- Groveland Ranger District: Cherry Borrow; Grizzly Quarry; Jawbone Quarry; Sawmill Quarry

**Response:** Open cross-country travel play areas are outside the scope of the purpose and need for this project to make limited changes to the existing NFTS and identifying existing routes for addition to the NFTS. Also, it is not consistent with Forest Plan direction prohibiting cross-country overland OHV travel (USDA 2005a, p. 55).

**d. Trigger seasonal closure on and off throughout the wet season**

This alternative would close native surfaced roads when 1 inch of rain or more fell within a 24 hour time period. The roads would remain closed for 48 hours and then re-open. This closure would only occur during the wet season, generally November through mid May on the STF.

**Response:** Seasonal closures are used to reduce wildlife disturbance; reduce soil compaction during wet weather; and, provide for public safety by closing routes during wet winter weather conditions when general motorized travel is considered unsafe. This type of triggered closure does not address rain events outside of the wet season. It does not respond to wildlife or soil resource protection issues, and it does not provide for public safety. Alternatives 1, 4 and 5 incorporate this concept to deal with rain events during the proposed season of use.

**e. No Seasonal Closures**

This alternative (developed through internal scoping based on public comments) would remove all existing closures and would not replace them.

**Response:** Seasonal closures are used to reduce wildlife disturbance; reduce soil compaction during wet weather; and, provide for public safety by closing routes during wet winter weather conditions when general motorized travel is considered unsafe. Removal of all seasonal closures does not respond to those resource protection issues and safety concerns.

**f. New Route Construction**

This alternative (developed through internal scoping based on public comments) would identify and include new route construction to complete loops, connect trails and bypass private property where no public right of way exists.

**Response:** New route construction is outside the scope of the purpose and need for this project to make limited changes to the existing NFTS and identifying existing routes for addition to the NFTS. New trail construction is identified as a potential future project and discussed in the cumulative effects analysis in Alternatives 1 and 4.



**g. Non-Motorized**

This alternative would prohibit motorized use on the National Forest.

**Response:** The prohibition of motorized use across the entire National Forest is outside the scope of the purpose and need for this project to provide a diversity of motorized recreation and make limited changes to the existing NFTS. Also, it is not consistent with Forest Service policy (FSM 7702) which states in part: “The objectives of managing the forest transportation system and motor vehicle use on NFS roads, on NFS trails, and in areas on NFS lands are: 1. To provide sustainable access in a fiscally responsible manner to NFS lands for administration, protection, utilization, and enjoyment of NFS lands and resources consistent with the applicable land management plan. 2. To manage the forest transportation system and motorized and non-motorized uses on NFS roads, on NFS trails, and in areas on NFS lands within the environmental capabilities of the land.”

**h. “Grandfather User-created Routes into the NFTS and Conditionally Add Routes Pending Further Analysis and Mitigation**

Suggested by the Blue Ribbon Coalition and other advocates of motorized recreation, this alternative would consider that many so-called “user-created” routes are actually Forest Service “facilities” since the agency expended appropriated funds to place them on previous or current maps or are/were maintained by federal agents. Hence, these facilities are by definition actually system routes and should not be analyzed as unauthorized or “user-created” routes. This alternative would also convert “roads-to-single track trails” or “roads-to-motorized trails less than 50 inches in width” and “roads managed as motorized trails greater than 50 inches in width” to help achieve FS budget objectives while still providing a substantive recreational route network. It would also include a second tier group of routes that are “conditionally approved/designated” once certain issues are addressed.

**Response:** Creating a second tier group of routes that are conditionally approved is outside the purpose and need for this project to make limited changes to the existing NFTS and identifying existing routes for addition to the NFTS. Also, it is against Forest Service policy to add routes to its transportation system that do not have legal access. Adding all unauthorized routes to the system is not feasible as many do not currently meet Forest Plan direction. Routes are considered in two categories: either they were authorized through an environmental evaluation process and added to the transportation system or they were created by recreational use. This latter group of routes is considered unauthorized. Even though many of these routes have been in existence for a number of years, they were not evaluated for suitability as OHV trails and were not added to the system. They cannot be “grandfathered” into the system. Alternative 4 incorporates many of the proposed additions and other components of this alternative.

**i. Add All Routes Receiving OHV Use**

Suggested by the Blue Ribbon Coalition and other advocates of motorized recreation, this alternative would designate, at a minimum, all of the system or facility roads and trails receiving current OHV use unless the individual route is causing a “considerable adverse affect.” It would designate the maximum number of important and historic user-created routes as identified by the public and re-open old existing trails that connect to worthwhile destinations. If a considerable adverse effect is found, review for mitigation (re-route, maintenance, closure, etc.).

**Response:** In addition to the Response to alternative “h” (above), adding all routes receiving current OHV use is not consistent with the Forest Plan direction for Restricted Motor Vehicle Travel Management (USDA 2005a, p. 51-56). Some roads were identified in the 2006 OHV inventory as having OHV use. These roads previously closed under other NEPA decisions will not be re-opened. Alternative 4 incorporates some components of this alternative.

**j. Protect Yosemite National Park**

Suggested by Yosemite National Park, this alternative would exclude OHV use on existing NFTS roads, close some roads and not add any trails adjacent to Yosemite National Park to reduce OHV incursions into the Park.

**Response:** Closing existing NFTS roads is outside the scope of the purpose and need for this project to make limited changes to the existing NFTS. Alternative 5 includes some components of this alternative. The Forest Service already evaluated and implemented some of the recommendations in other previous NEPA decisions.

**k. Close and Decommission NFTS Roads and Trails to Reduce Resource Impacts**

Suggested by the Wilderness Society and others, this alternative would close and decommission a number of roads and trails to reduce road density and disturbance to wildlife; prevent incursions into Wild and Scenic River corridors through road closures; reduce access adjacent to Wilderness through road closures; not add trails that are in Roadless Areas; implement a seasonal closure for the protection of wildlife; and, allow some number of motorized trails to be added to the NFTS.

**Response:** Decommissioning existing NFTS roads is outside the scope of the purpose and need for this project to make limited changes to the existing NFTS. Alternative 5 includes some components of this alternative.

**l. Maximum Resource Protection**

Suggested by the Central Sierra Environmental Resource Center (CSERC), this alternative would close and decommission a number of roads and trails to reduce road density and disturbance to wildlife; implement a seasonal closure for the protection of wildlife; and, allow some number of trails to be added to the system.

**Response:** Closing and decommissioning existing NFTS roads is outside the scope of the purpose and need for this project to make limited changes to the existing NFTS. Alternative 5 includes other components of this alternative.

**m. Maximum Recreation**

Suggested by the Merced Dirt Riders, Stewards of the Sequoia and Stewards of the Sierra, this alternative would add a number of the existing unauthorized trails identified in the OHV inventory, conducted and finalized in June, 2006 as well as adding trails that have been established in the past and were not inventoried. In addition, several trails would be added to the NFTS as “permit only” trails. A wet weather seasonal closure, triggered by a certain amount of rainfall in a 24 hour time period, would be implemented.

**Response:** The Forest Service evaluated the trails recommended for addition and incorporated some into Alternative 4. Other trails did not meet the Forest Plan direction for inclusion into the NFTS. The wet weather closure does not address rain events outside of the wet season and it does not respond to wildlife or soil resource protection issues and it does not provide for public safety. Alternatives 1, 4 and 5 incorporate this concept to deal with rain events during the proposed season of use. Alternative 4 includes some other components of this alternative.

**n. Prohibit unlicensed OHV use**

This alternative would require that all drivers are State licensed.

**Response:** Prohibiting unlicensed drivers on all NFTS routes does not meet the purpose and need for this project to provide a variety of managed motorized recreation opportunities. It is not consistent with the California Vehicle Code and Forest Service policy. Requiring that all drivers are state licensed is under the purview of the State of California, California Highway Patrol and the legislature to regulate the licensing of drivers.

**o. Limit OHV use to several OHV parks run by concessionaires**

This alternative would identify areas where limited OHV activities could occur. These “park areas” would charge fees and be managed by a concessionaire under contract with the Forest Service. OHV recreation would be confined to these park areas and not allowed on any other trails on the Forest. OHV travel would be allowed on NFTS roads and other previously authorized trails.

**Response:** Analyzing for new concessionaire recreational opportunities is outside the scope of the purpose and need for this project to provide a diversity of motorized recreation and make limited changes to the existing NFTS. Limiting OHV recreation to “park areas” suggests only one kind of recreational riding exists. The Forest Service should provide a range of OHV riding opportunities and challenges, including roads and trails.

**p. Travel Corridors**

This alternative (developed through internal scoping based on public comments and developed as part of the proposed action described in the NOI) would prohibit cross-country motor vehicle travel off NFTS roads and NFTS trails by the public except to allow vehicle access and parking up to 100’ off NFTS routes for motorized dispersed camping.

**Response:** Allowing travel corridors on all routes as an exception to prohibition of cross-country motor vehicle travel was proposed in the NOI as a way to possibly implement Forest Plan direction. Further review of this concept and public comments revealed a necessity to complete a more detailed and time consuming site-specific analysis covering thousands of acres where motor vehicles would be allowed to travel off NFTS roads. Potential impacts to cultural resources, threatened and endangered species, wildlife and other resources would need to be analyzed. Based on recent evaluations of the timeline, budget and organizational capacity constraints, it is not feasible for the Forest to complete the required site-specific analysis needed to implement a travel corridor concept at this time. In its place, the Forest developed a strategy to provide access by proposing as many unauthorized recreational access spur routes as possible within the limited timeframe to complete this analysis. A limited number of routes were inventoried, evaluated and incorporated into Alternatives 1 and 4. Further inventory of recreational access routes is ongoing and is not precluded from future consideration in a subsequent NEPA analysis.

## **2.05 COMPARISON OF THE ALTERNATIVES**

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Chapter 3 describes the environmental consequences of the alternatives. This section compares the alternatives by summarizing key differences between them and provides a summary of the effects analysis.

While Table 2.02-6 previously showed the existing condition (Baseline), Table 2.05-2 compares the alternatives in terms of additions to the NFTS (Additions); Table 2.05-3 compares the alternatives in terms of changes to existing NFTS (Changes); and, Table 2.05-1 presents the general themes used to develop the alternatives.

Table 2.05-1 Comparison of Alternatives: Alternative Themes

Component	Alternative 1 (Proposed Action)	Alternative 2 (No Action)	Alternative 3 (X-C Prohibited)	Alternative 4 (Recreation)	Alternative 5 (Resources)
<b>1. Cross Country Travel</b>					
Travel and Parking	implement 36 CFR 212 limiting motorized use to the NFTS system; protect resources by preventing route proliferation; provide parking for dispersed recreation	cross country travel <b>not</b> prohibited	same as Alternative 1	same as Alternative 1	same as Alternative 1
<b>2. Additions to the NFTS</b>					
Add existing unauthorized routes to the NFTS	provide a variety of motorized trail opportunities; enhance loop opportunities; access destinations; reduce conflicts between different uses; include most past adopted or managed trails	none	none	similar to Alternative 1 with changes to <b>add</b> : trails based on comments; past adopted or managed trails	similar to Alternative 1 with changes to <b>reduce</b> : trails based on comments; trail density in sensitive wildlife areas; resource impacts
<b>3. Changes to the Existing NFTS</b>					
Convert NFTS roads to NFTS trails	road not maintained; don't need as a road; road never physically closed to public motorized use; access to popular destinations	none	none	similar to Alternative 1 with changes to convert more roads	none
Change NFTS roads from Closed to Open	existing NFTS roads; access destinations or private property; enhance loop opportunities by connecting trails	none	none	similar to Alternative 1 with changes to open more ML1 roads	none
Change NFTS Roads from Open to Closed	protect facilities; not needed for recreation; reduce conflicts between different uses	none	none	close roads only for public safety, homeland security, and private land	similar to Alternative 1
Change NFTS roads from HLO to ALL	provide a variety of motorized mixed use opportunities; enhance loop opportunities by connecting trails; reduce maintenance needs	none	none	similar to Alternative 1 with changes to open most ML2 roads to all vehicles	none
Change NFTS roads from ALL to HLO	county roads; private property; short roads; no connection to non-highway legal opportunities; reduce incursions into adjacent non-motorized areas; reduce conflicts between different uses	none	none	none	similar to Alternative 1 with changes to reduce conflicts
Season of Use	protect resources including road and trail surfaces during the normal winter season	existing closures and restrictions with forest orders	same as Alternative 2	same as Alternative 1	same as Alternative 1
Wet Weather Closures	protect resources including road and trail surfaces in storm events during the normal season of use	none	none	same as Alternative 1	same as Alternative 1
Wheeled Over Snow Use	protect resources including road and trail surfaces; provide a variety of motorized winter recreation; reduce conflicts with other winter recreation uses	prohibited on groomed snowmobile routes and marked cross country ski trails	same as Alternative 2	same as Alternative 1	prohibited except where allowed by permit or other authorization
<b>4. Forest Plan Amendments</b>					
Non-significant amendments	allow continued existing motorized use on routes where it is not compatible with current Forest Plan direction; update cross country travel prohibition	none	none	same as Alternative 1	update cross country travel prohibition

Table 2.05-2 Comparison of Alternatives: Additions to the NFTS

Vehicle Class <sup>1</sup>	Alternative (miles)				
	1	2	3	4	5
All Vehicles (ALL)	48.67	0.00	0.00	59.96	10.61
All Terrain Vehicle (ATV)	37.11	0.00	0.00	48.86	5.66
Motorcycle (MC)	54.72	0.00	0.00	57.20	11.89
Permit Only (PER)	1.38	0.00	0.00	1.38	0.54
4 Wheel Drive (4WD)	15.50	0.00	0.00	14.33	2.81
<b>total</b>	<b>157.39</b>	<b>0.00</b>	<b>0.00</b>	<b>181.72</b>	<b>31.51</b>

<sup>1</sup> Additions

Table 2.05-3 Comparison of Alternatives: Changes to Existing NFTS

Vehicle Class <sup>2</sup>	Alternative (miles)				
	1	2	3	4	5
Administrative (ADM)	35.46	0.00	0.00	10.32	35.46
All Vehicles (ALL)	106.16	0.00	0.00	111.84	2.88
Maintenance Level 1 (ML1)	15.94	0.00	0.00	2.81	28.99
Highway Legal Only (HLO)	402.66	0.00	0.00	146.49	442.55
Trail - All Vehicles (t-ALL)	26.73	0.00	0.00	76.81	11.29
Trail - All Terrain Vehicle (t-ATV)	1.94	0.00	0.00	2.09	1.82
Trail - Motorcycle (t-MC)	3.56	0.00	0.00	4.32	1.69
Trail - 4 Wheel Drive (t-4WD)	30.83	0.00	0.00	16.65	6.71
<b>total</b>	<b>623.28</b>	<b>0.00</b>	<b>0.00</b>	<b>371.32</b>	<b>531.39</b>

<sup>2</sup> Changes

Table 2.05-4 compares the alternatives in terms of Forestwide issues and indicators (Baseline with Changes and Additions); Table 2.05-5 compares the alternatives in terms of the actions resulting from the changes to the existing NFTS; and, Table 2.05-6 compares the alternatives in terms of components and outputs.

Table 2.05-4 Comparison of Alternatives: Forestwide Issues and Indicators

Issue	Indicator <sup>3</sup> (miles unless specified otherwise)	Alternative				
		1	2	3	4	5
Motorized Opportunities	All Vehicles (ALL) Road	1387.43	1734.91	1734.91	1682.16	1226.15
	Highway Legal Only (HLO) Road	735.58	429.17	429.17	473.23	869.05
	All Vehicles (ALL) Trail	136.76	61.35	61.35	198.11	83.25
	All Terrain Vehicle (ATV) Trail	60.05	21.00	21.00	71.95	28.48
	Motorcycle (MC) Trail	71.22	12.94	12.94	74.46	26.52
	Permit Only (PER) Trail	1.38	0.00	0.00	1.38	0.54
	4 Wheel Drive (4WD) Trail	46.02	0.00	0.00	30.97	9.45
	<b>total</b>	<b>2438.44</b>	<b>2259.37</b>	<b>2259.37</b>	<b>2532.26</b>	<b>2243.45</b>
	Distance off of NFTS for parking (vehicle length)	1	NA	1	1	1
Administration	Combined Use Roads (CU)	16.51	0.00	0.00	18.44	0.00
	Mixed Use Roads (MU)	70.56	0.00	0.00	74.79	0.00
	<b>total</b>	<b>87.06</b>	<b>0.00</b>	<b>0.00</b>	<b>93.23</b>	<b>0.00</b>
Private Property	ALL within ¼ mile of residential	63.18	185.22	156.85	129.58	52.93
	ATV and MC within ¼ mile of residential	4.06	1.86	1.86	6.99	2.51
	<b>total</b>	<b>67.24</b>	<b>187.07</b>	<b>158.70</b>	<b>136.56</b>	<b>55.43</b>
Recreation	NFTS roads changed from closed to open	67.96	0.00	0.00	101.83	11.66
	NFTS roads changed from open to closed	51.40	0.00	0.00	13.13	64.45

<sup>3</sup> Baseline with Changes and Additions

Table 2.05-5 Comparison of Alternatives: Actions Resulting from Changes to the Existing NFTS

Action	Alternative (miles)				
	1	2	3	4	5
Convert Road to Trail <sup>1</sup>	63.06	0.00	0.00	99.86	21.51
Closed to Open	67.96	0.00	0.00	101.83	11.66
Closed to Administrative	5.42	0.00	0.00	2.47	5.42
Open to Closed	45.98	0.00	0.00	10.66	59.03
Highway Legal Only to All Vehicles	93.59	0.00	0.00	99.76	0.00
All Vehicles to Highway Legal Only	400.49	0.00	0.00	145.76	441.10
All Vehicles Road to Trail	9.84	0.00	0.00	10.84	14.17
<b>total</b>	<b>623.28</b>	<b>0.00</b>	<b>0.00</b>	<b>371.32</b>	<b>531.39</b>

<sup>1</sup> mileage overlaps with other actions shown below

Table 2.05-6 Comparison of Alternatives: Alternative Components and Outputs

Component	Alternative 1 (Proposed Action)	Alternative 2 (No Action)	Alternative 3 (X-C Prohibited)	Alternative 4 (Recreation)	Alternative 5 (Resources)
Cross Country Travel	prohibited	not prohibited	prohibited	prohibited	prohibited
Parking allowed off NFTS	one vehicle length	no restriction	one vehicle length	one vehicle length	one vehicle length
Add existing unauthorized routes to the NFTS (miles)	157.39	0.00	0.00	181.72	31.51
Convert NFTS roads to NFTS trails (miles)	63.06	0.00	0.00	99.86	21.51
Change NFTS roads from Closed to Open (miles)	67.96	0.00	0.00	101.83	11.66
Change NFTS Roads from Open to Closed (miles)	51.40	0.00	0.00	13.13	64.45
Change NFTS roads from HLO to ALL (miles)	93.59	0.00	0.00	99.76	0.00
Change NFTS roads from ALL to HLO (miles)	400.49	0.00	0.00	145.76	441.10
Existing Closures and Restrictions	replaced	remain	remain	replaced	replaced
Season of Use	Elevation 1	all year	none	none	all year
	Elevation 2	4/1-11/30	none	none	4/1-12/31
	Elevation 3	5/15-11/30	none	none	4/1-12/31
Wet Weather Closures (native surface routes)	during the season of use when 1 inch of rain occurs in a 24 hour period and allowing for 72 hours of drying	none	none	same as Alternative 1	same as Alternative 1
Wheeled Over Snow Use	prohibited except on routes identified or where allowed by permit or other authorization	prohibited on groomed snowmobile routes and marked cross country ski trails	same as Alternative 2	same as Alternative 1	prohibited except where allowed by permit or other authorization
Non-significant Forest Plan amendments (miles)	10.63	0.00	0.00	14.52	0.00

Table 2.05-7 compares the alternatives in terms of the required mitigation measures. The mitigation mileage represents the individual work items that often overlap on the same piece of ground. The routes with mitigation mileage represent route segments with specific mitigations that must be completed prior to designation of the route for public motorized use.

Table 2.05-7 Comparison of Alternatives: Mitigation Measures

Mitigation	Alternative				
	1	2	3	4	5
Annual Maintenance	8.137	0.000	0.000	8.137	3.309
Bench Tread	0.000	0.000	0.000	0.114	0.000
Bridge	0.002	0.000	0.000	0.002	0.000
Cattleguard	0.002	0.000	0.000	0.002	0.000
Drain Dip	43.409	0.000	0.000	52.490	9.192
Fill over Culvert	0.002	0.000	0.000	0.002	0.000
Low Impact Barrier	1.364	0.000	0.000	1.411	0.000
No Vehicle Sign	0.142	0.000	0.000	0.142	0.000
Padding	0.125	0.000	0.000	0.125	0.000
Rock Barrier	0.471	0.000	0.000	0.611	0.070
Rock, Log or Fence Barrier	0.692	0.000	0.000	0.700	0.000
Tread Harden	7.679	0.000	0.000	9.379	1.470
Waterbar	0.606	0.000	0.000	0.985	0.606
<b>total mitigation (miles)</b>	<b>63.512</b>	<b>0.000</b>	<b>0.000</b>	<b>74.989</b>	<b>14.646</b>
<b>Routes with Mitigation (miles)</b>	<b>74.118</b>	<b>0.000</b>	<b>0.000</b>	<b>87.981</b>	<b>12.733</b>

## Summary Comparison of Alternatives by Environmental Effects

Table 2.05-8 compares the alternatives by summarizing their environmental effects.

Table 2.05-8 Comparison of Alternatives: Summary of Effects

	<b>Alternative 1 (Proposed Action)</b>	<b>Alternative 2 (No Action)</b>	<b>Alternative 3 (X-C Prohibited)</b>	<b>Alternative 4 (Recreation)</b>	<b>Alternative 5 (Resources)</b>
<b>Botanical</b>	mileage and number of routes increases effects to sensitive plants and suitable habitat; greatest risk to sensitive plants affected by routes within 200 feet of areas infested with noxious and invasive plants	greatest effects to sensitive plants and suitable habitats along existing routes and to lava cap and moist habitat types	reduction in routes and mileage concentrates use increasing effects to roadside occurrences; least overall impacts to sensitive plants	mileage and number of routes increases effects to sensitive plants and suitable habitat; highest impacts to known sensitive plants	reduction in routes and mileage concentrates use increasing effects to roadside occurrences; least impacts to unique habitats such as lava caps and meadows
<b>Cultural</b>	additions to the NFTS and opening closed roads could adversely affect cultural resources	cross country travel with continued route proliferation adversely affects cultural resources	none	same as Alternative 1	none
<b>Recreation</b>	third highest mileage available to motorized use; reduces impacts to non-motorized activities; reduces motorized access to dispersed recreation sites	highest mileage available to motorized use with fewest limitations; greatest conflicts with adjacent landowners; alters recreation settings; highest impacts on non-motorized or quiet recreation activities; continues motorized access to all dispersed recreation sites	lowest mileage available to motorized use; least conflicts with adjacent landowners; recreation setting changes from predominately motorized to predominately non-motorized; highest reduction of motorized access to dispersed recreation sites	second highest mileage available to motorized use; conflicts with adjacent landowners may occur; second greatest impacts to non-motorized activities; reduces motorized access to dispersed recreation sites	second lowest mileage available to motorized use; few loops and very limited riding opportunities; reduces conflicts with adjacent landowners; reduces motorized access to dispersed recreation sites
<b>Roadless and Special Areas</b>	roadless characteristics and special area values improve over time as unauthorized routes passively restore to natural conditions; additions to the NFTS and opening closed roads reduce opportunities for solitude in the Carson-Iceberg, Mt. Reba, North Mountain, Raymond Peak and Tuolumne River roadless areas	noise and more evidence of human activity due to cross country travel with continued route proliferation reduce roadless character in all roadless areas; cross country travel with continued route proliferation could reduce values in all Special Areas (Proposed Wilderness, SIAs, RNAs, Wild and Scenic Rivers and Proposed Wild and Scenic Rivers) outside of Wilderness	roadless characteristics and special area values improve over time as unauthorized routes passively restore to natural conditions	roadless characteristics and special area values over time as unauthorized routes passively restore to natural conditions; additions to the NFTS and opening closed roads reduce opportunities for solitude in the Carson-Iceberg, Mt. Reba, North Mountain, Raymond Peak and Tuolumne River roadless areas	roadless characteristics and special area values improve over time as unauthorized routes passively restore to natural conditions; additions to the NFTS reduce opportunities for solitude in the Carson-Iceberg and Raymond Peak roadless areas
<b>Transportation</b>	greatest risks to public safety with the most miles where motorized mixed use occurs on roads	none	none	same as Alternative 1	least risk to public safety with the lowest miles where motorized mixed use occurs on roads



	<b>Alternative 1 (Proposed Action)</b>	<b>Alternative 2 (No Action)</b>	<b>Alternative 3 (X-C Prohibited)</b>	<b>Alternative 4 (Recreation)</b>	<b>Alternative 5 (Resources)</b>
<b>Society, Culture and Economy</b>	does not meet demand for motorized access to dispersed recreation sites; proliferation of new sites impacts land and driving experiences	cross country travel and route proliferation degrade the quality of the recreation setting	does not meet demand for motorized routes displacing use to other locations; does not meet demand for motorized access to dispersed recreation sites; proliferation of new sites impacts land and driving experiences	same as Alternative 1	same as Alternative 3
<b>Soil</b>	128 miles of additions to the NFTS occur on high MEHR soils; 55 miles of additions to the NFTS occur on soils with HFC concerns; opens 29 miles of closed roads prone to loss of hydrologic function and water control	204 miles of unauthorized routes occur on high MEHR soils with route proliferation adding another 22 miles over 10 years representing a loss of soil productivity on 158 acres	vegetation growth on most unauthorized routes stabilizes them to background erosion rates	151 miles of additions to the NFTS occur on high MEHR soils; 68 miles of additions to the NFTS occur on soils with HFC concerns; opens 45 miles of closed roads prone to loss of hydrologic function and water control	24 miles of additions to the NFTS occur on high MEHR soils; 8.6 miles of additions to the NFTS occur on soils with HFC concerns; opens 2.9 miles of closed roads prone to loss of hydrologic function and water control
<b>Visual</b>	high positive effect on the overall scenery by prohibiting cross country travel; parking and camping along NFTS roads makes roads appear less natural and more congested	negative effect on the overall scenery by continued cross country travel and route proliferation resulting in loss of natural character and a inconsistency with VQOs; parking and camping remain hidden from view in most locations	same as Alternative 1 except: highest positive effect on the overall scenery; reduced motorized touring and enjoyment of the scenery at many locations; increased parking along NFTS roads makes roads appear least natural and most congested	same as Alternative 1 except: lower positive effect on the overall scenery; maximizes motorized viewing opportunities at the expense of some non-motorized	same as Alternative 1 except: higher positive effect on the overall scenery although less access to early spring (wildflowers) and fall (peak fall color) scenery at some locations
<b>Watershed</b>	reduces direct, indirect and cumulative watershed effects by prohibiting cross country travel; water quality is good to excellent; meets beneficial uses of water; sediment, water temperature and oil and grease are consistent with water quality objectives	cross country travel and route proliferation slightly increase sedimentation but do not adversely affect beneficial uses	same as Alternative 1 except: most reduction in direct, indirect and cumulative watershed effects	same as Alternative 1 except: less reduction in direct, indirect and cumulative watershed effects	same as Alternative 1 except: more reduction in direct, indirect and cumulative watershed effects
<b>Wildlife</b>	additions to the NFTS and opening closed roads adversely affects individuals of numerous wildlife species over the short and long-term	cross-country travel impacts individuals of numerous wildlife species; continued route proliferation exacerbates long-term impacts	beneficial effects to all wildlife species	same as Alternative 1 except more additions to the NFTS and opening more closed roads increases impacts on the number of individuals for each species	same as Alternative 1 except fewer additions to the NFTS without opening closed roads decreases impacts on the number of individuals for each species

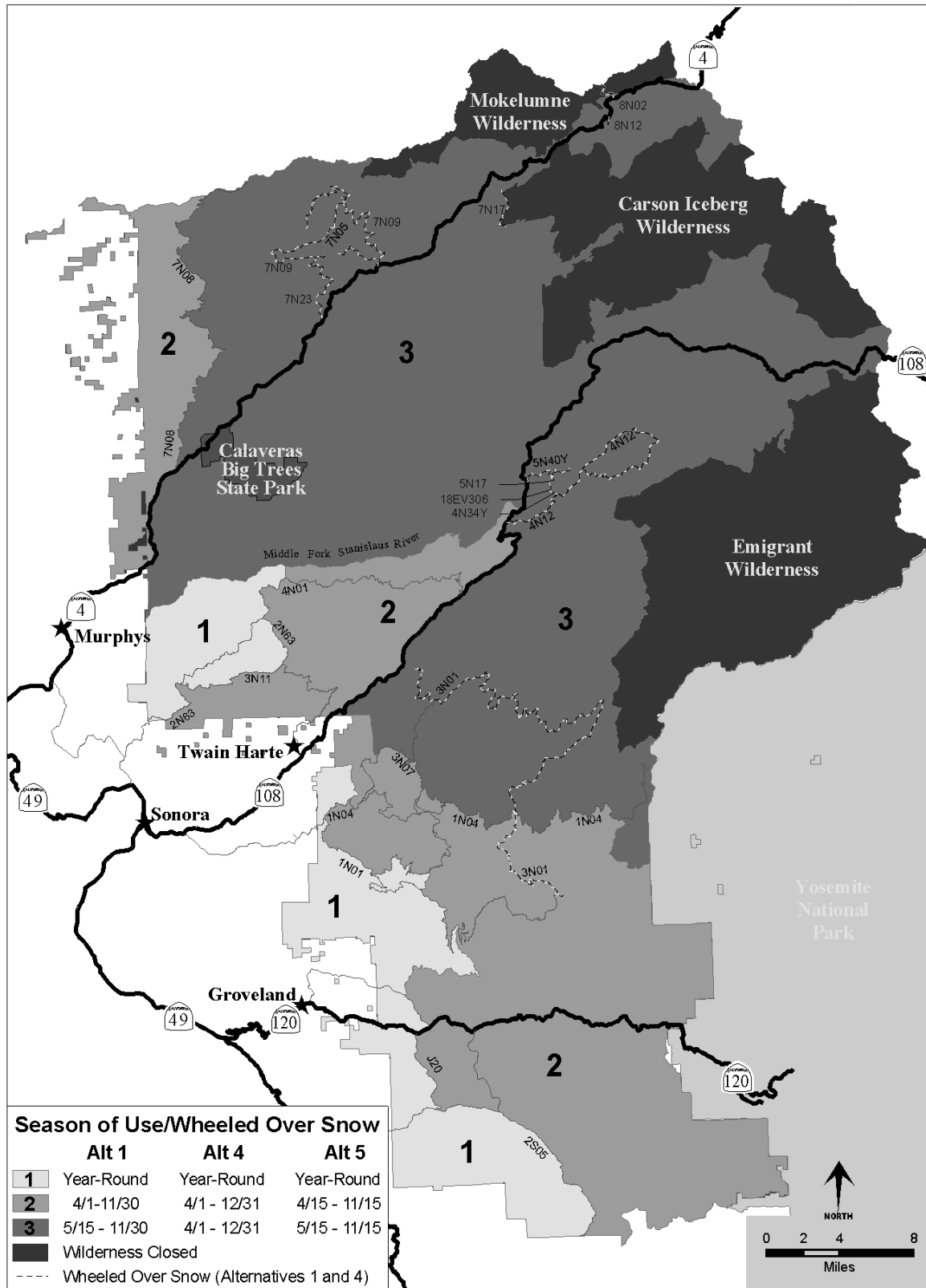


Figure 2.02-1 Season of Use/Wheeled Over Snow Map